Tri-agency written brief for the House of Commons Standing Committee on Science and Research
Integration of Indigenous Traditional Knowledge and Science in Government Policy Development

INTRODUCTION

The federal granting agencies, namely the Social Sciences and Humanities Research Council of Canada (SSHRC), the Canadian Institutes of Health Research (CIHR), and the Natural Sciences and Engineering Research Council of Canada (NSERC), collaborate with First Nations, Inuit and Métis partners, to support Indigenous self-determination and capacity-building in research and research training. These collaborative efforts support the implementation of the *Truth and Reconciliation Commission of Canada's Calls to Action*, the *Inuit Nunangat Policy*, and the *United Nations Declaration on the Rights of Indigenous Peoples Act Action Plan 2023-28,* as well as broader efforts for reconciliation. Further, Indigenous research also contributes to the advancement of truth and reconciliation by helping Indigenous communities re-gain and protect traditional knowledge, including through the revitalization of Indigenous languages and Knowledge Systems. Through this written brief, the federal granting agencies aim to highlight their actions to support Indigenous research while conveying the importance of Indigenous Knowledge systems and the practical and applied contributions they can both make to the development of government policy that supports better outcomes for all Canadians.

INDIGENOUS RESEARCH AND RESEARCH TRAINING STRATEGY

In response to the Truth and Reconciliation Commission of Canada's (TRC) Call to Action 65, the Government of Canada asked the Canada Research Coordinating Committee (CRCC)[1] to develop, in close collaboration with Indigenous partners, a strategy to increase the capacity of First Nations, Inuit and Métis communities to lead their own research and partner with the broader research community.

To that end, the Government of Canada committed $3.8 million to SSHRC in Budget 2018. SSHRC, on behalf of the CRCC, awarded 116 Indigenous Research Capacity and Reconciliation Connection Grants. The grants provided Indigenous communities, collectives and organizations, as well as postsecondary institutions, resources to organize community gatherings, workshops and events, to mobilize and exchange knowledge on Indigenous research and reconciliation. In collaboration with First Nations, Inuit and Métis communities, 14 regional discussions were organized, followed by a national dialogue with grant recipients.

These resulted in the *Setting New Directions to Support Indigenous Research and Research Training in Canada* strategic plan, launched in 2020. The interagency strategy sets out four directions:

- building relationships with First Nations, Inuit and Métis Peoples;
- supporting research priorities of Indigenous Peoples;
- creating greater funding accessibility; and,

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[1] The CRCC brings together the presidents of Canada's three federal research funding agencies, the Canada Foundation for Innovation; the chief science advisor; and the deputy ministers of Innovation, Science and Economic Development and of Health Canada. The CRCC provides a senior strategic forum on forward-looking initiatives that strengthen Canada's research enterprise, foster world-leading research, and advance the social and economic well-being of Canadians.

- championing Indigenous leadership, self-determination and capacity building in research.

The federal granting agencies, on behalf of the CRCC, and in collaboration with Indigenous partners, are leading the Strengthening Indigenous Research Capacity initiative (SIRC) to support the implementation of the strategic plan, which is based on collaborative structures internal and external to the agencies.

In February 2022, the CRCC published the first progress report of the SIRC which recounts how the federal granting agencies have been laying a foundation to implement the strategy, including important key milestones detailed in subsequent sections.

To support implementation and ensure the ongoing engagement of Indigenous partners, the Indigenous Leadership Circle in Research was established in April 2022. The Leadership Circle, composed of First Nations, Inuit and Métis members from communities and Nations across the country, and representative of various research disciplines and communities, provides guidance and oversight, to ensure successful implementation of the strategic plan.

Recognizing the importance of work underway despite the impacts of COVID-19, and the importance of supporting the strategy's intended outcomes through new mechanisms and improvements to existing mechanisms, the strategy's implementation has been extended to 2025-26.

Working Across the Agencies

Implementation is being coordinated across the agencies through several internal and external working groups which each include, and in some cases are led by, Indigenous Peoples. The working groups cover a wide range of issues, including: improving access to funding opportunities for Indigenous researchers and organizations; developing research programs to support reconciliation; recommending updates to the agencies' responsible conduct of research framework and research ethics policy; understanding different ways to affirm Indigenous citizenship and membership and working to avoid Indigenous identity fraud within the funding opportunities of the agencies; and, improving the representation of Indigenous peer reviewers while ensuring the culturally appropriate review of Indigenous research.

