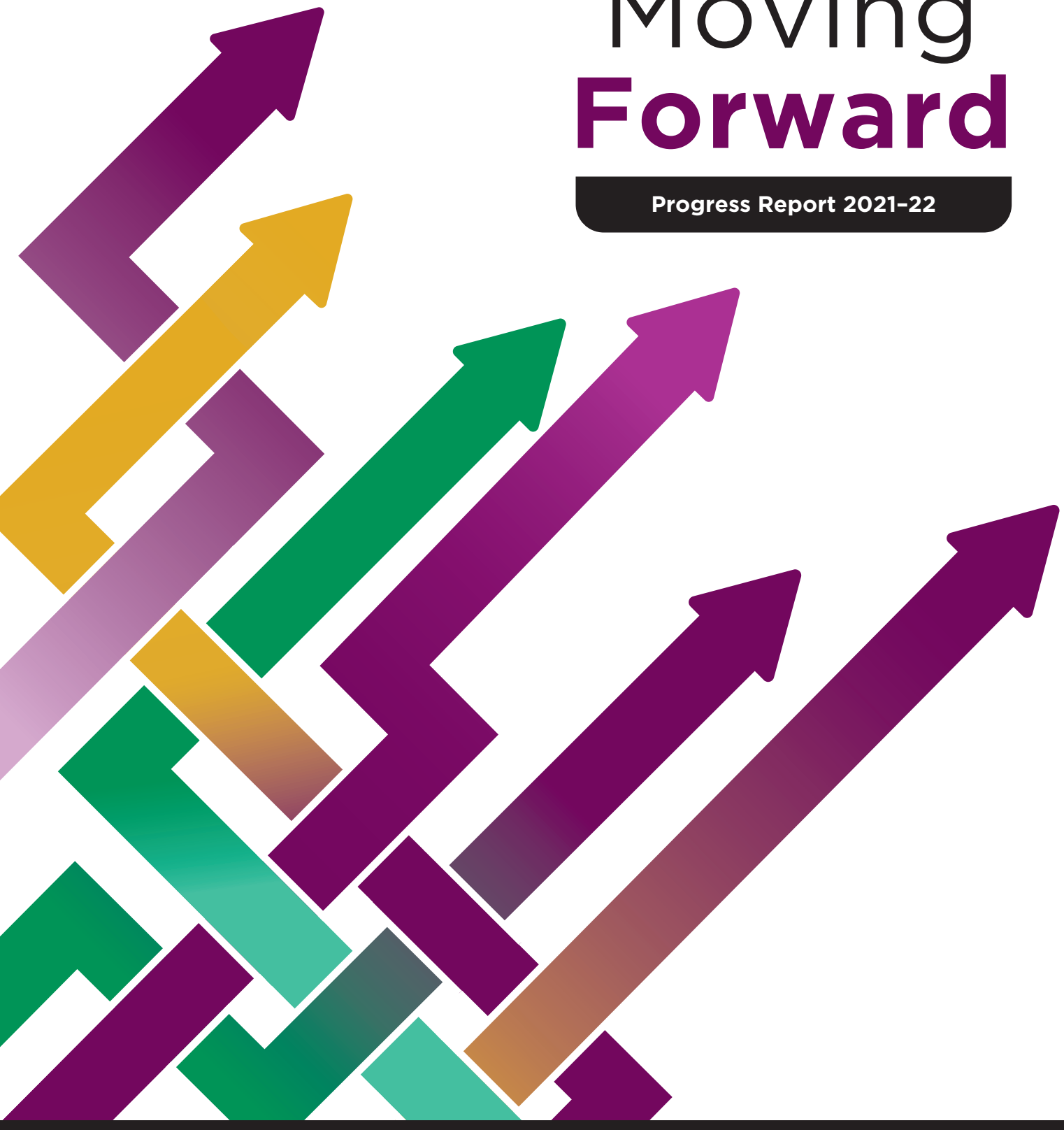
CANADA RESEARCH
COORDINATING COMMITTEE

Moving Forward

Progress Report 2021–22



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In 2021–22, Canada Research Coordinating Committee (CRCC) member organizations worked diligently to help sustain the country's research enterprise through the second year of the global pandemic. At the same time, they kept a keen eye to the future: working closely together to build a strong, more equitable, connected and innovative research community to empower Canadian research in the years ahead.

CRCC at a glance

The Canada Research Coordinating Committee (CRCC) works to actively coordinate and strengthen the policies and programs of Canada's three federal research funding agencies and the Canada Foundation for Innovation in order to advance federal research priorities. It serves as Canada's strategic forum for sharing information, building consensus and making decisions on forward-looking initiatives that strengthen Canada's research enterprise.

Committee members

Alejandro Adem
Chair, 2021 and 2022
President, Natural Sciences and Engineering Research Council

Ted Hewitt
Vice-Chair, 2021 and 2022
President, Social Sciences and Humanities Research Council

Simon Kennedy
Deputy Minister, Innovation, Science and Economic Development Canada

Stephen Lucas
Deputy Minister, Health Canada

Mona Nemer
Chief Science Advisor, Office of the Chief Science Advisor of Canada

Roseann O'Reilly Runte
President and Chief Executive Officer, Canada Foundation for Innovation

Iain Stewart
President, National Research Council Canada

Michael Strong
President, Canadian Institutes of Health Research

CRCC priorities

In 2021–22, CRCC member agencies and departments worked together on five shared priorities. Efforts to address and recover from the impacts of the COVID-19 pandemic continued in all five areas and a new priority initiative was launched on research training.

Interdisciplinary, international, high-risk/ high-reward, rapid-response research	International cooperation	Indigenous research and reconciliation
Foster world-leading discovery and innovation	Position Canada as a valuable partner in global research and innovation	Advance reconciliation and help build research capacity by working with Indigenous communities on new models for Indigenous research and research training
Equity, diversity and inclusion	**Early career researchers**	***NEW*** **Tri-agency training strategy**
Achieve excellence by engaging the full pool of diverse research talent in an equitable and inclusive research ecosystem	Develop the next generation of talent and encourage innovation by engaging early career researchers in Canada's research ecosystem	Support, inspire and empower the next generation of leaders, within and beyond the research ecosystem, for the benefit of Canada

A strategic forum

As a strategic forum for members to share information and advice on issues of importance for Canadian research, the Committee met with the leaders of other federally funded research organizations and engaged discussions on a wide range of topics in 2021–22. These included the priorities above, as well as open science, research security, climate change, pandemic recovery, research training, major research facilities, international collaboration and public trust in science.

Message from the Ministers

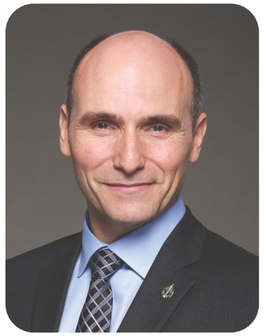
Supporting strong and vibrant researchers coming up with innovative and evidence-based solutions is at the heart of our government's priorities, and even more so in our efforts to recover from the COVID-19 pandemic and build a more resilient, inclusive and prosperous Canada.

When it mattered most, our research community adapted, pivoted and worked in tandem to respond to this challenge by leveraging their collective knowledge into discoveries and solutions. On behalf of the Government of Canada, we are grateful to the world-class researchers who are leading our country toward a long-lasting recovery. With a diverse and thriving research community, we are driving an innovative economy, building a healthier, more resilient future, and training the next generation of leaders.

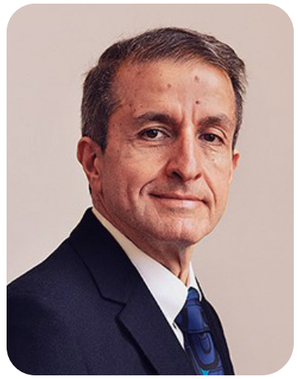
We also wish to thank the organizations represented on the Canada Research Coordinating Committee (CRCC). Working together, they addressed national priorities, including the innovations needed to advance research during the pandemic; inspired Canadian leadership in transformative international projects; encouraged the growth of a more equitable, diverse and inclusive research community; and worked collaboratively with First Nations, Inuit and Métis Peoples to advance their research priorities. We are also truly grateful for the work of the federal research granting agencies, which stepped up to support Ukrainians in the research community by ensuring they would be able to continue their important work here in Canada.

This report highlights the key contributions that the CRCC member organizations made to support Canada's research enterprise over the past year. Reflecting on their accomplishments, we look forward to continuing our work with them in the year ahead.

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



The Honourable Jean-Yves Duclos
Minister of Health



Message from the Chair

In 2021–22, Canadian researchers continued to bend their collective efforts to overcome the challenges posed by COVID-19. At the same time, they found ways to adapt, innovate and advance research in all fields for the health and well-being of Canadians.

In much the same way, Canada's federal research funding organizations worked together to support research adapted to pandemic realities and international projects essential for a sustainable recovery. We also continued to move forward: to help create a more equitable, diverse and inclusive research enterprise; to support Indigenous-led research; and to inspire Canadian researchers to lead transformative projects that reimagine approaches to global challenges.

