

NSERC MANAGEMENT RESPONSE TO THE EVALUATION OF THE CHAIRS FOR WOMEN IN SCIENCE AND ENGINEERING (CWSE) PROGRAM

Background

The Chairs for Women in Science and Engineering (CWSE) program originated in 1989, as the NSERC Women in Engineering Chair, with a single nationwide Chair in Engineering. The program was expanded in 1996 to include five regional Chairs across Canada (Atlantic, Quebec, Ontario, Prairies, and British Columbia/Yukon). The goal of the program is to increase the participation and retention of women in science and engineering and to provide role models for women active in, and considering careers, in these fields. Chairs work toward this goal using strategies to overcome barriers to careers in science and engineering for women and other underrepresented groups, to attract and retain girls and women in these fields, to promote the integration of girls and women within and outside of academia, and to promote EDI as an essential component of research and training. The CWSE program also has an impact across Canada through a national network connecting and amplifying the work of the five regional Chairs.

This is the CWSE program's first evaluation since its expansion in 1996; the evaluation covers the period from 1989 to 2020. Over this period, 18 women have served, or are currently serving, as CWSE Chairs.

Context

Although some improvements in women's participation and lived experiences in science, technology, engineering, and math (STEM) fields have been made over the last 50 years, progress remains modest. Continued efforts to remove barriers and increase equity, diversity, and inclusion (EDI) for women in STEM are required. Canadian Federal Government initiatives towards gender equality are gaining momentum in recent years and NSERC has been putting increasing emphasis on EDI within its own programs. These actions are synchronous with an environment of greater societal awareness of the challenges faced by women in STEM and greater appreciation for EDI.

General Comments

NSERC agrees with the overall findings of the evaluation, which confirm the importance and relevance of the CWSE program in contributing to NSERC's priorities related to improving EDI in the Canadian research ecosystem.

NSERC would like to thank the current and past Chairs, partners, selection committee members, and program representatives who provided invaluable feedback through various case studies and key informant interviews during the evaluation process.

Recommendations and Responses

The recommendations of the evaluation follow, along with the Management Responses. The Action Plan can be found at the end of this document.

Recommendation 1: *NSERC should maintain the CWSE program.*

The evaluation confirms that the CWSE program occupies an important niche within the wide eco-system of programs and initiatives that promote the engagement of women in science and engineering. The chairholders who are supported by the program undertake a set of activities tailored to their specific areas of scientific research and their regional and institutional environments. They collaborate with other stakeholders, sharing the goal of meaningfully engaging women in science and engineering. The program also serves to communicate NSERC's vision and commitment related to equity, diversity, and inclusion in the fields of natural sciences and engineering.

Management Response: Agree

NSERC acknowledges that change related to gender equality and EDI in STEM takes time and consistent, prolonged effort. The current momentum gained on EDI should be leveraged to contribute to the impact of the CWSE program. As well, the goals are in line with NSERC's commitment to improving EDI in STEM through its policies and programs; and having women STEM researchers championing the EDI cause is essential in this endeavour. As such, Management is in full agreement that the CWSE program remains relevant and should be continued.

Recommendation 2: *In collaboration with the current Chairholders and other relevant stakeholders, NSERC should review the current set of program objectives to ensure that they more closely reflect the range of activities undertaken by Chairholders and the contribution that the program can be reasonably expected to achieve.*

The current set of program objectives adequately reflects the challenges faced in Canada in engaging women in science and engineering, and the range of outcomes that all stakeholders in this field aspire to achieve. As such, these objectives reflect the broader context in which the CWSE program is operating.

On that basis, it is recommended that a set of objectives that more closely align with the precise contribution that the program, and each Chair by extension, may be expected to achieve be developed. Defining objectives that better describe the relative contribution of the program within the larger set of initiatives promoting women in science and engineering in Canada offers tangible benefits. It will serve to better communicate expectations to those considering applying to become a chairholder or the newly appointed chairholders. It will also support efforts to adequately position and promote the program in the broader ecosystem of women in science and engineering initiatives. Finally, it will allow the program to refine its performance measurement activities, including considerations associated with equity, diversity, and inclusion within the program itself, to ensure that no systemic barriers may limit the access by the targeted clientele to the expected benefits of the program.

Management Response: Agree

NSERC agrees with this recommendation, which is in part based on feedback from the Chairs themselves. Transformational change for EDI in STEM in Canada requires action and effort from many stakeholders. It is not reasonable to impose all-encompassing goals on five individual women and expect results across a very broad scope. Going forward, it will be important to consider how the program objectives can be refined to reflect what Chairs can reasonably accomplish, particularly in the context of work being done in this area by other programs. NSERC also agrees that having more focused, specific program objectives would make results and impact of the program easier to measure and assess.

However, at the same time, NSERC recognizes that flexibility across regions remains an important element of the CWSE program which should be maintained.

Recommendation 3: *NSERC should review the process related to the transition between chairholders in each region to include sufficient overlap for knowledge sharing and continuity.*

Evaluation findings leave no doubt as to the profound engagement of each Chair in promoting science and engineering among Canadian women. The experience of being Chair has been described as demanding, rewarding, and transformative. To make the most of these efforts, it is critical to ensure an efficient transition between chairholders in each region, so that the knowledge acquired can be shared and that continuity can be achieved, as applicable.

Management Response: Agree

The learning curve for a new Chair is very demanding and intensive. Suddenly being expected to spend up to 50% of their time on the CWSE program, while maintaining a research program, requires a significant period of adjustment for a new Chair. Management agrees that the transition process should be reviewed to investigate possible solutions to improve continuity between Chairs.

Summary of Recommendations and Action Plan

Recommendation	Agree/ Disagree	Proposed Action	Responsibility	Target Date for Completing Proposed Action
1. <i>NSERC should maintain the CWSE program.</i>	Agree	<ul style="list-style-type: none"> • Maintain the CWSE program. • Keep focus on gender but increase requirements on intersectionality. Note that this does not preclude the possibility of exploring how the CWSE model could be adapted to other underrepresented groups. 	Director of Scholarships and Fellowships division	September 2022
2. <i>In collaboration with the current chairholders and other relevant stakeholders, NSERC should review the current set of program objectives to ensure that they more closely reflect the range of activities</i>	Agree	<ul style="list-style-type: none"> • Review and refine the program objectives so that they are more realistic as to what can be accomplished by chairholders. • Review the need for partnership requirements. • Review guidelines for measuring success and impact. 	Director of Scholarships and Fellowships division	September 2022

<i>undertaken by chairholders and the contribution that the program can be reasonably expected to achieve.</i>				
<i>3. NSERC should review the process related to the transition between chairholders in each region to include sufficient overlap for knowledge sharing and continuity.</i>	Agree	<ul style="list-style-type: none"> • Explore ways to ensure continuity and appropriate transition between Chairs. • Introduce the concept of a transition/overlap period in the CWSE program design. 	Director of Scholarships and Fellowships division	September 2023