The federal granting agencies have also incorporated other aspects of the strategy, including analyzing the Tri-Agency Research Data Management Policy's implications for Indigenous communities and peoples, promoting international collaborations among Indigenous researchers, and increasing Indigenous representation in the agencies through targeted recruitment.

Spotlight on the Appropriate Review for Indigenous Research

Among the many goals of the strategic plan, improving the review of Indigenous research is an important feature. In October 2020, an external Reference Group for the Appropriate Review of Indigenous Research composed exclusively of First Nations, Inuit and Métis members was established. The group evaluates peer and merit review models across the agencies, to ensure the processes are culturally appropriate, inclusive and relevant for First Nations, Inuit and Métis communities, and that they advance proper recognition and respect for Indigenous Knowledge systems and values. The group has developed guiding principles for the appropriate review of Indigenous research, as well as recommendations to streamline, within agency application processes, the submission process for letters of support from Indigenous communities and organizations.

To complement these initiatives, the federal granting agencies have organized learning opportunities for staff to raise awareness of the strategy and increase understanding of Indigenous realities in research.

Key Milestone: Indigenous Citizenship and Membership

As part of the implementation of the CRCC's strategic plan, the federal granting agencies are working to establish a common set of principles and guidelines to better understand issues relating to Indigenous citizenship and membership, to ensure opportunities intended for Indigenous Peoples are being provided

to Indigenous Peoples, and to support the integrity and authentic representation of Indigenous knowledge in agency-funded research.

The agencies have engaged with a range of key partners in the development of a policy on Indigenous citizenship and membership affirmation. Input from all partners has been used to develop a What We Heard Report, which reflects what was shared and which elaborates the foundations for the development of a new policy intended to ensure that programs, funding opportunities, and/or appointments intended for Indigenous people are held by Indigenous people. The policy is expected to be published in FY 2024-2025, with implementation to be phased in following its publication.

Key Milestone: Research Data Management

The agencies recognize that data related to research by and with the First Nations, Métis, or Inuit whose traditional and ancestral territories in Canada must be managed in accordance with data management principles developed and approved by these communities, and on the basis of free, prior and informed consent. Launched in March 2021, the *Tri-Agency Research Data Management Policy*, promotes practices aligned with Indigenous data sovereignty. Though the policy mentions First Nations principles of ownership, control, access, and possession (OCAP®), it takes a distinctions-based approach and does not endorse or proscribe any specific Indigenous research data management protocol.

Supporting Indigenous Talent

The agencies provide support specifically for Indigenous graduate students and postdoctoral researchers. For example, educational institutions may recommend applications from Indigenous student researchers to the doctoral awards competition beyond the institution's application quota. These additional awards to promising Indigenous students help address barriers to accessing higher education.

To further strengthen support for Indigenous Master's students, in September 2022, NSERC and SSHRC were pleased to launch the Indigenous Scholars Awards and Supplements Pilot Initiative to provide financial support to First Nations, Inuit and Métis Master's students in social science, humanities, natural science, and engineering programs.

Other Key Achievements

In addition to the abovementioned work, the agencies have collaborated in other important areas, including increasing collaboration with other government departments related to the implementation of the *United Nations Declaration on the Rights of Indigenous Peoples Act*, the *Inuit Nunangat Policy*, and others.

The agencies are also in the process of updating the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans Chapter 9 and the Tri-Agency Framework: Responsible Conduct of Research to better reflect Indigenous perspectives.

Key projects related to the administration of research funding are in various stages of implementation, including a proposal to better support indirect costs of research by Indigenous not-for-profit organizations, as well as work to support the compensation of Indigenous Elders, Knowledge-Keepers and community members participating in funded projects.

Finally, a new focus on better understanding the outcomes and results of the strategy, alongside potential areas for further work and renewal, will remain an important focus for the upcoming year on the part of all the agencies.

These collaborative initiatives set an important, coordinated framework for federally-funded Indigenous research. Within this framework, each agency also takes action to address gaps within their respective mandate area. The next three sections detail these actions.

SSHRC ACTIONS

In addition to leading the implementation of the interagency strategy, SSHRC has long been committed to supporting research by and with First Nations, Inuit and Métis Peoples. SSHRC's Indigenous Advisory Circle—formed in 2014—provides guidance to the agency's senior management to support and promote Indigenous research and talent development.

