

Management Response to the Evaluation of NSERC's Science and Engineering Prizes

Context

The Natural Sciences and Engineering Research Council's (NSERC) Prizes are designed to celebrate exceptional examples of research excellence, partnerships and/or science promotion within the natural sciences and engineering (NSE) across Canada. In particular, they recognize a wide range of accomplishments from researchers at different stages of their careers, and highlight Canadian achievements in training, research, and innovation.

This evaluation for most of NSERC's Prizes covered the period from fiscal year 2003-2004 until 2013-2014. The purpose of the evaluation was to provide NSERC senior management with an assessment of the relevance, delivery and performance of Prizes. The evaluation was also designed to ensure that NSERC adheres to the requirements of section 42.1(1) of the *Financial Administration Act* and the Treasury Board *Policy on Evaluation* (2009)¹.

This evaluation included the following six NSERC prizes:

1. The **NSERC Awards for Science Promotion** (NASP, formerly the Michael Smith Awards for Science Promotion).
2. **Synergy Awards for Innovation (Synergy)**

Four NSERC academic Prizes:

3. the **Gerhard Herzberg Canada Gold Medal for Science and Engineering** (Herzberg Medal);
4. the **E.W.R. Steacie Memorial Fellowships** (Steacie);
5. the **NSERC John. C. Polanyi Award** (Polanyi); and
6. the **Brockhouse Canada Prize** (Brockhouse) for Interdisciplinary Research in Science and Engineering.

Note: All these programs except the Synergy awards are run by the Innovative Collaborations and Science Promotion Team (ICSP). Synergy is run by Research Partnerships (RP).

This is the first evaluation of the Prizes programs, all of which are of long standing. The Brockhouse Prize has been offered annually since 2004. The Polanyi Prize started in 2005 and the Herzberg has been offered since 1988. NSERC offered the **Michael Smith Prize program for Science Promotion** between 2000 and 2008; the name of the program was changed to the **NSERC Award for Science Promotion** and has been offered annually since 2009. The Synergy Awards have been offered each year since 1995.

The evaluation was undertaken to assess the relevance, delivery, performance and efficiency of the Prizes funding opportunities. The evaluation complies with the 2009 Treasury Board Policy on Evaluation.

Overall comments

Management is very pleased that the evaluation demonstrated that the NSERC Prizes are successful in celebrating Canadian research and innovation in natural science and engineering. Confirmation of their importance in generating new knowledge and innovations, solving problems, and supporting long term economic growth, is very welcome. As the objective of the academic Prizes is to raise the scientific profile

¹ TBS (2009). *Policy on Evaluation*. Retrieved from: <http://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=15024>

of the country, its institutions and individual scientists, it is useful to be assured that they result in increased productivity, opportunities for collaboration and greater attraction and/or retention of scientists.

The Prize programs clearly have an important function for the future of Canada and connect very well with government priorities. Moreover, continuing to offer all the Prizes is an important part of the NSERC 2020 Strategic Plan for 2015-2020. They fit within 3 of the 5 foci: *Fostering a science and engineering culture, Building a diversified and competitive research base and Strengthening the dynamic between discovery and innovation.*

Responses to each recommendation and the management action plan are presented below.

Recommendation 1: The findings from the evaluation illustrate the need for an explicit and cohesive set of intended outcomes for NSERC's Prizes. While NSERC's Prizes are highly differentiated in terms of their eligibility criteria, value and objectives, the establishment of an organized set of intended outcomes for Prizes would support greater understanding of how they contribute to the priorities of the federal government and NSERC's strategic goals. This set of intended outcomes should reflect the common impacts across the six Prizes, such as recognition, increased capacity and career development (including highly qualified people), as well as the unique outcomes of individual Prizes, and/or to one category of Prizes, such as academic, science promotion and/or academic-industry collaborations.

Management response: Agree

Management agrees that the intended outcomes for NSERC's prizes should be more clearly articulated with respect to federal government priorities and NSERC's strategic goals. Although each prize may have a different objective, the establishment of a framework against which the outcomes can be measured, would be beneficial.

Program staff will create a logic model for all the Prize programs with measurable immediate, intermediate, and ultimate outcomes in consultation with staff from the Evaluation Division.

Recommendation 2: It is recommended that the current reporting requirements for NSERC's Prizes are examined to determine whether they are sufficient to meet the needs of the Council, and if not, how these requirements may be improved. Reporting requirements exist for NSERC's academic Prizes and the NSERC Awards for Science Promotion for organizations; however, fewer than half of Prize recipients submit the impact reports requested by the Council. Unlike other NSERC funding opportunities, Prizes are awarded for past achievements and recipients are not required to submit their impact report to be eligible for future grants and/or prizes. As a result, there may be fewer incentives for recipients to submit these reports. Without these reports however, Prizes' staff are limited in the extent to which they can assess and understand the impact of Prizes within the NSE research community.

Management Response: Agree

While management considers that the proportion of reports received from the academic Prize winners in the past may be higher than what was found through the evaluation, it agrees that it would be worthwhile to improve the tracking and filing of reports as well as data compilation so that future assessments of the Prizes can be based on a clearer picture.