Like many organizations, we have drawn lessons from the pandemic experience. We saw how it exacerbated difficult circumstances for researchers and students, and coordinated efforts to mitigate the impact on them. Recognizing the increasingly precarious status of graduate students and postdoctoral fellows, we also launched an initiative to develop a more equitable, accessible and effective suite of scholarships and fellowships for our next generation of research leaders. Similarly, the pandemic highlighted the importance of international collaboration in addressing global problems. So, we have worked together to broaden our international networks and lay the groundwork for future international efforts.

Perhaps most importantly, our experience has proven the value of sharing information and advice on key issues across the federal research enterprise. As we emerge from the pandemic, I am confident that our committee will continue to serve in this way, as a resource for our organizations and a strategic forum for Canada's research enterprise.

It has been a pleasure to work with my CRCC colleagues and staff in all member agencies and departments this year as we strive to strengthen Canadian research together. My greatest pleasure, however, has been to see the energy and initiative of researchers across Canada who have taken their work to new heights. They are realizing our best hopes for the future.

Alejandro Adem
Chair, Canada Research Coordinating Committee

President, Natural Sciences and Engineering Research Council

PRIORITY: Increasing engagement in interdisciplinary, international, high-risk/high-reward, rapid-response research

Opening new frontiers

The New Frontiers in Research Fund (NFRF) is designed to support world-leading innovation through three distinct funding streams and occasional special calls. Last year, the first-ever Transformation stream grants were awarded to support large-scale, Canadian-led international and interdisciplinary research with the potential to create real and lasting change.

In total, $144 million was awarded to seven six-year interdisciplinary projects that will challenge current paradigms, develop novel approaches and promise ground-breaking impact. These initial Transformation projects include research to preserve donor organs longer and improve recipients' tolerance during organ transplantation; to repurpose marine byproducts and wastes to create valuable new products; to advance inclusive workplace design for persons with disabilities; to use DNA sequencing to track changes in the Earth's biosphere; to apply Indigenous knowledge to the stewardship of biodiversity internationally; to develop new methods to repair spinal cord injuries; and to protect all metals from rust, permanently.

New Frontiers in Research Fund Transformation 2020 research project Protection of Metallic Surfaces from Bulk to Nano Through Molecular-Level Innovation

This team of researchers seeks to develop a new approach to the protection of metal surfaces by developing carbon-to-metal coatings with unprecedented strength and resistance to oxidation. This unique technology will assist manufacturing, automotive, shipping and aerospace industries, while opening markets in green energy, microelectronics manufacturing and nanomedicine approaches to precision cancer treatments.

Photo used by permission

COVID-19 recovery

In 2021–22, NFRF issued two special calls. The first awarded 90 grants to projects designing innovative approaches to research interrupted by pandemic-related restrictions. The second will support international teams responding to the priorities of the UN's Research Roadmap for the COVID-19 Recovery, which encourages "targeted research for data-driven responses that focus particularly on the needs of people being left behind."

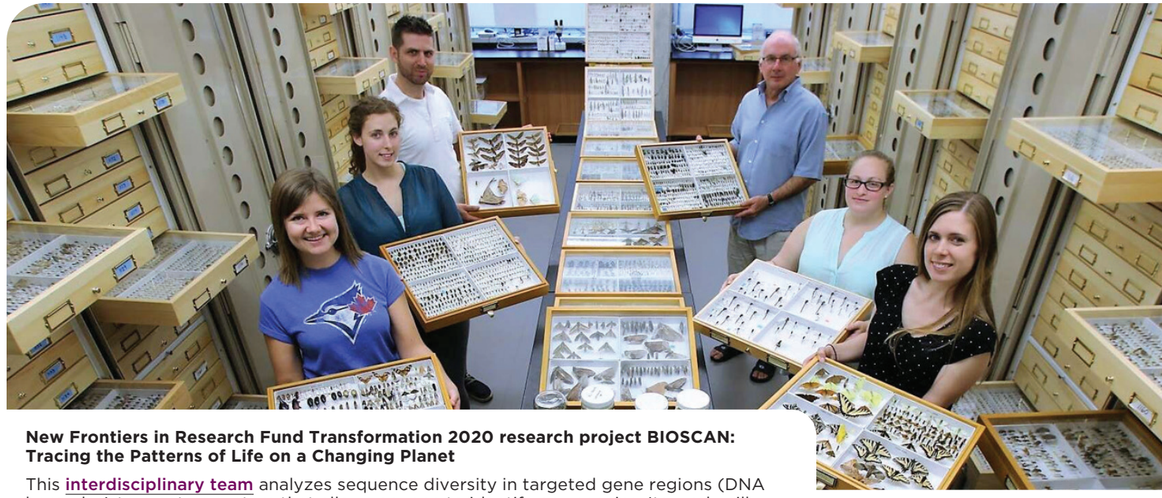
Fuelling the drive to discover

Through the NFRF Exploration stream, $25 million was awarded to 102 high-risk, high-reward interdisciplinary projects. Since 2018, more than 500 Exploration grants have been awarded—with more than 300 going to early career researchers to help launch their careers.

In all NFRF streams, project teams must articulate a commitment to equity, diversity and inclusion (EDI) in research—embedding EDI considerations directly into the evaluation process so teams consider these from the outset and adopt them as standard practice going forward in their research design and practice.

The exploratory and transformational research enabled by NFRF helps researchers redefine our understanding of the world, with benefits for generations to come.

$144 million awarded to transformative projects with potential for global impact



New Frontiers in Research Fund Transformation 2020 research project BIOSCAN: Tracing the Patterns of Life on a Changing Planet

This interdisciplinary team analyzes sequence diversity in targeted gene regions (DNA barcodes) to create a system that allows anyone to identify any species. Its work will allow biodiversity scientists to extend the barcode library, probe species interactions, and study shifts in species distribution and abundance in response to global change.

Photo used by permission

PRIORITY: Position Canada as a valuable partner in global research and innovation

Fostering international dialogue and cooperation

Recognizing the heightened importance of international collaboration in the pandemic context, CRCC members helped broaden Canada's global research and innovation networks in 2021–22 by collectively engaging with international research funding organizations to share information and perspectives on the drivers of national and global research agendas and discuss potential areas for cooperation.

The CRCC met with the chief executives of France's Centre national de la recherche scientifique (CNRS), the Deutsche Forschungsgemeinschaft (German Research Foundation) and the US National Science Foundation (NSF). Building on the international activities of individual member organizations, these meetings created opportunities to strengthen international cooperation across the federal research enterprise, exchange strategic information on shared priorities and advance collaboration.

For example, during a meeting with the CRCC, NSF signed a **memorandum of understanding with NSERC** that supports fundamental discovery research in the US and Canada. In addition to paving the way for new collaborations between the two countries' research communities, this partnership will foster a shared commitment to equity, diversity and inclusion (EDI) in the research enterprise.

Sustained engagement to advance shared goals

Following an earlier CRCC-UK Research and Innovation (UKRI) meeting, member organizations in both countries joined forces to plan a professional workshop on EDI to be held in 2022–23. The workshop will focus on efforts underway on both sides to promote more equitable, diverse and inclusive research cultures, and to establish valuable connections to facilitate future collaborations in this area.

11 federally funded research organizations came together for CRCC-hosted meetings with research funders from France, Germany and the United States

"International collaboration and equitable partnerships are vital to the delivery of UKRI's strategy and the challenges we face. The CRCC-UKRI partnership is a great example of how to work together to achieve common goals, including implementation of EDI policies/practices and working toward Net Zero. UKRI looks forward to building on the great work done with the CRCC."

PROFESSOR DAME OTTOLINE LEYSER,
CHIEF EXECUTIVE OF UK RESEARCH AND INNOVATION

COVID-19 recovery

Sustained engagement with international partners creates avenues to address challenges that require global cooperation, such as the COVID-19 pandemic and climate change. Over the past year, the CRCC deepened this engagement through virtual meetings and collaboration, at many levels, with counterparts from France, Germany, the United Kingdom and the United States.

Recognizing that multiple perspectives are required to tackle complex, transboundary problems, the CRCC is committed to broadening Canada's research networks and enhancing opportunities for collaboration with diverse partners around the world.

PRIORITY: Fostering Indigenous self-determination, leadership and capacity in research and training

Strengthening Indigenous research capacity

In February 2022, the CRCC released the first progress report on the implementation of the interagency **strategic plan on Indigenous research and research training**.

The report, ***Building the Foundation***, highlights the critical role Indigenous scholars, community leaders, Knowledge Keepers, Elders and youth played in shaping the strategic plan—and in building the community that will guide its implementation as part of the interagency collaborative initiative **Strengthening Indigenous Research Capacity** (SIRC).

The **Reference Group for the Appropriate Review of Indigenous Research** is a fundamental part of this community. Its work over the past year laid the groundwork for a review of the agencies' peer assessment models guided by principles of cultural relevance, cultural safety, respect for Indigenous knowledge systems and self-determination in research. In this spirit, the Reference Group launched an **open call for expressions of interest** to engage more closely with Knowledge Keepers and Elders to ensure that the group's work and deliberations are guided by a deep understanding of Indigenous ways of knowing and being.