A crucial step to this work was clarifying what is meant by the term "Indigenous research." The Indigenous Advisory Circle has thoughtfully crafted a clear definition of Indigenous research, which SSHRC uses to inform its work. With the guidance of the Indigenous Advisory Circle, SSHRC also created an Indigenous Research Statement of Principles and landmark resources to support and guide Indigenous research and talent, including Guidelines for the Merit Review of Indigenous Research.

SSHRC supports Indigenous research, research training and knowledge mobilization across all its funding opportunities, including on truth and reconciliation, as well as other research areas that can inform the development of government policies. SSHRC invests about 10-12% of its annual research funding expenditures in Indigenous research. There are countless examples of research stories demonstrating the contributions of SSHRC-supported Indigenous research on various issues, such as sharing Indigenous environmental knowledge, helping schools revitalize Indigenous languages and enhance cultural identity, and increasing equitable access to safe drinking water. SSHRC also supports Indigenous research through more targeted initiatives such as those discussed below.

Pilot Project for the Merit Review of a Grant Application in Cree

The pilot project for the Merit Review of a Grant Application in Cree was created in response to applicant's request that SSHRC provide merit review for applications written in Indigenous languages in the same way that it does for applications written in English or French. In 2022, the President's Office created a pilot project under the Special Initiatives Fund to review the project in its original language: Cree.

The project had two related goals, including to review the application in the original language and make a funding recommendation, as well as to serve as a case-study for a larger discussion that would explore the feasibility of the intake and adjudication of applications submitted in Indigenous languages. The case study is still being completed, but the adjudication process is now complete, with a positive result for the applicant.

SSHRC looks forward to further sharing the results of its case study to inform the path forward.

Collaboration with the NCTR

In February 2022, SSHRC and the National Centre for Truth and Reconciliation (NCTR) announced their collaboration on a national research program to advance understanding of reconciliation, in response to the TRC's Call to Action 65, and to support calls to action 71 to 76. Through research on reconciliation and residential schools, done by and with Indigenous communities, the collaboration is intended to leverage the skills and knowledge of both parties—the NCTR's expertise and ability to safeguard the truths of Survivors, their families, communities and others affected by the residential school system; and SSHRC's role to promote and support research and training in the humanities and social sciences.

This collaboration has yielded three new funding opportunities: in March 2022, the Partnership Engage Grants—Residential Schools Joint Initiative was launched to support communities in their search; in May 2022, the Reconciliation Network Coordination Hub was launched to support the NCTR in its role as a Coordination Hub for the future Reconciliation Network; and, in November 2022, the Reconciliation Network in Response to Call to Action 65 was launched to advance a collective understanding of reconciliation.

Imagining Canada's Future

Indigenous research is integrated into the Future Challenge Areas being addressed through SSHRC's Imagining Canada's Future initiative. As part of this initiative, in September 2023, SSHRC partnered with Canadian Heritage, Genome Canada, and the UK Research and Innovation's Arts and Humanities Research Council, to launch a new a funding opportunity aiming to foster a deeper understanding of the state of knowledge about the global challenge of Evolving Narratives of Cultures and Histories. A key dimension of this issue is that the impacts of colonization and racism continue to inform understandings of, and engagements with, cultures and histories. In Canada, reconciliation with First Nations, Inuit and Métis requires settlers and newcomers to reconsider dominating historical and cultural narratives and respectfully engage with Indigenous Knowledge systems, cultures and traditions.

Indigenous Talent Measures

In addition to the tri-agency initiatives mentioned above, SSHRC has established measures to support Indigenous graduate students and postdoctoral researchers. Applicants can identify their proposal as Indigenous research, such that SSHRC's Guidelines for the Merit Review of Indigenous Research will apply. For applications related to Indigenous research, SSHRC ensures that external assessors, either Indigenous or non-Indigenous, have experience and expertise in Indigenous research. Instructions were added for members of SSHRC's doctoral and postdoctoral adjudication committees to take into account special circumstances that may have had an impact on the academic or career paths of Indigenous applicants. In addition, SSHRC makes concerted efforts to include experts in Indigenous research in doctoral and postdoctoral adjudication committees.

SSHRC has also established a master's scholarships for Indigenous students as part of the Mobilizing Insights in Defence and Security (MINDS) program which is administered in collaboration with the Department of National Defence (DND).

Indigenous Not-For-Profit Organizations Applying for Institutional Eligibility

In response to the Truth and Reconciliation Commission Report in 2015, and, in particular, Call to Action 65, SSHRC offers Indigenous not-for-profit organizations with a research mandate to apply for institutional eligibility.

