

SCIENCE & POLICY EXCHANGE

RETHINKING FEDERAL RESEARCH FUNDING:

Towards More Equitable Funding for Canada's Next Generation

Indigenous Graduate Student & Postdoctoral Fellow Perspectives: An SPE Report

In this report, we present results disaggregated by Indigenous identity from SPE's 2018 scholarship and fellowship survey, which provided insight from over 1100 respondents. Research trainees from diverse communities and backgrounds have unique experiences and interactions with the research ecosystem. The survey responses revealed specific experiences and needs of respondents from underrepresented groups. In this report, we examined the results from respondents who self-identified as Indigenous. While self-identified Indigenous responses only represented approximately 1% of total survey respondents, we still highlighted the results as Indigenous peoples are severely underrepresented in academia^{1,2}. We also wish to acknowledge that Indigenous identities are diverse, and not mutually exclusive from any of the other identities (gender, disability, other racial minorities) reported.

Indigenous respondents differed from non-Indigenous respondents in the financial necessity of external funding and in the types of barriers experienced. Indigenous award holders were 40% more likely to require other sources of funding in addition to their federal awards, compared to non-Indigenous respondents, demonstrating a need for better financial support for Indigenous researchers. Additionally, they identified the following barriers to obtaining awards: lack of support for multidisciplinary research, insufficient award duration, lack of support for Indigenous researchers, and lack of equity, diversity, and inclusion considerations. Many Indigenous scholars are first-generation university students who would benefit from redefining merit criteria for awards in order to better account for different kinds of experiences, including reducing focus on previous publications and academic records^{3,4,5}. Based on these responses, improving financial support and changing award criteria would enable more Indigenous students to pursue and focus on an advanced research-based degree.

Furthermore, Indigenous respondents indicated a desire for change in where and how to invest in funding for graduate students and post-doctoral fellows. Given a hypothetical increase in funding for awards, Indigenous respondents highly valued increasing the number of awards for science outreach and engagement activities, travel awards, and support for multidisciplinary research. Over half of Indigenous respondents also valued the inclusion of policy skills, and one third valued the inclusion of second language classes in awardee training. In addition, they were approximately equally as likely as non-Indigenous respondents to indicate they valued more management and leadership training and the incorporation of communication skills to diverse audiences.

The low percentage of Indigenous respondents supports the need for further outreach to Indigenous communities in order to better understand their experiences in the research funding process. By under-

^{1 &}lt;u>The Indigenous Diversity Gap: Canadian Universities - 2019 Indigenous Representation Analysis</u>, Malinda S. Smith and Nancy Bray, Academic Matters (Spring 2019), pg 14-15.

^{2 &}lt;u>Underrepresented and Underpaid: Diversity & Equity Among Canada's Post-Secondary Education Teachers, Canadian Association of University Teachers, April 2019.</u>

³ Supporting Indigenous students on campus: Finding the best approach, Jennifer Lewington, Macleans, Dec 5 2017.

^{4 &}lt;u>Canada 150 and indigenous post-secondary education,</u> Vianne Timmons, Stephen King, Regina Leader-Post, Jul 1 2017.

^{5 &}lt;u>The challenges faced by Indigenous students in post-secondary education,</u> Lenard Monkman, CBC News, Sep 6 2018.

standing and addressing their needs, policies and programs can be created to improve access to science, make academia more inclusive, and produce better research. In order to foster a more inclusive research training environment that values multiple methods of knowledge production and is more inclusive and supportive of Indigenous scholars, award criteria, amount, and access should all be reviewed.

Along with recommendations made in our other survey reports, we recommend that the federal funding agencies:

- 1. Further engage Indigenous trainees on their unique experiences with research funding.
- 2. Dedicate new trainee funding for leadership and communication development, international collaboration, and science outreach and engagement.
- 3. Support multidisciplinary research by continuing to better coordinate amongst tri-councils.
- 4. Widen criteria for award recognition to de-emphasize previous success and increase emphasis on research-related extracurricular work.

Different groups of students experience the federal funding system in unique ways. You can read more about some of their specific experiences in other micro-reports at the following link.

https://www.sp-exchange.ca/rethinking-federal-research-funding





SCIENCE & POLICY EXCHANGE

SURVEY ON CANADIAN SCHOLARSHIPS FELLOWSHIPS

Science & Policy Exchange (SPE) is a non-profit group aimed at representing the voice of next-generation researchers to policy makers. We asked graduate students and postdoctoral fellows to tell us what they want for the future of scholarships and fellowships in Canada.

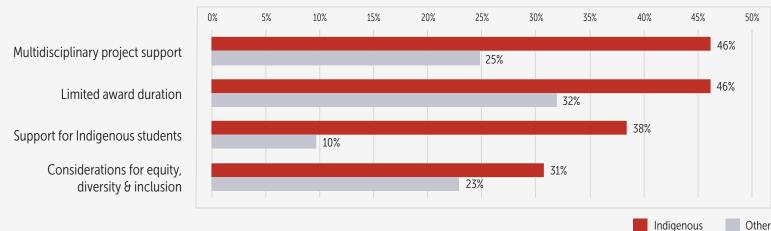
These selected data highlight the diverse perspectives of early-career scholars with self-identified Indigenous status. These experiences and responses further the crucial analysis required to support attraction, retention and promotion of Indigneous trainees through scholarship.