In collaboration with Indigenous partners, the federal research granting agencies reached another major milestone by setting up the Indigenous Leadership Circle in Research (ILCR). Composed of individuals from First Nations, Inuit and Métis communities, the ILCR will oversee implementation of the plan and advise the agencies on matters related to Indigenous research. Using the model developed for the establishment of the Reference Group, ILCR members were selected by an Indigenous expert panel that took into consideration their commitment to Indigenous research, their community engagement and the diversity of voices across First Nations, Inuit and Métis communities. The ILCR will start its mandate and meet with the members of the CRCC in 2022.

Cowessess First Nation community members worked together with a research team from Saskatchewan Polytechnic on the **Remote Sensing of Residential School Cemeteries** project, funded through the tri-agency **College and Community Innovation Program**.

From left to right (standing): Cowessess First Nation project facilitators Conrad Obey and Josh Aisaican and Elder and band council member Debbie Delorme. Sitting: Abdul Raouf, Saskatchewan Polytechnic's team lead.

Photo Credit: Abdul Raouf

12 Meetings have been held by the Reference Group for the Appropriate Review of Indigenous Research since its inception in 2020

> “We have a voice and a responsibility to begin to shape policies and processes that acknowledge the strengths of our languages, cultures and ways of being in the world.”
>
> **KIMBERLY FAIRMAN**
> CHAIR, REFERENCE GROUP FOR THE APPROPRIATE REVIEW OF INDIGENOUS RESEARCH

Illustration by Donald Chrétien

COVID-19 recovery

While the COVID-19 pandemic undeniably slowed the progress of the SIRC initiative, important foundational work was achieved through continued engagement with the community of Indigenous youth, scholars, leaders and Elders that will guide the implementation of the Indigenous research and training strategy.

Advancing Indigenous research priorities

The three research funding agencies and the NRC also pursued collaborative initiatives with Indigenous-led organizations to support their research priorities and objectives.

CIHR encouraged distinctions-based engagements and initiatives through directed grants, co-developed with Indigenous organizations and tailored to address Indigenous health issues. Examples of this are the First Nations Biobanking and Genomic Research Initiative and the Inuit Research Network (IRN) Grant. The IRN Grant builds on the memorandum of understanding (MOU) and shared workplan between Inuit Tapiriit Kanatami (ITK) and CIHR.

In 2021, ITK and NSERC co-developed a draft five-year workplan based on a MOU signed in 2020 to advance key objectives of the National Inuit Strategy on Research, including the improvement of Inuit governance in research and the alignment of funding with Inuit research priorities.

In March 2022, the National Centre for Truth and Reconciliation (NCTR) and SSHRC launched the Partnership Engage Grants—Residential Schools Joint Initiative to support Indigenous community-led research and related activities involving community decision-making processes, research and actions regarding residential school sites in Canada.

This joint initiative was made possible by a partnership agreement between the NCTR and SSHRC, which pursues work to address the Truth and Reconciliation Commission’s Call to Action 65 and supports calls 71 to 76.

The NRC, with ITK, UKRI, Polar Knowledge Canada, Parks Canada and Fonds de recherche du Québec, co-developed the Canada-Inuit Nunangat-United Kingdom Arctic Research Programme (CINUK). The research funded under CINUK focuses on changing Arctic ecosystems and their impacts on Inuit communities, ensuring alignment with the National Inuit Strategy for Research and Canada’s Arctic and Northern Policy Framework.

In 2022, the Indigenous Leadership Circle in Research will start its mandate. It will advise senior management at the three federal research funding agencies and the CFI on the implementation of the interagency strategic plan on Indigenous research and research training.

PRIORITY: Strengthening equity, diversity and inclusion in research

Fair Access and Equitable Participation

COVID-19 highlighted existing inequities in Canada's research ecosystem. In 2021–22, CRCC members took steps to gather better data and gain a deeper understanding of the disparities facing underrepresented groups within the research ecosystem.

As part of that effort, CRCC member organizations revised the self-identification form that is provided to people who participate in agency funding programs to gather disaggregated data. When analyzed, the data will help identify potential bias and inequities in the agencies' policies and programs and support evidence-based decisions that promote equity, diversity and inclusion (EDI) in the funding system. Some CRCC member organizations completed the rollout of the expanded form this year while other members are working to complete this process in the coming year.

April 2021 saw the public release of a revised 2018–25 **Tri-Agency EDI Action Plan**, which outlines measures to increase fair access to agency funding opportunities and promote equitable and inclusive participation in the Canadian postsecondary research system. Another 17 postsecondary institutions and research organizations committed to embed EDI principles in their policies by signing the **Dimensions Charter**. As the year progressed, CIHR and SSHRC began public engagements to inform antiracism action plans, and the tri-agencies started working on plans to enhance accessibility in the research funding system.

Diversity among Canada's Research Chairs

In 2021, it became a requirement for institutions that participate in the Canada Research Chairs Program to set population-based equity targets to ensure representation of visible minorities, Indigenous Peoples, women and persons with disabilities aligns with Canada's diversity. The program also provided an EDI stipend of $50,000 to help participating institutions develop and implement institutional EDI action plans for the program. The **Robbins-Ollivier Excellence in Equity Award** launched in March 2022 will grant three $100,000 awards to three individuals or teams of individuals for bold and potentially game-changing projects that challenge the status quo, spark change and address persistent systemic barriers in the research ecosystem and academia.

17 more postsecondary institutions committed to embed EDI in their policies and processes by endorsing the Dimensions Charter, bringing the total number of signatories to 141

By pursuing a collective EDI action plan, the tri-agencies continue to identify—and remove—barriers for underrepresented groups in the research system.

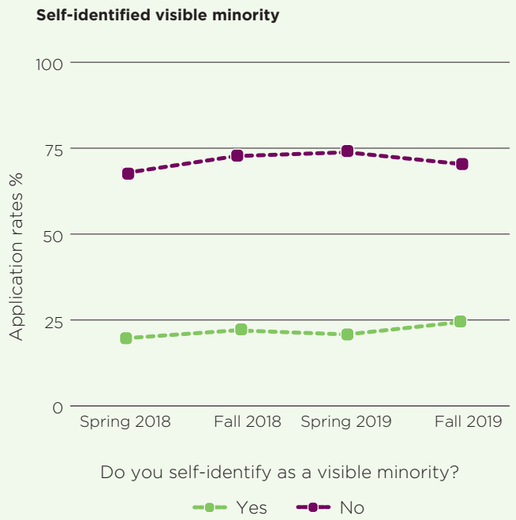
These underrepresented groups include, but are not limited to, women, Indigenous Peoples (First Nations, Inuit and Métis), persons with disabilities, members of visible minorities and 2SLGBTQI+ (2 Spirit) communities.

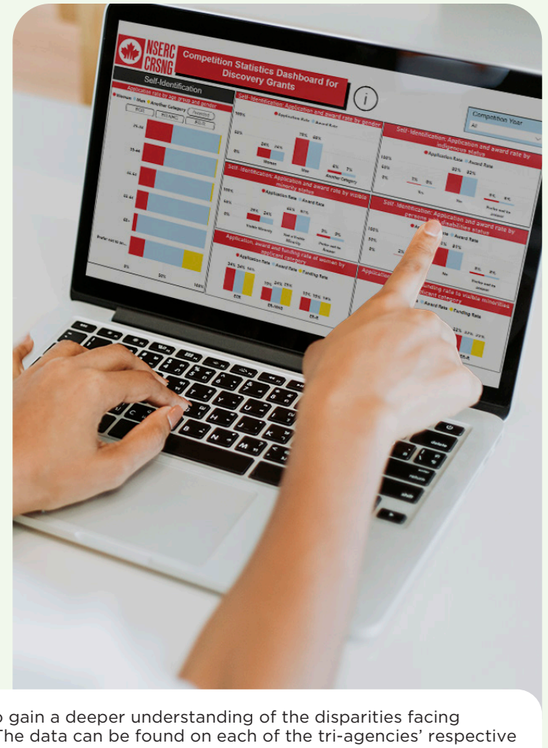
* For additional information and data, see the EDI data annex.

COVID-19 recovery

Recognizing that emerging from COVID-19 presents an opportunity to "build back better" across the research ecosystem, the cohort of 17 institutions co-developing the Dimensions program are placing the voices of those who have experienced inequities, underrepresentation and exclusion at the centre of their evidence-based engagement strategies and action plans.

FIGURE 1: APPLICATION RATES BY SELF-IDENTIFIED VISIBLE MINORITY





The three federal research funding agencies gather data to gain a deeper understanding of the disparities facing underrepresented groups within the research ecosystem. The data can be found on each of the tri-agencies' respective websites.

PRIORITY: Supporting early career researchers

Research capacity for tomorrow

The three federal research funding agencies and the CFI are committed to supporting early career researchers (ECRs), recognizing the vital role they play in research innovation and the unique challenges they face establishing research careers.

A foundation for career-long success

Merit review is central to funding research excellence—and is a learned skill. The three agencies and the CFI offer several pathways that provide ECRs with peer review opportunities. These include the CIHR Awards Review program and the CIHR Reviewer in Training program, which help ECRs develop their skills through hands-on peer review and strengthen their own research proposals.

