# 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 Aboriginal women, in science and engineering across the Prairie Region.

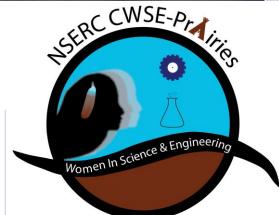
## CONGRATULATIONS! LOGO CONTEST WINNERS

Jessee Wise (below-left) is a student at the University of Calgary, working towards a Bachelor of Arts degree in Social and Cultural Anthropology. The inspiration for her design stems from the combination of femininity, Aboriginal diversity, and of course science and engineering. She has spent most of her life in Alberta, and growing up there inspired her to feature beautiful, realistic photos and silhouettes in her logo.

Mitchell Haw (below-right) is from a small farming community in Northwestern Ontario. He is passionate about technology, plants and animals, and renewable energy. Mitch is an Engineering student at the University of Manitoba. Inspired by Aboriginal art style and palette, Mitch created a CWSE logo that features the circle and organic font. Confident women of diverse ethnic colour overlook the rolling hills of the prairies.







# CWSE-PRAIRIES LAUNCHES LOGO

The CWSE-Prairies logo is a combination of two logos originally designed by Jessee Wise and Mitch Haw.

The A in Prairies (text on top of the CWSE-Prairies logo) represents a teepee, the traditional home of the

Great Plains. Traditionally, women are in charge of the decision making process surrounding the family teepee.

The circle is divided into two parts. Land is represented by the brown lower part. Land is the source of the strong agricultural sector in our Prairies. Water is represented by the blue upper part. Women are the keepers of water according to First Nation tradition.

A First Nation woman is seen in the foreground with the feather representing land, water and air, all of which are needed to provide for diversity in life.

There are two other women seen in the logo and together they are looking forward to the East where the sun rises and new opportunities arise for them, their families and communities, and the World.

The women also look at the water that is slowly evaporating from a flask as a warning that we need to take care of this precious resource if we want to keep the earth rotating and all of its inhabitants therein, as represented by the wheel.

Science and engineering (as represented by the flask and wheel), as well as traditional knowledge (as represented by the First Nation woman) can all be seen as essential components to preserving this water and life.

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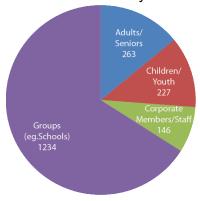
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FARM AND FOOD DISCOVERY CENTRE

The Bruce D. Campbell Farm and Food Discovery Centre, Research Station Road, Glenlea off Highway 75, explores how your food gets from the farm to your plate. Interactive exhibits show the

science and technology of modern food. Highlights include windows into the pig barn, tractor cab, computer games, weather station, biosecurity shower, vet ultrasound, store scanner, exercise bike to burn calories and chemistry of food. The Centre includes parking, bus drop-off, picnic area, and outside plots growing Manitoba crops. A multipurpose room supports hands-on activities, presentations and meetings. Tel: (204) 883-2524 Hours: Tuesday - Saturday, 10:00 am - 4:00 pm Website: www.FFDC.ca

Summer Visitors to the Farm Food and Discovery Centre





#### BIG THANK YOU TO THE SUMMER STUDENTS

#### KARIN ROSE

For the second year in a row, **Karin Rose** (left-top) earned a **NSERC Undergraduate Student Research Award** and returned this summer to the Department of Soil Science to continue her research under the supervision of Dr. Annemieke Farenhorst. Over the past two summers, Karin has been researching the fate of estrogens in soils, manure and biosolids in the presence of various antibiotics. She particularly enjoyed the freedom to explore new concepts as her research progressed. Karin was so inspired by her research experiences that she has decided to continue her research on estrogens at the graduate level. Karin started her MSc. program in September 1, 2012.