Experiences with Awards Application

Did you require other sources of funding during the duration of this award?

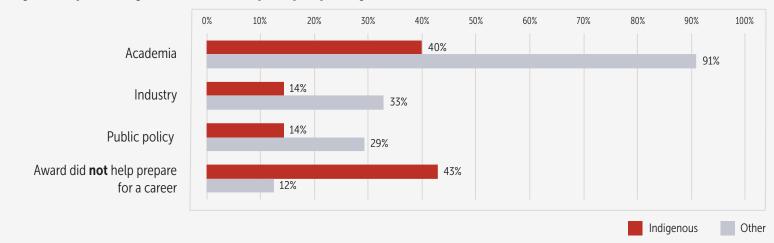


What are the barriers or problems with current scholarship and fellowship opportunities?



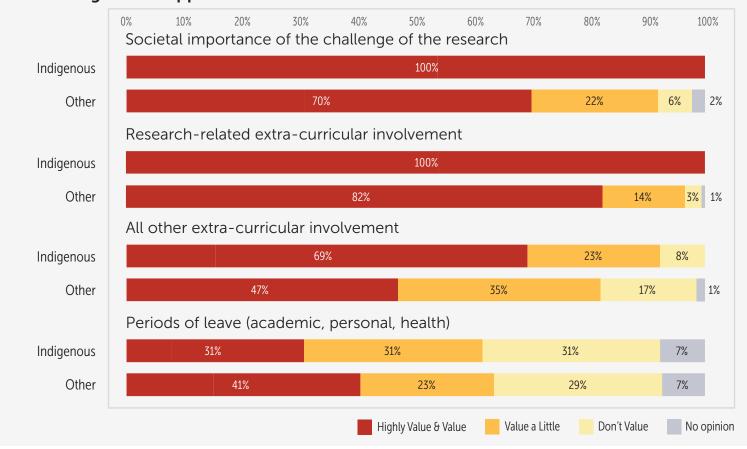
Launching Future Careers

In your opinion, your award helped prepare you for a career in:



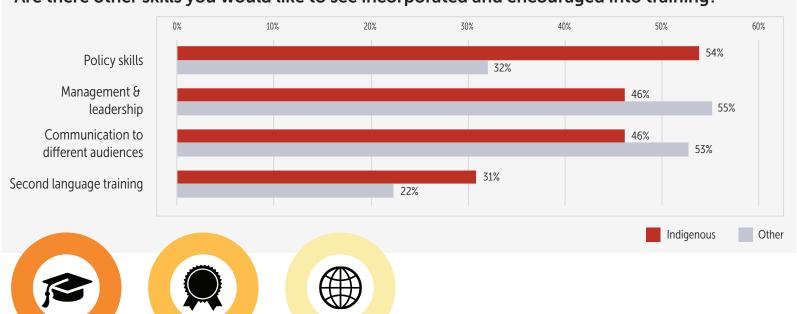
Redefining Excellence Criteria

In your opinion, rate how much value you think reviewers should place on the following factors when evaluating awards applications:



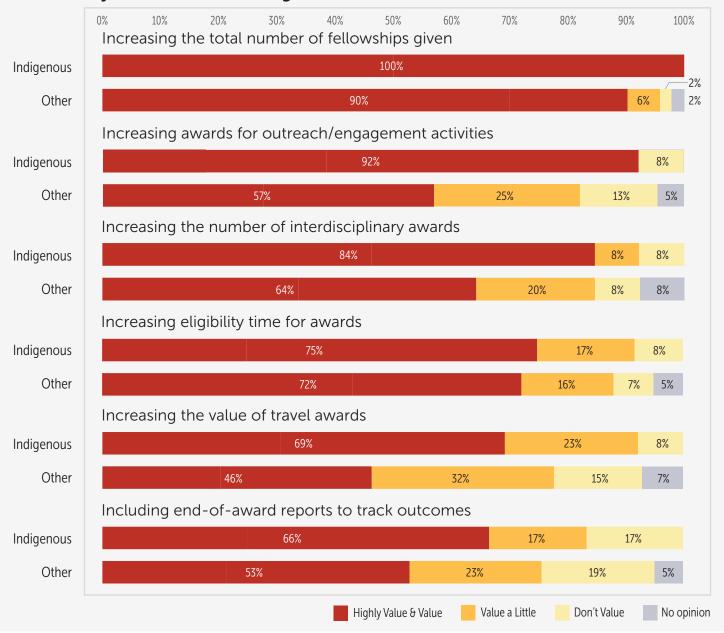
Redefining Skills Training

Are there other skills you would like to see incorporated and encouraged into training?



Increasing Trainee Support

If there were an increase in the total federal budget for graduate and postdoctoral awards, indicate how much you value the following:



Indigenous Self-Identification Demographics 1100+ FR Indigenous (13 Respondents)* Other (1119 Respondents)



*SPE gave respondents the option to self-identify as Indigenous. In our cohort, 13 respondents identified themselves as Indigenous, or 1.18% of our total cohort of 1132. As of 2016, 4.9% of the Canadian population self-identifies as Indigenous, and of that group, 48% holds a postsecondary qualification, as per the 2016 Census. Despite the limitations of our sample size and the slight underrepresentation of indigenous respondents, we still wish to highlight the specific experiences, opinions and barriers of Indigenous students, postdocs and researchers with regards to attaining funding in Canada.

99%