# CWSE-Prairies Newsletter

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# The goal of the NSERC CWSE - Prairies

is to develop and support strategic activities that promote greater opportunities for women, particularly Indigenous women, in science and engineering across the Prairie Region.

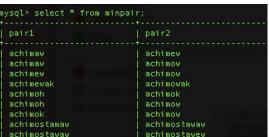


#### An ICAN-WISE Summer Research Recap

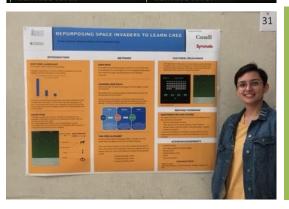
In the summer of 2018, CWSE-Prairies offered the ICAN-WISE scholarship program for its fifth year, creating opportunities for university students in the sciences / engineering to gain research experience. ICAN-WISE is the Integrated Collaborative Academic Network for Women in Science and Engineering, and it aims to help female-identified undergraduate students develop mentoring relationships in STEM. Students are invited to select a mentor of their choice, and propose a research project. This year, over 60 mentor-student matches were made across 13 universities in the Prairies.



This year's scholarship recipient was Delaney Lothian from the University of Alberta. Her research project was particularly unique, combining computer science and linguistics. Her mentorship match was special as well, as she was co-supervised by two mentors: computer scientists Dr. Martha White and Dr. Carrie Demmans Epp. Together, they worked on developing an online learning platform to help people learn to speak Plains Cree, with a long-term goal of helping to protect this language.



Throughout the summer, Delaney learned about database creation and management, conducted research on the Plains Cree language, and developed exercises for a Plains Cree learner. She also explored human computer interaction and machine learning methods, which will eventually make the learning system one that is adaptive to its users. She plans to continue this work beyond the summer, having secured additional funding from her community to do so.



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### Understanding the 'Climate' of Academic Workplaces



This year, the CWSE Prairies conducted a major survey about the perceptions and experiences academic faculty members have of their workplaces. The "Workplace Climate Survey" focused on the natural sciences and engineering (NSE) disciplines, and involved its faculty members from five universities across the Prairies.

Participants were asked in-depth questions concerning topics related to their experiences of respect at work, collegial support and inclusion, career satisfaction, work-life balance and workload, equality at work, and incidents of harassment or discrimination. This summer, the CWSE Prairies released a summary report of the findings from this survey. One important finding from this work was a gendered difference in perceptions of workload for service work – where women seemed to carry a heavier load than men. While most NSE faculty, regardless of gender, were satisfied with their careers, many felt unsatisfied with their work-life balance overall.



The major goal of this work is to develop strategic recommendations for university departments that will enhance and strengthen support for diversity and difference in the workplace. The next stages of this project will involve developing a working group to develop recommendations based on the findings, and to extend the scope of the project to other parts of the country. This survey has provided a picture of the workplace climate in academia in the Prairies, but there is more work ahead in understanding how well it describes the experiences of other people and in other places.

The results of this report are available online at the CWSE-Prairies website.

### Verna J. Kirkness Program Continues to Grow

The Verna J. Kirkness program for Science and Engineering Education has continued to create opportunities for Indigenous youth to explore an education in STEM, and connect with other youth from communities all over Canada. Since its beginning in 2012, it has grown each year, reaching more than 90 youth at six different universities in 2018.

At each location, students participate in a week of science or engineering research in a field of their choosing. The program also includes visits to museums and city landmarks, an evening of Indigenous games, shared meals between students and supervisors, and a closing ceremony honouring the students' work in the program.

The program's namesake, Verna J. Kirkness, has done significant activism work for improved education for Indigenous youth, and has been recognized with the Order of Canada, among numerous other awards. Being a role model for Indigenous youth, Verna herself participated at many of the locations to visit with the students and share in their experiences. The CWSE-Prairies was also fortunate to be able to participate by hosting students in Winnipeg and attending the session at First Nations University.







