CWSE-Prairies Newsletter

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The goal of the NSERC CWSE - Prairies

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

Prairies CWSE Sponsored Women in Physics Conference in Saskatoon

The 2016 Women in Physics Canada conference was held July 27-29 at the University of Saskatchewan. One-hundred men and women, including 27 undergraduate students, 42 graduate students, five post-doctoral researchers, eight faculty/non-academic attendees, plus 18 speakers and panellists travelled from six different provinces to participate in this conference.

The WIPC is a scientific conference, where early career scientists have the opportunity to present their work and to hear plenary talks from leaders in the field. Its intent is also to provide support to early career women, encouraging them to continue a career in science. The conference provides participants with the opportunity to network with women in physics from across Canada, and to facilitate the sharing of experiences, ideas and advice.

CWSE Prairies is proud to have sponsored this event!



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Student in the Spotlight: Melissa Anderson

"Advice I would give to first year students entering the science field is to not give up."

Melissa Anderson, an Indigenous student studying Physics and Engineering through the University of Winnipeg and the University of Minnesota's dual degree option, presented her research at the Women in Physics conference in Saskatoon.

Ms. Anderson was approached by her professors to apply for undergraduate funding from NSERC to pursue a 16-week summer research position. She received the award, spent her summer studying magnetic coils in a lab, and realized she wants to pursue a career in research. This opportunity led her to attend the Women in Physics conference in Saskatoon.

"My ambition is driven by my family and my intense desire to be a role model for my children and other Aboriginals to enter the science field," Ms. Anderson told Prairies CWSE Program Coordinator, Lena Yusim. "My role models are my dad and my sister. My sister finished a nursing degree with four children and being a single mother. My dad finished a college program when he was much younger but he also is finishing his commerce degree this year. Never too late to follow your dreams."



Inside this issue:

- 2. Go Eng Girl / What's New in Science Outreach at the University of Saskatchewan?
- 3. 2016 ICAN WISE Scholarship Recipient and Recent University of Manitoba Biosystems Engineering Graduate, Kelsey Smyth, Shares Summer Mentorship Experience
- 4. Prairies CWSE Dr. Annemieke Farenhorst Attends Advancing Women in Agriculture Conference, Toronto / CWSE Prairies Luncheon Kicks-Off Fall Term / Amazing Agriculture Adventure / Announcing 2017 MCWESTT Conference

Go Eng Girl

On Saturday, October 15th, WISE Kid-Netic Energy and the Faculty of Engineering hosted their very first Go Eng Girl for 40 young women in grades 7-9 at the Engineering Information Technology Complex at the University of Manitoba. Each young women was accompanied by a parent/guardian. This half-day event is designed to introduce these girls and their families to engineering as a possible career goal. Go Eng Girl is also meant to encourage them to continue taking high level math, as well as other sciences throughout high school. All participants were teamed up in groups of three or four to compete in a design challenge. This year the teams built balloon cars and competed in three categories – distance, aesthetics, and a drop test. The winners from each category were awarded special prizes, and each participant left with a gift bag.

Each team was partnered with a female undergraduate student who is currently enrolled in the Faculty of Engineering at the University of Manitoba. Besides assisting with the challenge, they shared their personal experiences and provided the girls a sense of what it means to be a student studying Engineering. While the students were building and bonding, the parents/guardians were delivered a presentation from Dean of the Faculty of Engineering, as well as a panel of female Professional Engineers.



What's New in Science Outreach at the University of Saskatchewan?

Throughout 2016 the Prairies CWSE provided financial support to the Science Outreach initiatives lead by Lana Elias, Director of Science Outreach at the College of Arts and Sciences at the University of Saskatchewan. These programs provide outreach activities for indigenous youth in Saskatchewan. Prairies CWSE Program Coordinator Lena Yusim got in touch with Ms. Elias to hear what impact the Prairies CWSE contribution had on these initiatives.





"Thanks to support from the Prairies NSERC CWSE it's been an outstanding year of growth for the Science Outreach programs in the College of Arts and Science at the University of Saskatchewan. One of the programs, PotashCorp Kamskénow (a Cree word meaning "to find or to learn, together") is a weekly science outreach program that provides engaging, inquiry-based science activities over 13 weeks to Saskatoon schools with a high proportion of Aboriginal students. Because of the financial support from the Prairies NSERC CWSE, this international award winning program was able to expand in 2015/2016 to a point where it could serve 1007 students within 44 classrooms.

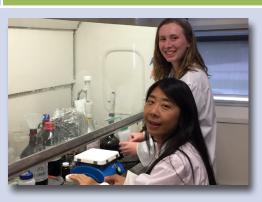
Another program supported by CWSE Prairies is the Science Ambassador Program. It pairs university student Science Ambassadors (senior undergraduate and graduate students in science, health science, engineering and agriculture and bioresources) with Northern Aboriginal community schools for four to six week placements each spring. Thanks to the funding from the Prairies NSERC CWSE, the program was able to expand this year, employing twenty-four Science Ambassadors placed in twelve northern Aboriginal communities and reaching 2430 youth.

During May and June, the Museum of Natural Sciences Outreach field trip program offered guided digital tours of the museum along with hands-on science activities to 2532 students, grades 4-9. As a result of the new support from the Prairies NSERC CWSE this year, four science departments offered further field trip opportunities as part of this program. In the end, the program doubled in capacity.