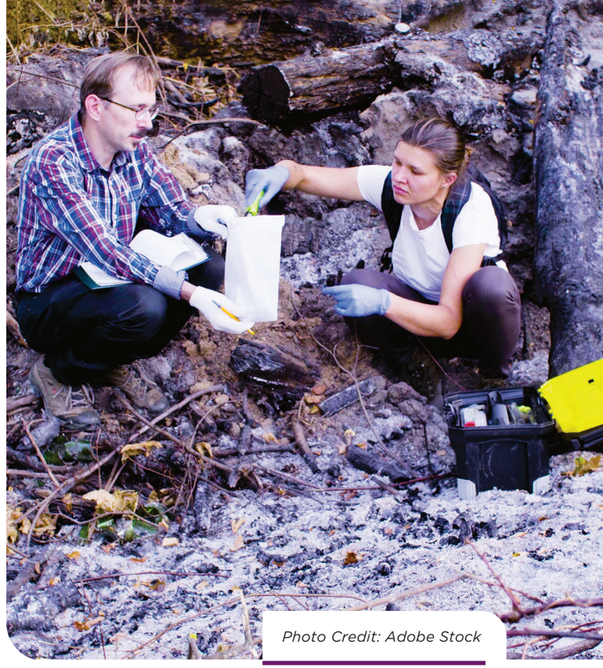


Photo Credit: Adobe Stock

In addition, ECRs are included in NSERC grant selection committees and postdoctoral fellows (PDFs) are included in NSERC scholarship and fellowship committees. At SSHRC, ECRs are included in merit review committees and PDFs in scholarship and fellowship merit review committees.

80% of peer reviewers on CIHR's Fellowship Awards committees were early career researchers

Safeguarding ECR futures

In addition, the funding agencies continued to mitigate the impacts of the pandemic by extending measures introduced in 2020–21. NSERC guidelines for assessing pandemic impacts on ECRs were used throughout the year, while SSHRC included consideration of the pandemic's impact on research plans in the review of Insight Grant and Insight Development Grant applications. It allowed all applicants—including ECRs—to describe pandemic-related slowdowns or interruptions. CIHR enabled Project Grant applicants to outline the impact of specific factors, including the pandemic, on their research progress as part of the review process.

The CFI's John R. Evans Leaders Fund is often used by institutions to attract new researchers and assist young researchers in building their research portfolios. The introduction of co-leads to the CFI's Innovation Fund competition has resulted in a significant increase in projects led by ECRs. The CFI continues to encourage the inclusion of ECRs.

All CRCC member organizations are committed to creating opportunities through funding and training for early career researchers to strengthen and support the future research ecosystem.

* For additional information and data, see the ECR data annex.

COVID-19 recovery

In 2021–22, many early career researchers and their work were affected by ongoing pandemic-related challenges such as loss of access to research facilities and resources. The three federal research funding agencies offered mechanisms to extend the eligibility window for individuals to be considered early career researchers where it was beneficial for them to do so.

Photo Credit: Adobe Stock

PRIORITY: Tri-agency Training Strategy

Research Talent for a Knowledge-Based Society

Advanced research training for people in all sectors provides an essential foundation for Canada's ever-growing knowledge-based society and economy. Already, more than 80% of Canadian doctoral graduates are employed outside academe, in business, government and non-governmental organizations.

With this in mind, the CRCC asked the three federal research funding agencies to propose a new Tri-agency Training Strategy to deliver an internationally competitive, equitable, accessible and effective suite of scholarships and fellowships to help support and prepare a diverse population of students and postdoctoral fellows for careers requiring strong research skills in all sectors. Development and implementation of the strategy will be guided by an external advisory committee to ensure it addresses the current and future needs of students, postdoctoral fellows and postsecondary institutions.

ANNEX I

Self-identification data collection in support of equity, diversity and inclusion

Photo Credit: Adobe Stock

This annex represents a data set drawn from the self-identification questionnaire for tri-agency and agency-specific (CIHR, NSERC, SSHRC and CFI) major funding opportunities from the 2021 competition year.[1] The tables and figures from the data set present a snapshot of self-identification information about the following groups: women, Indigenous Peoples, members of visible minorities and persons with disabilities. Completing the **self-identification questionnaire** is mandatory; however, all questions provide an option to select "I prefer not to answer."

The data set presents a summary of the application and award rates[2,3] of tri-agency and agency-specific major funding opportunities (Tables 1a and 1b; Figures 1a–1d).[4] The data distinguish between applications and award rates for research and training programs and provide an overview of the nominations and active chairs awards for the Canada Research Chairs Program.

1 Competition year is defined by the fiscal year in which the first award payment for a competition is anticipated. Applications may be received in the previous fiscal year and/or some awardees may receive their first payment in the subsequent fiscal year, but all application and award data for a given competition year will be kept together. Tri-agency funding opportunities are NOT included.

2 The application rate is calculated by dividing the number of applications in the competition year where the individual responsible for the application self-identifies as a member of an underrepresented group by the total number of applications in the competition year, multiplied by 100 (to calculate a percentage).

3 The award rate is calculated by dividing the total number of awardees from a competition year who identify as a member of an underrepresented group by the total number of awardees who received funding in a competition year, multiplied by 100 (to calculate a percentage). Here, awardees are the individuals responsible for the application and do not include their colleagues who are part of research teams, where applicable.

4 This data set represents the individual identified as having the primary responsibility for the overall intellectual direction of the research, research-related activity or partnership; generally, the agencies refer to this person in various ways, such as the "principal investigator", "project director" and "(nominated) principal applicant"; this also includes students and postdoctoral fellows who submit applications to the scholarships and fellowship programs.

Application and award rates for tri-agency and agency-specific major funding opportunities

Application and award rates for major funding opportunities for competition year 2021 are outlined below as they relate to the four groups identified in the self-identification questionnaire. The data are collected from the questionnaires completed by the individual who has the primary responsibility for the application.

The collection of this data is still relatively new, and caution should be exercised in interpreting the data, particularly for competitions with low numbers of applications. As more data are collected in coming years, trends can be tracked and analyzed for a clearer picture of each group's participation in the Canadian research enterprise and in accessing available funds.

TABLE 1A: SUMMARY OF APPLICATION AND AWARD RATES FOR TRI-AGENCY AND AGENCY-SPECIFIC MAJOR FUNDING OPPORTUNITIES

Program	Women		Indigenous Peoples	Indigenous Peoples	Persons with disabilities	Persons with disabilities	Members of visible minorities	Members of visible minorities
Research Program	App. rate	Award rate	App. rate	Award rate	App. rate	Award rate	App. rate	Award rate
SSHRC Insight Grants	51.6%	54.0%	2.0%	2.7%	4.1%	3.9%	22.5%	20.5%
SSHRC Partnership Grants	60.0%	62.2%	2.4%	2.7%	5.6%	5.3%	19.2%	19.7%
NSERC Discovery Grants	26.0%	27.5%	0.6%	–	2.4%	2.3%	31.1%	28.9%
NSERC Partnership Grants	18.2%	18.2%	–	–	2.8%	2.6%	39.8%	39.5%
New Frontiers in Research Fund*	29.7%	34.3%	–	–	5.0%	–	40.5%	33.3%
CIHR Project Grants	35.9%	37.2%	0.7%	1.3%	2.2%	1.4%	24.8%	22.2%
CFI John R. Evans Leaders Fund	37.6%	37.9%	2.1%	2.6%	3.6%	3.7%	33.4%	32.1%

* Tri-agency funding opportunities

TABLE 1A (CONTINUED): SUMMARY OF APPLICATION AND AWARD RATES FOR TRI-AGENCY AND AGENCY-SPECIFIC MAJOR FUNDING OPPORTUNITIES

Program	Women		Indigenous Peoples	Indigenous Peoples	Persons with disabilities	Persons with disabilities	Members of visible minorities	Members of visible minorities
Training Program	App. rate	Award rate	App. rate	Award rate	App. rate	Award rate	App. rate	Award rate
Canada Graduate Scholarships–Master's*	62.0%	64.5%	2.0%	2.1%	6.1%	5.9%	25.6%	22.8%
Vanier Canada Graduate Scholarships*	57.9%	62.7%	3.0%	6.0%	7.2%	9.6%	32.8%	38.0%
Banting Postdoctoral Fellowships*	46.7%	44.3%	–	–	4.0%	–	32.0%	21.4%
SSHRC Doctoral Awards	64.8%	66.9%	5.6%	5.3%	8.1%	7.8%	22.0%	25.0%
SSHRC Postdoctoral Fellowships	53.6%	56.9%	1.4%	–	6.5%	6.9%	24.4%	16.3%
NSERC Postdoctoral Fellowships	36.3%	45.6%	–	–	3.3%	–	34.7%	24.8%
NSERC Postgraduate Scholarships (Doctoral)	42.3%	45.1%	1.8%	–	3.8%	5.4%	30.4%	29.0%
CIHR Postdoctoral Fellowships	55.9%	56.6%	–	–	2.2%	–	32.4%	30.9%
CIHR Doctoral Research Awards	67.9%	63.7%	2.8%	–	5.1%	4.1%	31.2%	36.8%