CIHR ACTIONS

The Canadian Institutes of Health Research (CIHR), Canada's federal health research funding agency, would like to thank the committee for embarking on this important study. CIHR recognizes the crucial role Indigenous traditional knowledges play in health research and health equity.

In addition to our concerted efforts with the other federal granting agencies, as outlined above, CIHR is committed to, and is working toward, a research ecosystem that ethically and respectfully advances Indigenous health research. Over time, this will create a robust foundation of evidence, reflective of diverse knowledge systems and grounded in Indigenous self-determination, which can inform policy development.

Indigenous Health Research

As one of CIHR's 13 institutes, the Institute of Indigenous Peoples' Health (CIHR-IIPH) fosters the advancement of a national health research agenda to improve and promote the health of First Nations, Inuit and Métis Peoples in Canada, through research, knowledge mobilization, and capacity building, and with respect for community research priorities and Indigenous knowledges, values and cultures.

Based on Indigenous engagement led by IIPH, CIHR understands Indigenous health research (IHR) as any field or discipline related to health and/or wellness that is conducted by, grounded in, or engaged with, First Nations, Inuit or Métis communities, societies or individuals and their wisdom, cultures, experiences or knowledge systems, as expressed in their dynamic forms, past and present.

CIHR Action Plan

Throughout the entire agency, CIHR embraces a distinctions-based and culturally safe approach to Indigenous health research. This approach is described in more detail in CIHR's 2021-2031 Strategic Plan, which builds on the foundations set by CIHR's 2016 Action Plan, *Building a healthier future for First Nations, Inuit, and Métis Peoples*. The Action Plan was informed by Indigenous communities and entails accelerating the self-determination and leadership of Indigenous Peoples in health research. It also aligns with the Truth and Reconciliation Commission's Calls to Action, which call on the Government of Canada to establish measurable goals to identify and close the gaps in health outcomes between Indigenous and non-Indigenous communities.

CIHR is pleased to share some highlights of progress on the Action Plan that strengthen the research ecosystem's capacity to integrate Indigenous traditional knowledges and science, which can inform policy development upstream:

- To increase the agency's capacity to interact with Indigenous communities in a culturally appropriate manner, a dedicated Indigenous health research support office was created in 2017, to work directly with Indigenous Peoples, researchers, and communities.

- In the past two fiscal years, CIHR reached its commitment to increase its investments in Indigenous health research to a minimum of 4.6% of its annual budget (proportional to the Indigenous population in Canada in 2016). This represents a total investment of over $59M (4.7%) in 2022-2023.

  o As one example, CIHR is investing $14 million over six years in a long-term study focused on Indigenous children's health and well-being. Led by the Nuu-chah-nulth Tribal Council, collaborators on this project include Indigenous leaders and communities of 23 First Nations, the First Nations Health Authority in British Columbia, and researchers from Simon Fraser University and the University of Alberta. This research is using traditional Indigenous knowledge coupled with Western science to promote and sustain healthy child development.

- As part of its commitment to create impactful strategic initiatives aimed at improving the health of Indigenous Peoples, CIHR is investing $100.8M over 16 years in the Network Environments for Indigenous Health Research (NEIHR) Program. Located across the country, 9 NEIHR centres lead research, knowledge translation and capacity-building initiatives that respond to Indigenous health priorities. For instance, the Saskatchewan NEIHR supported an initiative to provide accessible and culturally responsive on-reserve care for First Nation partner communities through a shared knowledge approach, which integrated training and mentoring for Indigenous community members and post-secondary students.

- To support Indigenous research capacity, CIHR is also investing $6.4 million to establish an Inuit Research Network to support the implementation of Inuit Tapiriit Kanatami's *National Inuit Strategy on Research*. This investment will support the strategy's aim to enhance Inuit capacity, knowledge and self-determination in research, with an emphasis on improving Inuit health and well-being.

- To advance community-based research and remove barriers to research funding accessibility, in Fall 2020, CIHR expanded the eligibility criteria of its Project Grant program to include individuals from Indigenous non-governmental organizations in Canada with a research or knowledge translation mandate.

CIHR is also working to address the under-representation of Indigenous people in clinical trials. As research studies that involve human participants to evaluate the safety and/or effects of interventions on health outcomes, clinical trials are key to improving health outcomes. This is why CIHR is currently investing more than $38 million in a pan-Canadian Clinical Trials Consortium (2022-2025), which will lead to greater coordination of clinical trials conducted in Canada and strengthen Canadian participation in international clinical trials. This newly formed consortium, co-led by The Ottawa Hospital, has set a goal to identify Indigenous health priorities that can be evaluated through clinical trials, in partnership with Indigenous Peoples.