It is truly and honour to have the Saskatoon Regional Economic Development Association announce the Science Outreach Team and the PotashCorp Kamskénow program as finalists in the upcoming 2016 STIC (Science, Technology, Innovation and Collaboration) awards. This recognition of program growth, successes and impact is shared with program sponsors, including the Prairies NSERC CWSE."

2016 ICAN WISE Scholarship Recipient and Recent University of Manitoba Biosystems Engineering Graduate, Kelsey Smyth, Shares Summer Mentorship Experience

This past summer, through the Prairies CWSE ICAN WISE Scholarship program, recent Faculty of Engineering graduate Kelsey Smyth completed a summer research project with Dr. Qiuyan Yuan in the department of Civil Engineering. They studied the biological mechanisms in place in aerated and facultative wastewater lagoons to get a better understanding of how they treat standard wastewater parameters under different environmental conditions. Ms. Smyth, who initially heard about the scholarship through an email from the Civil





Engineering department, applied for the scholarship to further explore research before her graduation, to help her narrow her focus as she considers studying at a Master's level, and to find a female mentor in Engineering. Prairies CWSE Program Coordinator, Lena Yusim caught up with Ms. Smyth and they talked about her experiences with this unique mentorship opportunity.

LY: How did you find your mentor?

KS: I looked on the engineering website and found the female engineering professors that do work related to water. Of those I found, I had previously briefly met with one professor earlier during the school year for my graduation project and contacted her about applying for the scholarship. It was a relatively easy process to find a mentor as there were few women working in the department in the area I was interested in.

LY: What are you doing now and did your ICAN WISE experience help shape your next steps?

KS: I finished the last of my Bachelor's coursework during my summer ICAN WISE experience, and I am currently researching and applying to different jobs and looking into the possibility of graduate studies. My ICAN WISE experience helped to reinforce the fact that I am capable of continuing on with further education and made the idea of applying for graduate studies less intimidating.

LY: How closely did you and your mentor work together?

KS: I worked relatively closely with my mentor to maintain a good understanding of the goals of my project and to ask lots of questions whenever they came up. I also had lots of help in the lab and in the field from graduate students. In terms of communicating with my mentor, we both emailed and met in person in her office on numerous occasions.



LY: What skills or insights did you learn during this mentorship that have been most valuable to you?

KS: During this mentorship, I gained some insight into the Engineering research based Master in Science program in terms of course and research requirements and day to day activities. It helped to show me some of the differences between the Master and Undergraduate programs. One aspect of Master's that I think would be particularly valuable is the amount of project management involved in organizing and running a project from start to finish over the course of a year. I think that this insight will be quite valuable to help in my decision whether to pursue a Master's in the near future.





LY: Do you and your mentor have plans to stay in touch?

KS: I am still in regular contact with my mentor, continuing to work on and edit a paper from my summer work which we'll hopefully be able to publish.

Prairies CWSE Dr. Annemieke Farenhorst Attends Advancing Women in Agriculture Conference, Toronto



Advancing Women is a resource for women in agriculture to sharpen skills necessary for them to have successful careers, family lives, and communities. The conference provides a space to listen, learn, network, and grow with women who share the same passion for agriculture.

Prairies CWSE Dr. Annemieke Farenhorst took part in the most recent Advancing Women Conference in Toronto on October 3rd and 4th. The conference had more than 400 attendees from over 200 organizations from across seven provinces and three American states.

The next Advancing Women Conference is on March 6-7th in Calgary. View all conference details and register at <u>advancingwomenconference.ca</u>.

CWSE Prairies Luncheon Kicks-Off Fall Term



On September 28th, the Prairies CWSE, along with 18 academics and administrators from the Science Cluster, celebrated the beginning of fall term at Daily Bread Café, John's College, at the University of Manitoba.

This informal luncheon was part of a recurring event series, intended to continue the Prairies CWSE's efforts to connect women academics and senior administrators in the Faculty of Agricultural and Food Sciences, the Clayton H. Riddell Faculty of Environment, Earth, and Resources, the Faculty of Engineering and the Faculty of Science.

Amazing Agriculture Adventure

CWSE Prairies program coordinator Lena Yusim



guided two groups of elementary school students at AITC-Manitoba's Amazing Agriculture Adventure on September 21st at the Glenlea Farm and Food Discovery Centre. Ms. Yusim led the grade 4 and 5 students through a variety of stations around the educational facility. The event had over 1000 students registered, so it was a busy and fun time! This event takes place annually with activities taking place at the Glenlea Farm and Food Discovery Centre, and Kelburn Farm, where students spend half their day at one location, then move to the other to continue their Agricultural experience.

CONNECTIONS CREATE, FOSTER, LEAD.

Engineers Geoscientists Manitoba's Committee for Increasing the Participation of Women in Engineering is excited to announce the biannual Manitoba Community for Women in Engineering, Science, Trades, and Technology (MCWESTT) Conference coming May of 2017.

CWSE Prairies is a continuing sponsor and supporter of this conference, and the Chair, Dr. Annemieke Farenhorst, and her coordinator, Lena Yusim, are both members of the organizing committee.

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