* Tri-agency funding opportunities

TABLE 1B: NOMINATIONS AND FILLED CHAIR AWARDS FOR THE CANADA RESEARCH CHAIRS PROGRAM

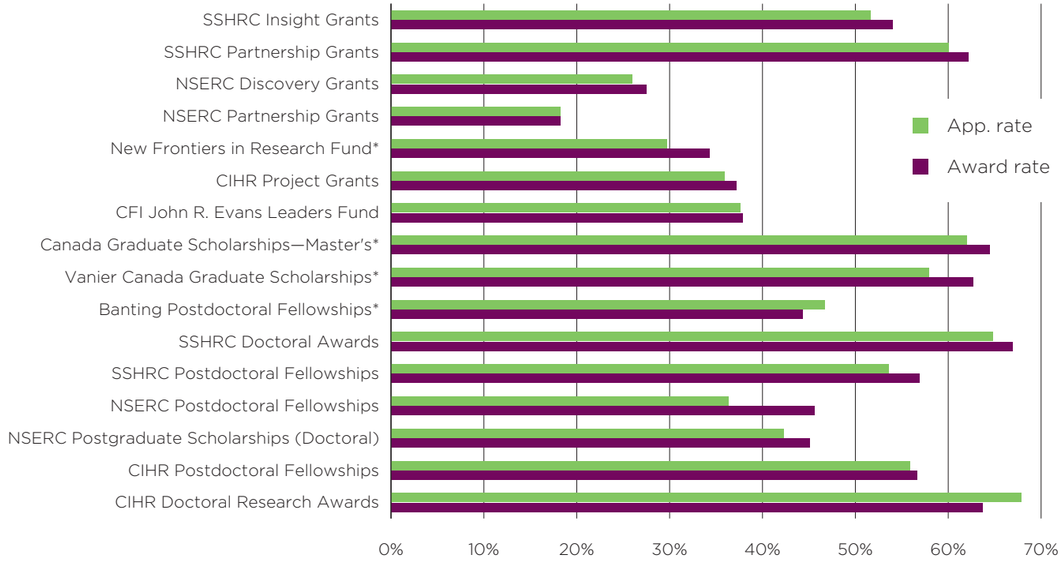
Program	Women	Women	Indigenous Peoples	Indigenous Peoples	Persons with disabilities	Persons with disabilities	Members of visible minorities	Members of visible minorities
Program	Nominations	Filled alloc.*	Nominations	Filled alloc.*	Nominations	Filled alloc.*	Nominations	Filled alloc.*
Canada Research Chairs Program	45.0% **	42.7%	5.0%	3.6%	7.0%	6.0%	34.0%	23.0%

* Data includes off-cycle nominations up to December 1, 2020

** Does not include gender identity minorities

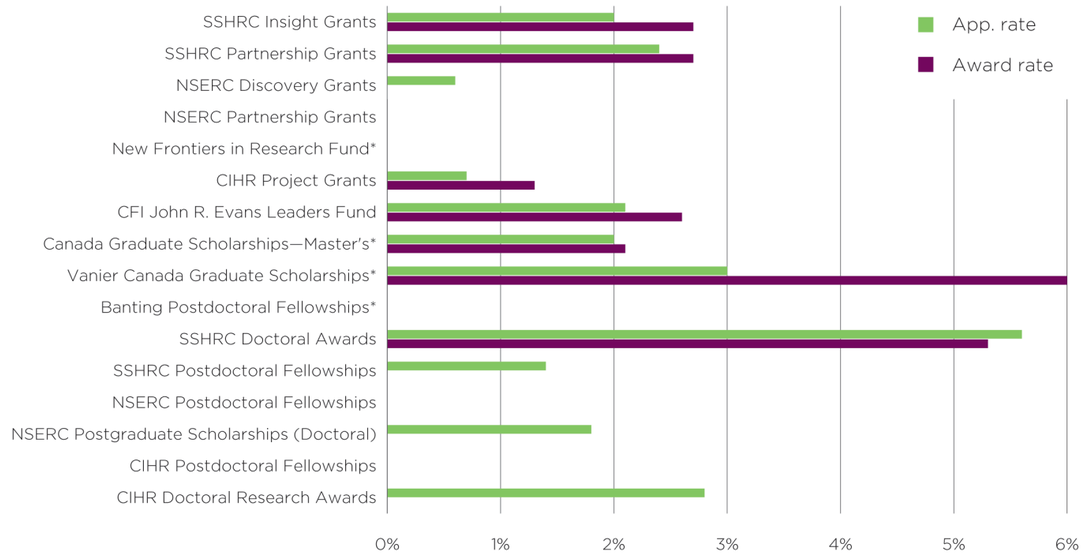
Note: Figures 1a–1d below are visual representations of the data provided in Table 1a, below.

FIGURE 1A: APPLICATION AND AWARD RATES FOR **WOMEN** BY TRI-AGENCY AND AGENCY-SPECIFIC FUNDING OPPORTUNITIES



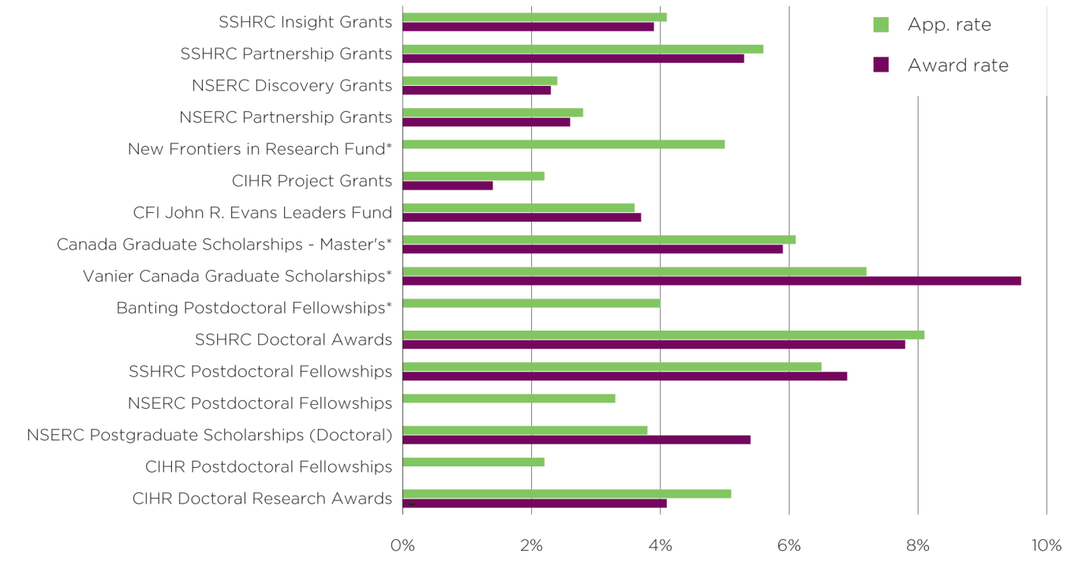
* Tri-agency funding opportunities

FIGURE 1B: APPLICATION AND AWARD RATES FOR **INDIGENOUS PEOPLES** BY TRI-AGENCY AND AGENCY-SPECIFIC FUNDING OPPORTUNITIES



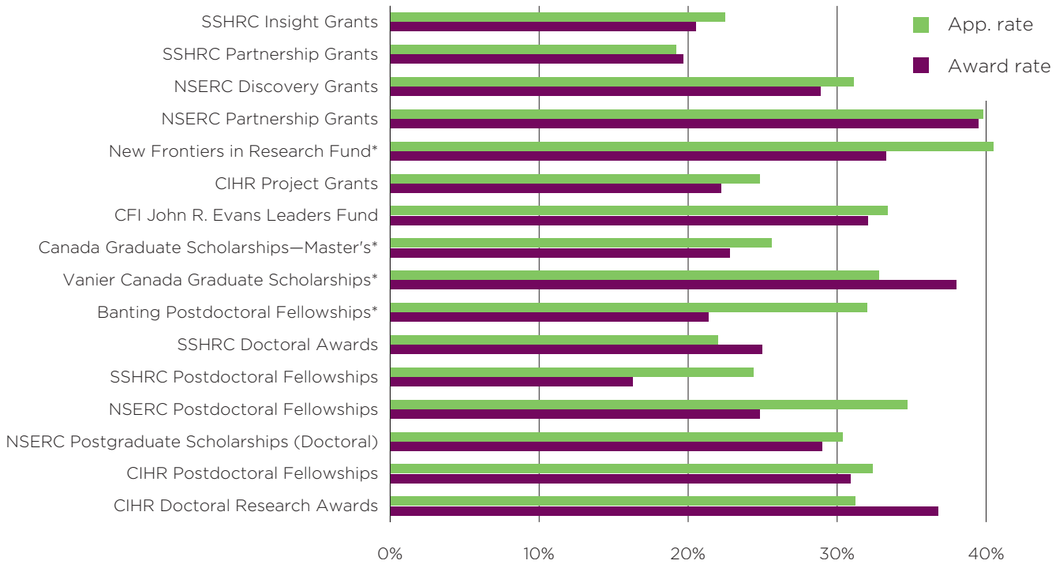
*Tri-agency funding opportunities

FIGURE 1C: APPLICATION AND AWARD RATES FOR **PERSONS WITH DISABILITIES** BY TRI-AGENCY AND AGENCY-SPECIFIC FUNDING OPPORTUNITIES



* Tri-agency funding opportunities

FIGURE 1D: APPLICATION AND AWARD RATES FOR MEMBERS OF **VISIBLE MINORITIES** BY TRI-AGENCY AND AGENCY-SPECIFIC FUNDING OPPORTUNITIES



* Tri-agency funding opportunities

Notes:

- A dash (-) indicates categories where fewer than 10 responses were received.
- The CRCP requires that all nominees submit a self-identification form as part of a complete nomination package; as such the data presented in this table correspond to the nomination rate and filled allocations. This data must not be used to calculate award rates or success rates. For additional program statistics, consult the **program website**.
- The CRC nominations represent the number of nominations in all cycles of the reporting year (e.g., 2020–21 and 2020–22) in which nominees self-identify as a member of an underrepresented group, divided by the total number of nominees in all cycles of the reporting year, multiplied by 100 (to calculate a percentage).
- The filled CRC allocations (total representation in program) represent the number of active chairs who self-identify as a member of an underrepresented group, divided by the total number of active chairs, multiplied by 100 (to calculate a percentage). Due to the nature of the program, these data are only available as point in time.

