

Canada's National Network of NSERC Chairs for Women in Science and Engineering

C. Mavriplis¹, E. Langelier², T. Franz-Odenaal³, A. Farenhorst⁴ and L. Shannon⁵

¹ University of Ottawa, ² Université de Sherbrooke,

³ Mount Saint Vincent University, ⁴ University of Manitoba, ⁵ Simon Fraser University, Canada

Summary We present a consolidated view of the work of Canada's national network of five academic Chairs for women in science and engineering (S&E), addressing initiatives and interdisciplinary research aimed at increasing the participation of women in S&E university programs, professions, and leadership.

1. Relevance

Women have traditionally been underrepresented in S&E. Since 1996, Canada's S&E funding agency, the Natural Sciences and Engineering Research Council of Canada (NSERC), has supported five regional Chairs for women in S&E, with matching private support. In the past four years, the network of these chairs has strengthened its ties and coordinated efforts in order to provide national coverage, leverage accomplishments and align goals.

2. Aims & Objectives

As key figures in five vast regions, the Chairs face challenges of geography, of spanning the demographics of youth to leadership levels, as well as of the breadth of all the S&E disciplines. Each Chair focuses her attention on specific themes related to her expertise and region, but also contributes to national action items. Our aims in working together as a network are to support and initiate diversity efforts in as many S&E fields as possible, to work towards more equitable participation of women in professorial ranks, to provide a united voice on policy issues for gender diversity in S&E, and to learn from each other.

3. Methods

We first set out to develop key metrics to use to measure our collective impact and present it in a common format. Next, we implemented some key activities on a national scale, based on success in regional pilot programs. Lastly, we evaluated our complementarity and mapped it to a national framework.

4. Results

Together, the network reaches close to 100,000 people with direct interactions, including youth and their parents, post-secondary students, industry professionals, and university and school educators. We network with over 70 companies and 100 other professional organizations. Our work has led to new interdisciplinary research programs, leveraging additional funds of over \$8 million. By coordinating our efforts, we are able to demonstrate national impact, learn from each other and more quickly implement successful and tested interventions, thereby filling gaps for which we may not have had expertise. For example, workshops for women professors seeking tenure or promotion in Science or Engineering faculties have been held across the country following pilot projects initiated in one region. In the past three years, three workshops addressing promotion to the rank of full professor have been held in the East, West and centre of the country, while four others addressing tenure have been held in the Prairies, centre and East. In all, over 250 women have benefited from these skills- building and networking events.

5. Conclusions

Canada's model for action on the underrepresentation of women in S&E disciplines is an effective vehicle for the development of gender diversity research and activities. A coordinated effort has demonstrated national impact and continues to innovate in several areas.

6. Contact details: Prof. Catherine Mavriplis, Catherine.mavriplis@uottawa.ca