While CIHR recognizes that there is more work to be done, it will continue to take action - informed by, and in partnership with, Indigenous communities - to ethically advance Indigenous health research, strengthening the pathways for Indigenous traditional knowledges and science to inform policy development, while respecting data sovereignty principles and Indigenous self-determination.

NSERC ACTIONS

The Natural Sciences and Engineering Research Council of Canada (NSERC) recognizes the crucial role Indigenous traditional knowledges play in the natural sciences and engineering.

NSERC envisions a diverse and inclusive research ecosystem, one that expands the existing talent pool, welcomes researchers with a range of expertise, finds common space for mutually respectful exploration and decolonizes research practices to support First Nations-, Inuit- and Métis-led knowledge creation and innovation. This will serve to advance the research priorities of Indigenous rightsholders and produce economic, environmental, and social benefits for Indigenous communities.

NSERC is committed to building meaningful relationships with Indigenous communities, organizations, researchers, students, and postdoctoral fellows in line with the principles of the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP); to supporting Indigenous research priorities; and to ensuring that NSERC-funded research involving Indigenous people and communities is beneficial to them and aligned with their priorities.

NSERC-supported Indigenous research has demonstrated impacts in these areas. For instance, NSERC-funded research on Eastern wolf populations in Northern Ontario weaves together different knowledge systems in wildlife monitoring and management, and by doing so, helps strengthen relationships between Indigenous communities and the province. NSERC also supports Indigenous research through more targeted initiatives including those discussed below.

Encouraging Indigenous Research

NSERC recognizes Indigenous research as research in any field or discipline related to the natural sciences or engineering that is conducted by, grounded in, or meaningfully engaged with First Nations, Inuit, Métis or other Indigenous Nations, communities, societies or individuals, and their wisdom, cultures, experiences, or knowledge systems, as expressed in their dynamic forms, past and present. This definition, which was informed by the Tri-Agency Reference Group for the Appropriate Review of Indigenous Research, has been adopted within NSERC's Discovery Grants and Discovery Horizons programs. The agency continues to work with Indigenous researchers to refine the definition so that it can be adopted across all NSERC programs.

Indigenous research has been especially welcome in NSERC's Discovery Horizons pilot, where over 20% of grants awarded in the past two years have gone to projects weaving traditional knowledge with western science or engineering. These projects are often led by Indigenous researchers or developed in close collaborations with Indigenous communities.

Supporting Research Excellence and Respect for Different Knowledge Systems

NSERC supports natural sciences and engineering research excellence in Canada and, as such, the agency considers and values the quality and impact of a wide range of contributions to research, training and mentoring as part of its merit review process. NSERC is a signatory to the San Francisco Declaration on Research Assessment (DORA). More diverse and traditional ways of knowing, along with fresh methods and perspectives, are increasingly applied to research. Indigenous knowledge systems, Indigenous-led research, and impact on Indigenous communities are increasingly central considerations in NSERC's suite of programs and in the thinking behind the assessment of research excellence.

Indigenous Research in Arctic and Northern Canada

NSERC is committed to pursuing a distinctions-based approach in efforts to support Indigenous research. In this context, and pursuant to broader Government of Canada guidance as described in the Inuit Nunangat Policy, NSERC entered into a memorandum of understanding with Inuit Tapiriit Kanatami (ITK) to further Inuit self-determination in Natural Sciences and Engineering (NSE) research. NSERC and ITK co-developed a workplan to support the implementation of the National Inuit Strategy on Research and create a shared research pathway with full and equal participation by Inuit in the research process. Commitments in the joint workplan include advancing Inuit governance in research, aligning funding with

Inuit research priorities, building capacity in Inuit Nunangat research, and ensuring Inuit access, ownership and control over data and information. NSERC also helped sponsor the recently-released Council of Canadian Academies report on Northern Research Leadership and Equity. The report provides helpful guidance for northern research and outlines opportunities for research funders to better support an inclusive and collaborative Arctic and Northern research system.

NSERC's Northern Research Supplements provide additional funding to Discovery Grant recipients working in the North, recognizing the additional cost of northern research. These grants are often provided for programs involving Indigenous research.