ANNEX II

Early career researcher data for flagship investigator-initiated research grant competitions

Photo Credit: Adobe Stock

Each agency has provided an update to last year's report, providing data from the 2020 and 2021 competition years from their flagship investigator-initiated research programs, based on grant amounts committed at the time of offer.

CIHR has included data from the Open Operating Grant program, which ran from 2000 to 2015, and the Project Grant program, which began in 2016.

NSERC has included data from the Discovery Grants program. The Discovery Launch Supplements, which began in 2018, are included for 2020 and 2021.

SSHRC has included data from two funding opportunities separately. The first table includes data for the Insight Development Grants funding opportunity, which began in 2011; the second table includes data for the Insight Grants funding opportunity, which began in 2012.

The CFI has included data from the John R. Evans Leaders Fund.

Canadian Institutes of Health Research

Project Grants are designed to support people at any career stage to build and conduct health-related research and knowledge translation projects while capturing ideas with the greatest potential for important advances in fundamental or applied health-related knowledge, health care, health systems and/or health outcomes. There are two Project Grants competitions per year (spring and fall). Grant values and durations are proportionate to the requirements of the research proposed and vary depending on the research field, research approach and scope of project activities: they are not explicitly capped.

At CIHR, an early career researcher (ECR) has historically been one who, at the time of application, has held a full-time, independent

research appointment for a period of up to five years (60 months), excluding leaves of absence. ECR status was validated only for project competitions. ECRs in Open Operating Grant program competitions (2014 to 2015) were considered those within five years of the date of their last degree. Within the overall competition budget, there is a specific funding envelope to ensure the proportion of grants going to ECRs is at least equal to the proportion of applications submitted by ECRs. Competition processes and peer review for this cohort are fully integrated in the entire competition, with no additional steps required on the part of applicants.

FIGURE 1: CANADIAN INSTITUTES OF HEALTH RESEARCH SUCCESS RATES (LINES) AND AVERAGE GRANT SIZES (BARS) FOR EARLY CAREER RESEARCHERS AND NON-EARLY CAREER RESEARCHERS FOR THE OPEN OPERATING GRANT PROGRAM AND PROJECT GRANTS FROM 2014 TO 2021

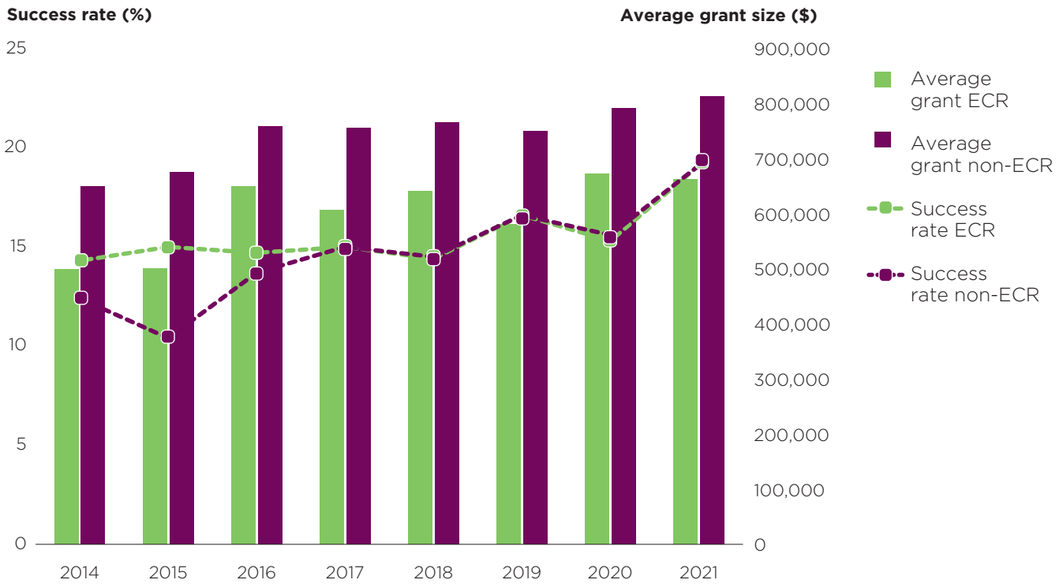


TABLE 1: CANADIAN INSTITUTES OF HEALTH RESEARCH

Open Operating Grant Program and Project Grants	2014	2015	2016	2017	2018	2019	2020	2021
Number of applications—ECRs	445	403	1,515	821	1,130	1,016	1,121	1,139
Number of applications—total	2,862	2,682	6,697	3,415	5,117	4,629	4,489	4,395
% of all applications	15.5%	15.0%	22.6%	24.0%	22.1%	21.9%	25.0%	25.9%
Success rate—ECRs	12.4%	10.4%	13.7%	15.0%	14.5%	16.6%	15.6%	19.1%
Success rate—established researchers	14.3%	15.0%	14.7%	15.0%	14.4%	16.6%	15.3%	19.1%
Average grant—ECRs	$499,585	$501,453	$649,423	$606,909	$641,404	$581,139	$673,052	$663,380
Average grant—established researchers	$649,479	$675,264	$759,156	$756,462	$765,262	$750,253	$792,275	$813,471
Total Open Operating Grant program / Project Grant program funds awarded—ECRs	$27,477,201	$21,061,029	$134,430,504	$74,649,750	$105,190,260	$98,212,527	$117,784,111	$144,616,856
Total Open Operating Grant program / Project Grant funds awarded	$251,547,297	$251,326,181	$711,389,291	$368,913,660	$545,981,020	$547,613,842	$526,597,846	$649,782,320
% of funds to ECRs	10.9%	8.4%	18.9%	20.2%	19.3%	17.9%	22.4%	22.3%

TABLE 1: CANADIAN INSTITUTES OF HEALTH RESEARCH (CONTINUED)

Open Operating Grant Program and Project Grants	2014	2015	2016	2017	2018	2019	2020	2021
Average grant (per year of grant)—ECRs	$122,025	$122,894	$151,524	$142,565	$145,751	$140,158	$155,533	$152,109
Average grant (per year of grant)—established researchers	$145,307	$146,186	$167,376	$169,043	$169,984	$166,980	$174,951	$179,988
Total Open Operating Grant program / Project Grant program funds awarded—ECRs (per year of grant)	$6,711,363	$5,161,554	$31,365,461	$17,535,442	$23,903,223	$23,686,639	$27,218,346	$33,159,544
Total Open Operating Grant program / Project Grant program funds awarded (per year of grant)	$56,842,202	$55,010,876	$158,571,008	$83,293,027	$121,814,153	$123,707,806	$117,492,829	$144,932,544
% of funds to ECRs	11.8%	9.4%	19.8%	21.1%	19.6%	19.1%	23.2%	22.9%

Natural Sciences and Engineering Research Council

NSERC Discovery Grants support ongoing programs of research with long-term goals rather than a single, short-term project or collection of projects. Discovery Grants are five-year grants. There is one Discovery Grants competition per year. Individuals can apply for and hold only one Discovery Grant at a time. Discovery Grant holders cannot reapply for another until the last year of their current award.

Individuals submitting an application are categorized as either ECRs or established researchers. From 2014 to 2016, ECRs were defined as people within two years of the start date of their first eligible position at a university with no prior academic or non-academic independent research experience. From 2017 to 2018, the ECR eligibility window was increased to three years; in 2019, it was increased to five years. In all years reported, the window for being considered an ECR could be adjusted to include instances when they had an eligible delay in research (owing to illness, parental leave, etc.).

While applications from ECRs are evaluated against the same three selection criteria as established researchers, it is recognized that individuals applying early in their career may not have had the opportunity to make the same levels of contribution to training as established researchers. For this reason, NSERC implements a different quality cut-off for funding ECRs, ensures the overall ECR success rate is at least 50%, and offers additional sources of support to those awarded a Discovery Grant. These include:

- an annual $5,000 top-up on their Discovery Grant;
- the Discovery Launch Supplement, introduced in 2018, a one-time award valued at $12,500; and
- since 2017, offering ECRs scheduled to apply for their second Discovery Grant the option of accepting an additional year of funding on their existing Discovery Grant at the same level.