A new final report that includes more close-ended questions regarding the impact of Prize funding, reach, and quality of project to provide useful, accessible and comparable performance information will be considered in the context of investments in resources. Ways to make the report easier to complete and

submit will also be explored within the limitations of the existing business systems. As much as possible, the reports for each of the Prizes should be harmonized. It is hoped that such improvements in formatting and submission may lead to an increase in the number of reports received.

It should be noted that the Synergy Awards do not currently require a report. Updated reporting requirements for them will be considered as part of this exercise. In the past, individual NASP winners were not required to provide a report either. The NASP program documentation has already been adjusted so that the 2016 individual winner will be required to provide a report as for the NASP Organizational award.

Recommendation 3: It is recommended that NSERC want to continue work towards increasing the profile of its Prizes, and their respective recipients, using various communication tools including traditional mass media and social media. Raising the profile of Prizes and recipients is important as Prizes are known to contribute to positive impacts on NSE research, including more opportunities for collaborations and career advancement, as well as increased capacity, such as receiving additional funds for future research. It was also noted by some Prize recipients and key informants that they would like to see more exposure of NSERC's Prizes and/or Prize recipients in the media, and that Prizes should be promoted more actively.

Management Response: Agree

Continuing to work towards increasing the profile of our Prizes and their recipients is consistent with the NSERC 2020 Strategic Plan. More specifically, the public celebration of research excellence will help us foster a science and engineering culture in Canada with the ultimate goal of increasing interest, awareness, and appreciation of science and engineering.

The report highlights the new communications approach that was implemented in 2011 and the impact it's had on the recognition of the NSERC Prizes and their recipients. We will continue to build on the increased media coverage that we've consistently garnered over the past five years by strengthening working relationships with media and other stakeholders. Unprecedented exposure for our 2016 prizes included page A1 coverage in *The Globe and Mail*, a Canadian Press article that appeared in over 90 outlets across the country and coverage on CBC The National, CTV National News, Global National News, and Discovery Channel's Daily Planet to name a few. We are clearly moving in the right direction on this front.

We are committed to fine-tuning our communications strategy for the Prizes by adapting to an ever-changing media landscape and exploiting emerging communications vehicles to engage a broader audience.

ICSP staff will meet with staff members in RP and other sections to discuss ways they might augment Communications efforts to further raise the profile of the Prizes. Including the Prize programs in staff presentations for society presentations and/or information/engagement visits is one idea that will be considered. As well, as per the *Action Plan for Fostering a Science Culture*, ICSP and Communications staff will work with other organizations such as PromoScience award winners, to find opportunities to raise the profile and celebrate prize winners, especially NASP.

Evaluation of NSERC's Prizes: Management Response - Action Plan

ICSP= Innovative Collaborations and Science Promotion Team, RP= Research Partnerships, CD= Communications Division.
ED=Evaluation Division

Recommendation	Agree/ Partially Agree /Disagree	Proposed Action	Responsibility	Timeline
Recommendation 1: The findings from the evaluation illustrate the need for an explicit and cohesive set of intended outcomes for NSERC's Prizes.	Agree	Develop new logic model with immediate, intermediate, & ultimate outcomes ready for 2017 competition launch.	ICSP, RP & ED	Begins January 9, 2017, ongoing activity
		Modify literature and reporting requirements as necessary	ICSP, RP, Secretariat, CD	Begins March 1, 2017 for Herzberg, Polanyi and Brockhouse Prizes (ICSP), ongoing activity December 1, 2017 for Synergy (RP) & NASP (CSP) ongoing activity
Recommendation 2: It is recommended that the current reporting requirements for NSERC's Prizes are examined to determine whether they are sufficient to meet the needs of the Council, and if not, how these requirements may be improved.	Agree	NASPI report requirements implemented & tracking method created	ICSP	August 2016
		New report templates & requirements in place for all Prizes except NASPI	ICSP, RP, & ED	Begins August 1, 2017, ongoing activity
		Review of all Prize report tracking & reminder procedures to see if improvements possible. New procedures in place for final reports.	ICSP & RP	Begins August 1, 2017, ongoing activity
Recommendation 3: It is recommended that NSERC continue to work towards increasing the profile of its Prizes, and their respective recipients, using various communication tools including traditional mass media & social media.	Agree	Continue to foster strong relationships with media and other stakeholders.	CD	In 2013 the Communications Division began working closely with key media outlets to facilitate media interviews and provide media. These efforts are ongoing with no expected end date

Recommendation	Agree/ Partially Agree /Disagree	Proposed Action	Responsibility	Timeline
				at this time.
		Adapt our communications strategy for the NSERC Prizes to capitalize on new vehicles that will allow us to engage with a broader audience.	CD	Began in 2010 with the decision to have one large awards ceremony. These efforts are ongoing with no expected end date at this time.
		Continue to produce high-quality multimedia content (videos, photos, Web profiles) to promote the Prize winners.	CD	The first video with a Prize recipient was developed in 2011 and profiles of Prize recipients have been available since 1996. Such efforts are ongoing with no expected end date at this time.
		Consider various opportunities to increase profile of Prizes including presentations given by staff.	CD, ICSP, RP	Begins March 1, 2017, ongoing activity