#### This Fall, Discover Women in Agriculture

The Farm & Food Discovery Centre (FFDC) at the University of Manitoba is getting an update: this fall, the faces of several accomplished women in agriculture will grace its digital displays! The CWSE-Prairies and the FFDC have sought out several women with interesting careers in agriculture, and with the help of Frank Digital Studios, have created videos of these women describing their work.

# "This industry has been fantastic for me - it is where I can place my passion and have a fulfilling career"

The women include prominent members of Manitoba's agriculture industry, as well as faculty members from the University of Manitoba, and independent farmers. "I have not been across a profession that is more diverse than agriculture," said Delaney Ross Burtnak (Manitoba Canola Growers) of her work. "This industry has been fantastic for me - it is where I can place my passion and have a fulfilling career."

The FFDC is a hands-on facility that engages visitors in all stages of food production, through a variety of hands-on exhibits. The CWSE-Prairies and the FFDC wanted to ensure that the public could see that women play a large role in the agricultural industry, and decided to feature women with a variety of different careers, who all contribute greatly to our food systems.





#### **Growing Community through Mentorship**

Women in agriculture – students and professionals alike – will continue to find community together through the Agriculture Mentorship Program, which is entering its second year in 2018-19. The program is designed to help students build connections, develop skills, and explore career goals under the guidance of mentors in industry and academia. It also enables mentors to share their experiences and expand their networks.





The program uses a tri-mentorship model, where 2 mentors in different areas of work are matched with each student. Mentorship matches are made based on mutual career goals and interests. Over the course of the 8 month program, students are encouraged to set a schedule with their mentor group and direct their own mentorship experience.

It also includes a number of large group events, where everyone is brought together to connect and network. In 2017, these events included panel discussions, roundtables, and an interactive presentation on unconscious bias in the workplace. They were held in venues near the U of M campus, including the HUB bar and restaurant, and Barley Brothers. These events provided opportunities for mentees and mentors to draw from the greater pool of knowledge within the program.

## "I love learning about people and trying to connect people together for their benefit"

The program structure will remain similar in 2018, but with knowledge gained from its first year's efforts to enhance it. As one of the mentors put it, "I love learning about people and trying to connect people together for their benefit. I am a people farmer! I want them to grow and harvest their bounty of success."

#### A Network for Women in STEM at CCWESTT

The Canadian Coalition of Women in Engineering, Science, Trades, and Technology (CCWESTT), brought together all five Chairs for Women in Science and Engineering, along with many other STEM employers, government representatives, subject experts, and women in STEM – who all gathered in Edmonton this May.

In addition to meeting with the other Chairs, the CWSE-Prairies was involved in this year's CCWESTT conference in a number of ways, including two presentations covering research on gender factors in STEM: postdoctoral fellow Dr. Jennifer Dengate presented her findings on the gender gap in service work in academia. Undergraduate student Danielle Saj presented results from her study of students' perceptions of underrepresentation in STEM.

The conference was a successful learning and networking event for over 200 participants, and its momentum will continue in the upcoming CCWESTT 2020 - taking place in Winnipeg, Manitoba.





### **Leadership Workshops**

After a successful run in Calgary in 2017-2018, the CWSE – Prairies is supporting a series of leadership workshops in Edmonton throughout the upcoming year. These WinSETT Centre workshops are specifically for women in science and engineering fields. They cover topics including negotiation, workplace politics, leadership, networking, and effective communication. Participants learn some theory on each topic, then have an opportunity to put it into practice using a variety of interactive methods: role-play, discussion, case study, and group work in a supportive environment.

The CWSE-Prairies Chair, Annemieke Farenhorst, was glad to participate in some of the Calgary sessions, including leading a presentation and discussion connected to the theme of "Mentors, Networks, and Sponsors".

In the future, the CWSE-Prairies would like to see these workshops extended to a greater number of cities in the prairie provinces. If you are interested in becoming involved or helping extend these workshops to your city, please contact the CWSE-Prairies by emailing mahalia.lepage@umanitoba.ca.

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