In comparison to previous years, increases in funds awarded to ECRs in 2018 and later reflect the Discovery Launch Supplements and the additional year of funding. In addition to the flagship Discovery Grants program, NSERC also devotes funds to a number of Discovery funding programs, many of which provide support to ECRs.

FIGURE 2: NATURAL SCIENCES AND ENGINEERING RESEARCH COUNCIL SUCCESS RATES (LINES) AND AVERAGE GRANT SIZES (BARS) FOR EARLY CAREER RESEARCHERS AND NON-EARLY CAREER RESEARCHERS FOR DISCOVERY GRANTS FROM 2014 TO 2021

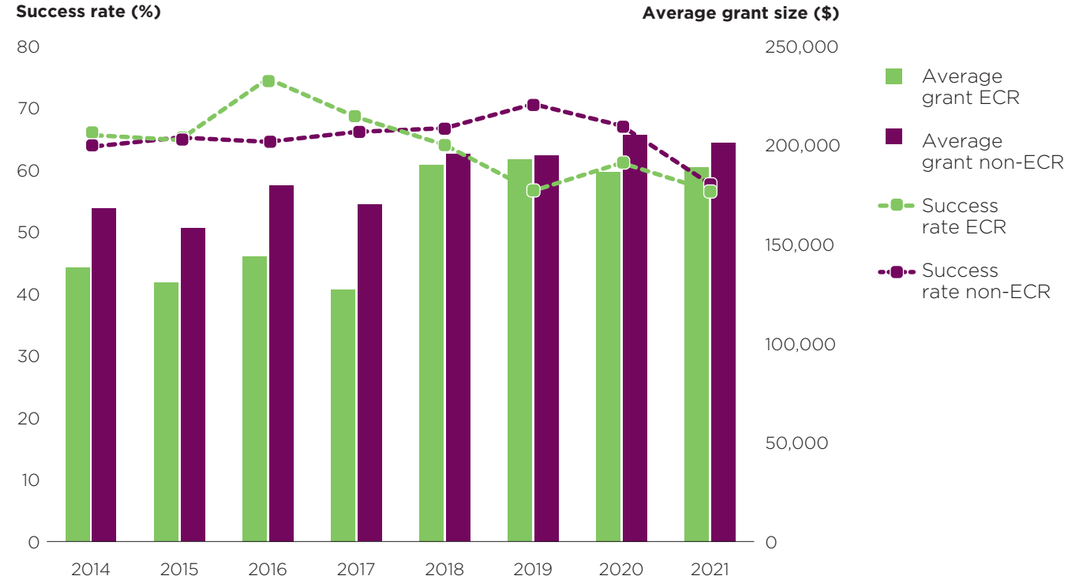


TABLE 2: NATURAL SCIENCES AND ENGINEERING RESEARCH COUNCIL

Discovery Grants	2014	2015	2016	2017	2018	2019	2020	2021
Number of applications—ECRs	427	489	494	562	677	882	889	866
Number of applications—total	3,134	3,159	3,167	3,240	3,213	3,404	3,372	2,008
% of all applications	13.6%	15.5%	15.6%	17.3%	21.1%	25.9%	26.4%	43.1%
Success rate—ECRs	65.6%	64.8%	74.7%	68.5%	64.0%	56.6%	61.1%	56.6%
Success rate—established researchers	63.7%	65.2%	64.5%	66.1%	66.7%	70.6%	67.1%	57.7%
Average grant—ECRs	$138,073	$130,553	$143,855	$127,043	$190,094	$192,549	$186,540	$188,798
Average grant—established researchers	$168,017	$157,924	$179,571	$169,937	$195,366	$194,672	$205,158	$201,134
Total Discovery Grants funds awarded—ECRs	$38,660,539	$41,385,170	$53,082,500	$48,911,515	$82,310,534	$96,081,926	$101,291,334	$92,510,996
Total Discovery Grants funds awarded	$328,489,387	$316,489,081	$362,842,820	$349,530,120	$412,869,600	$442,598,291	$443,084,989	$225,058,041
% of funds to ECRs	12.0%	13.1%	14.6%	14.0%	19.9%	21.7%	22.9%	41.1%
Average grant (per year of grant)—ECRs	$27,723	$26,120	$28,771	$25,409	$32,099	$32,508	$31,509	$31,883
Average grant (per year of grant)—established researchers	$35,513	$32,903	$37,135	$34,948	$40,355	$40,071	$41,032	$40,227
Total Discovery Grants funds awarded—ECRs (first year of grant)	$8,137,508	$8,280,084	$10,616,500	$9,782,303	$13,898,839	$16,221,571	$17,108,139	$15,622,666
Total Discovery Grants funds awarded (first year of grant)	$70,208,877	$65,870,975	$74,674,964	$71,605,024	$82,179,749	$87,547,244	$85,466,870	$42,132,075
% of funds to ECRs	11.6%	12.6%	14.2%	13.7%	16.9%	18.5%	20.0%	37.1%

Social Sciences and Humanities Research Council

Insight Development Grants support the development of new research in its initial stages. Applications are project-based and may be submitted by individual researchers or research teams. Insight Development Grants are valued at up to $75,000 over one to two years.

Within the Insight Development Grants funding opportunity, funding is available for two distinct categories of scholars: emerging scholars and established scholars. Emerging scholars may submit projects that build on and further the applicant's (or team's) graduate work and/or represent a continuation of their overall research trajectory. Applications by established scholars must explore new research questions and/or approaches that are distinct from the applicant's previous/ongoing research. Emerging scholar status is validated for Insight Development Grants and at least 50% of funds are reserved for applications from emerging scholars. The emerging scholar category is used as a proxy for ECRs within the Insight Development Grants funding opportunity.

When applying, emerging scholars must demonstrate that they have not successfully applied, as principal investigator or project director, for a grant offered through SSHRC, NSERC or CIHR. In addition, they must meet at least one of the following criteria:

- have completed their highest degree no more than six years before the competition deadline (SSHRC considers only the date of completion of the first doctorate);
- have held a tenured or tenure-track postsecondary appointment for less than six years;
- have held a postsecondary appointment, but never a tenure-track position (in the case of institutions that offer tenure-track positions); or
- have had their careers significantly interrupted or delayed for health or family reasons within the past six years.

Insight Grants support long-term, investigator-driven research excellence in the social sciences and humanities. Applications are project-based and may be submitted by individual researchers or research teams. Insight Grants are valued at $7,000 to $100,000 per year over two to five years, up to a total of $400,000. Two funding streams are available, depending on the scale of the proposed project:

- Stream A for requests between $7,000 to $100,000; and
- Stream B for requests between $100,000 to $400,000.

Insight Grants are available to both emerging and established scholars. There is no reserved budget envelope for emerging scholars within Insight Grants, as the Insight Development Grants emerging scholars stream serves this purpose. Neither emerging scholar nor ECR status is validated within the scope of the Insight Grants funding opportunity. Instead, a proxy is used to identify ECRs. Applicants who have completed their first highest degree no more than six years before the competition deadline are identified as ECRs.

FIGURE 3: SOCIAL SCIENCES AND HUMANITIES RESEARCH COUNCIL SUCCESS RATES (LINES) AND AVERAGE GRANT SIZES (BARS) FOR EARLY CAREER RESEARCHERS AND NON-EARLY CAREER RESEARCHERS FOR INSIGHT DEVELOPMENT GRANTS FROM 2014 TO 2021

TABLE 3: SOCIAL SCIENCES AND HUMANITIES RESEARCH COUNCIL

Overall	2014	2015	2016	2017	2018	2019	2020	2021
Number of applications—ECRs	1,055	1,026	970	1,013	1,000	884	960	905
Number of applications—total	3,271	3,225	2,912	2,749	2,675	2,493	2,681	2,288
% of all applications	32.3%	31.8%	33.3%	36.8%	37.4%	35.5%	35.8%	37.9%
Total Insight Development Grants / Insight Grants funds awarded—ECRs	$22,633,881	$19,972,111	$27,464,866	$23,579,015	$39,941,520	$29,049,725	$30,550,140	$36,237,645
Total Insight Development Grants / Insight Grants funds awarded	$115,651,421	$98,888,444	$110,634,127	$114,577,848	$139,711,962	$122,615,958	$129,715,263	$143,453,836
% of funds to ECRs	19.6%	20.2%	24.8%	20.6%	28.6%	23.7%	23.6%	25.3%

Insight Development Grants	2014	2015	2016	2017	2018	2019	2020	2021
Number of applications—ECRs	762	799	803	853	798	739	782	751
Number of applications—total	1,128	1,237	1,211	1,236	1,139	1,128	1,256	1,175
% of all applications	67.6%	64.6%	66.3%	69.0%	70.1%	65.5%	62.3%	63.9%
Success rate—ECRs	25.7%	23.7%	45.5%	32.6%	60.3%	50.9%	45.3%	56.9%
Success rate—established researchers	24.3%	22.1%	45.1%	31.1%	57.5%	48.6%	44.1%	55.2%
Average grant—ECRs	$60,643	$59,123	$55,604	$54,372	$55,434	$55,694	$57,567	$59,089
Average grant—established researchers	$62,048	$60,869	$55,862	$56,476	$58,087	$56,849	$57,050	$60,776
Total funds awarded—ECRs	$11,886,052	$11,174,264	$20,295,306	$15,115,320	$26,663,844	$20,940,988	$20,378,648	$25,231,168
Total Insight Development Grants funds awarded	$17,408,342	$17,078,587	$30,573,895	$21,835,969	$38,048,922	$31,685,401	$32,302,006	$39,452,804
% of funds to ECRs	68.3%	65.4%	66.4%	69.2%	70.1%	66.1%	63.1%	64.0%