College and Community Innovation

A substantial amount of Indigenous-focused research takes place at the college level. With 86% of Indigenous Peoples living within 50 km of a campus or learning facility, colleges are the main access point for post-secondary education. The Tri-agency College and Community Innovation (CCI) program is one of the largest vehicles for funding applied research at colleges, polytechnics, and CEGEPs across Canada. The program, managed by NSERC in collaboration with SSHRC and CIHR, is committed to supporting research that is led by and respectfully involves and engages First Nations, Inuit, and Métis Peoples or other Indigenous nations, communities, societies, or individuals.

The program's College and Community Social Innovation Fund grants develop partnerships that foster community innovation by increasing college capacity to work with communities. Partner eligibility for the fund includes First Nations, Inuit, and Métis not-for-profit organizations. In recognition of the unique need for guidance, CCI developed the Guide for research involving Indigenous Peoples and communities. The guidelines, now in their second iteration, were tailored for those whose research involves Indigenous Peoples or communities, and for those reviewing such applications. The guide draws primarily on resources developed by CIHR, SSHRC and the Secretariat for the Responsible Conduct of Research and individuals with shared Indigenous or traditional knowledge.

Support for Indigenous Talent

In addition to programs jointly managed by NSERC and SSHRC (noted above in the "Supporting Indigenous Talent" section), NSERC offers several initiatives that support the fuller participation of Indigenous scientists and engineers in the research ecosystem, fostering Indigenous research leadership and self-determination. One way that NSERC is championing Indigenous research talent is by funding Indigenous Student Ambassadors. These grants support Indigenous doctoral students and postdoctoral fellows in their visits to schools and Indigenous communities to encourage greater Indigenous participation in science and engineering. NSERC also promotes Indigenous research talent by allowing those who identify as Indigenous to bypass institutional quota systems and instead compete nationally for the NSERC Undergraduate Student Research Awards (USRA).

Launched in 2000, PromoScience is Canada's only national initiative to support science outreach groups and organizations. Its goal is to increase science literacy among young Canadians and boost the number of students who pursue studies and careers in Science, Technology, Engineering and Mathematics (STEM) fields. In 2016, NSERC started targeting groups that are under-represented in scientific and engineering careers, including Indigenous Peoples. PromoScience also supports activities that will encourage Indigenous undergraduate students to pursue graduate studies in natural sciences and engineering. For example, a PromoScience grant to the University of Manitoba helped support its Wawatay program for Indigenous undergraduate students enrolled in a science major. The program supports students (Wawatay Scholars) to pursue STEM topics while also recognizing and encouraging the importance of Indigenous knowledges. The objective is to increase the graduate rates of Indigenous undergraduate STEM students.

NSERC Scholar in Residence

In 2023, NSERC announced Dr. Mark Green as a Scholar in Residence (2023-25). Dr. Green is a professor of civil engineering at Queen's University as well as an Indigenous researcher who sits with the Turtle Clan in the Kenhtè:ke Longhouse in Tyendinaga. His Kanyen'kéha name is Rahswahérha (he

builds a bridge). The position was created to establish greater Indigenous representation at the agency and provide valuable advice to senior management on NSERC's programs, policies, and processes. The Scholar in Residence helps the agency bring together Indigenous traditional knowledge and science systems into government policy.

During NSERC's consultations with Indigenous rightsholders for development of the [NSERC 2030](#) strategic plan, concerns were raised over the perceived extractive nature of research. The agency was seen as focusing too narrowly on commercialization and competitiveness. The stakeholders also noted the harms done to Indigenous peoples through research and by researchers. These factors have historically formed barriers to access for Indigenous trainees and Indigenous researchers with different, more holistic world views. Within this context, the Scholar in Residence plays a central role in supporting NSERC's reconciliation efforts with Indigenous rightsholders.

I-STEM Cluster

As a participant in the Interdepartmental Indigenous Science, Technology, Engineering and Mathematics (I-STEM) Cluster, NSERC works with other federal departments and agencies to reduce duplication, break down silos inside government, and enhance effectiveness while co-developing solutions with Indigenous partners. I-STEM departments work together to foster long-term relationships with Indigenous partners that support these distinct approaches to stewardship and innovation, and advance the environmental, cultural, and socio-economic goals of Indigenous Peoples in a collaborative and reciprocal way that works to integrate Indigenous knowledge into government policy development.

CONCLUSION

This written brief highlights key actions that the federal granting agencies, both collectively and individually, are taking to support Indigenous research, grounded in principles of Indigenous self-determination. These upstream actions are intended to strengthen the research ecosystem, which will build the ecosystem's capacity to support the integration of Indigenous traditional knowledge and science in government policy development.