TABLE 3: SOCIAL SCIENCES AND HUMANITIES RESEARCH COUNCIL (CONTINUED)

Insight Development Grants	2014	2015	2016	2017	2018	2019	2020	2021
Average grant (per year of grant)—ECRs	$30,629	$29,695	$27,872	$27,180	$28,016	$27,950	$28,995	$29,787
Average grant (per year of grant)—established researchers	$31,649	$30,592	$28,101	$28,599	$29,419	$29,482	$28,805	$31,188
Total funds awarded—ECRs (per average duration of grant)	$5,926,653	$5,538,089	$10,103,675	$7,542,462	$13,543,093	$10,512,432	$10,232,683	$12,674,951
Total Insight Development Grants funds awarded (per average duration of grant)	$8,680,117	$8,490,250	$15,232,059	$10,902,787	$19,324,171	$15,984,153	$16,237,526	$19,891,917
% of funds to ECRs	68.3%	65.2%	66.3%	69.2%	70.1%	66.1%	63.1%	64.0%

Insight Grants	2014	2015	2016	2017	2018	2019	2020	2021
Number of applications—ECRs	293	227	167	160	202	145	178	154
Number of applications—total	2,143	1,988	1,701	1,513	1,536	1,365	1,425	1,213
% of all applications	13.7%	11.4%	9.8%	10.6%	13.2%	10.6%	12.5%	12.7%
Success rate—ECRs	18.4%	20.7%	28.7%	31.3%	47.5%	43.4%	41.0%	48.1%
Success rate—established researchers	23.8%	23.7%	31.4%	40.9%	47.3%	46.1%	44.2%	53.2%
Average grant—ECRs	$199,034	$187,188	$149,366	$169,274	$138,309	$128,710	$139,336	$148,736
Average grant—established researchers	$198,853	$174,670	$151,540	$152,127	$140,072	$147,108	$158,334	$165,177
Total funds awarded—ECRs	$10,747,829	$8,797,847	$7,169,560	$8,463,695	$13,277,676	$8,108,737	$10,171,492	$11,006,477
Total Insight Grants funds awarded	$98,243,079	$81,809,857	$80,060,232	$92,741,879	$101,663,040	$90,930,557	$97,413,257	$104,001,032
% of funds to ECRs	10.9%	10.8%	9.0%	9.1%	13.1%	8.9%	10.4%	10.6%

TABLE 3: SOCIAL SCIENCES AND HUMANITIES RESEARCH COUNCIL (CONTINUED)

Insight Grants	2014	2015	2016	2017	2018	2019	2020	2021
Average grant (per year of grant)—ECRs	$50,625	$45,437	$37,895	$39,220	$36,524	$34,498	$37,947	$40,403
Average grant (per year of grant)—established researchers	$48,947	$42,830	$37,925	$37,349	$36,316	$37,422	$40,267	$41,296
Total funds awarded—ECRs (per average duration of grant)	$2,712,069	$2,164,915	$1,820,841	$1,941,214	$3,521,152	$2,155,487	$2,719,850	$2,961,743
Total Insight Grants funds awarded (per average duration of grant)	$24,145,314	$19,969,335	$19,818,373	$22,460,343	$26,605,122	$23,338,470	$24,729,810	$26,425,472
% of funds to ECRs	11.2%	10.8%	9.2%	8.6%	12.8%	8.7%	10.4%	10.6%

Canada Foundation for Innovation

The John R. Evans Leaders Fund is designed to help institutions attract and retain the best people by providing them with the foundational research infrastructure needed to be or become leaders in their field. The John R. Evans Leaders Fund also offers institutions the opportunity to create competitive research support packages in the form of infrastructure and a portion of the operating and maintenance costs, coupled with direct research costs from partner organizations (Canada Research Chairs Program, Canada Excellence Research Chairs Program, NSERC and SSHRC).

Canadian universities, affiliated research hospitals and research institutions recognized as eligible by the CFI can apply for the John R. Evans Leaders Fund if they have received a minimum annual average of $200,000 in research funding over the last three years from the three federal research funding agencies (CIHR, NSERC and SSHRC).

Research community members listed on the proposal must be:

- recognized innovative leaders or have demonstrated the potential for excellence in the proposed research field;
- engaged in or embarking on research or technology development that is innovative, high quality and meets international standards; and
- current faculty members with full-time academic appointments or candidates that the university is in the process of recruiting to full-time academic positions in a strategic sector.

FIGURE 4: CFI SUCCESS RATES (LINES) AND AVERAGE GRANT SIZES (BARS) FOR EARLY CAREER RESEARCHERS AND NON-EARLY CAREER REEARCHERS FOR THE JOHN R. EVANS LEADERS FUND FROM 2014 TO 2021

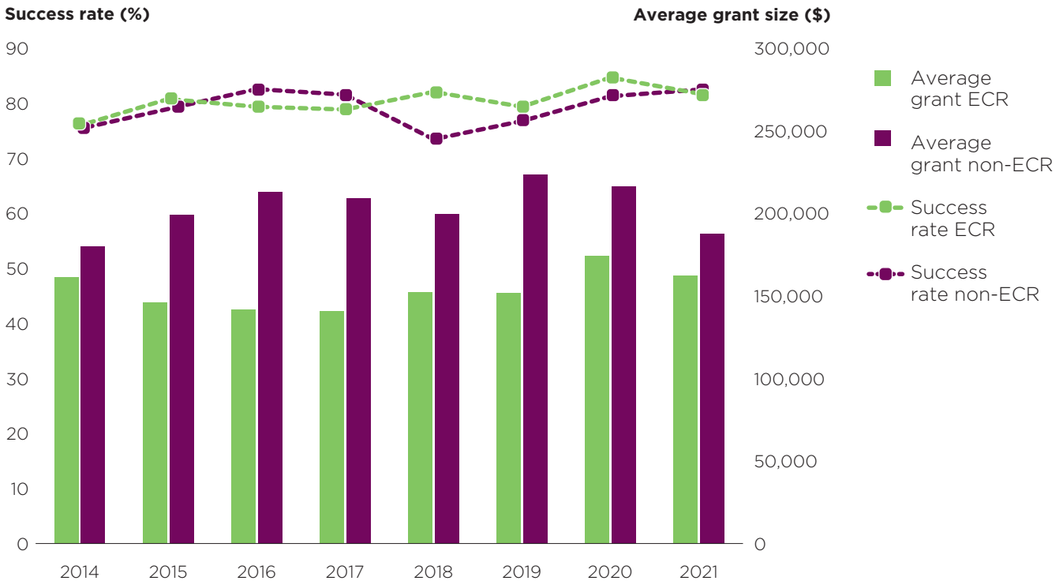


TABLE 4: CANADA FOUNDATION FOR INNOVATION

John R. Evans Leaders Fund	2014	2015	2016	2017	2018	2019	2020	2021
Number of applications—ECRs*	216	259	305	240	283	334	273	300
Number of applications—totals**	382	439	591	418	452	665	464	522
% of all applications	56.5%	59.0%	51.6%	57.4%	62.6%	50.2%	58.8%	57.5%
Success rate—ECRs	75.9%	80.7%	79.3%	78.8%	82.0%	79.3%	84.6%	81.7%
Success rate—established researchers	75.3%	78.9%	82.5%	81.5%	73.4%	76.7%	81.2%	82.4%
Average grant—ECRs	$161,031	$145,845	$141,832	$140,595	$152,209	$151,889	$174,267	$162,407
Average grant—established researchers	$179,824	$198,789	$212,993	$209,100	$199,564	$223,418	$216,270	$187,337
Total John R. Evans Leaders Fund funds awarded—ECRs	$26,409,068	$30,481,504	$34,323,312	$26,572,480	$35,312,473	$40,250,531	$40,255,643	$39,789,797
Total John R. Evans Leaders Fund funds awarded	$48,887,096	$58,709,489	$84,589,750	$56,891,959	$60,058,409	$96,998,760	$73,777,455	$74,072,384
% of funds to ECRs	54.0%	51.9%	40.6%	46.7%	58.8%	41.5%	54.6%	53.7%

*Overall, approximately 3% of applicants' data did not include information on their PhDs and has been excluded.

**In 2020-21 and prior, the CFI definition of ECR was, "Difference from the year of first PhD in their career and the proposal submission year is within 10 years."

FY 2021-2022: "The difference between the first research-related appointment start date and the proposal submission date is within five years."

Notes:
The variances from the previous report are due to the additional data collected since 2020 on first faculty and research-related appointments, and to the dynamic nature of our database.

Definitions of ECRs
FY2021-22: The difference between the first research-related appointment start date and the proposal submission date is within five years.

FY2020-21 and before: The difference between the year of the first PhD degree and the proposal submission year is within 10 years.

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