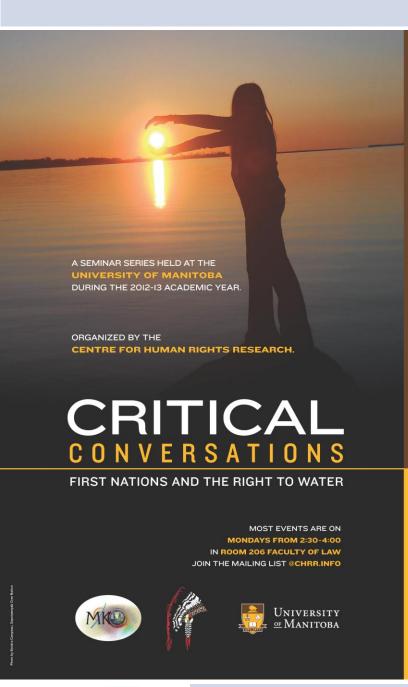


#### PEPPER-MACKENA PRITTY

As a recipient of the NSERC Chair for Women in Science and Engineering Inspirational Award, Pepper-Mackena Pritty (left-middle) was able to work alongside Drs Annemieke Farenhorst and Annette Shultz to create a research study that analyses the perspectives that undergraduate students have on the drinking water service gaps for First Nations reserves. This experience was for her inspiring; she saw the many faces and possibilities that research has to offer. Pepper also did field work and gathered and analyzed water samples. She will continue with her research this fall, and work on the data analysis from her research. The mentorship, support and encouragement she has received throughout experience has enhanced her professional development and facilitated networking opportunities that will benefit her future career.

#### ISCA SPILLETT

Isca Spillett (left-bottom) is an undergraduate student in the Faculty of Human Ecology at the University of Manitoba. Isca also earned a NSERC Undergraduate Student Research Award in 2012 which enabled her to work with Dr. Annemieke Farenhorst on the project entitled "Our Right to Clean Water". This First Nations led project is funded by Health Canada and designed to empower First Nations youth to become human rights advocates specifically related to the issue of the accessibility to clean drinking water. As a young Aboriginal woman, the opportunity to participate in the project has inspired Isca to continue to learn more about her role in protecting the water through environmental activism. Isca is passionate about empowering youth to take leadership roles as a way of building and strengthening their communities.



### COMMUNITY-BASED PROJECT ACTIVITIES IN SAPOTAWEYAK CREE NATION

First Nations youth from Sapotaweyak Cree Nation, and some from nearby communities, participated in a range of project-oriented activities that aimed to empower and inspire them to think about the traditional, spiritual, and academic perspectives of water. These project activities were held in Sapotaweyak Cree Nation (about 600 km north-west of Winnipeg) from May 28 to June 5, 2012, and from August 13 to 14, 2012. Funding and collaborations for the project activities were provided by the NSERC-CWSE (Prairies) program, Sapotaweyak Cree Nation Health Authority, Health Canada, RBC Foundation, University of Manitoba and University College of the North.

In the event from May 28 to June 5, grade 9 and 10 students from the Neil Dennis Kematch Memorial School, Sapotaweyak Cree Nation, were given cameras to record and reflect on water resources important to them and their community. The youth participated in two rounds of photography and discussion activities. In the first round, youth focused on the research question: "What role does water have in your life"? In total, 176 photos were taken by the youth, and discussed and described. In the second round, using their pictures, students developed a storyboard whereby groups worked on concepts of "good water" and "bad water".

Of the many, many creative photos that were taken, one stood out in particular. This photo, taken by Kendra Campeau from the Neil Dennis Kematch Memorial School, was chosen by Centre for Human Rights Research for use in a poster design for a seminar series that is held at the University of Manitoba during the 2012-2013 academic year. The poster is featured on the left.



Website: <u>www.wisekidneticenergy.ca</u> Interactive map: <u>www.wisekidneticenergy.ca/outreach</u>

#### WISE KID-NETIC ENERGY PROGRAM

CWSE-Prairies is also involved in supporting the **Wise Kid-Netic Energy Program**. This program, run through the University of Manitoba, Faculty of Engineering, envisions the youth of Manitoba inspired and empowered by the possibilities of science, engineering and technology. They envision a Manitoba where all youth, regardless of background, ability or socio-economic status are enriched in their science, math and technology education. The young people WISE Kid-Netic Energy reaches today will become Manitoba's workforce and leaders of tomorrow; these youth will be empowered by their knowledge and appreciation for science, engineering and technology.

To ignite youth's potential the WISE Kid-Netic Energy Program offers workshops based on the Manitoba science curriculum to kids in grades K-12. Teacher's love inviting the program's instructors into their class rooms. The program also runs year-long science camps for girls. In the summer, the program's instructors travel and reach as many rural communities as they can through week-long day camps. The Wise Kid-Netic Energy Program makes it a priority to deliver their programming to First Nation class rooms, often flying into communities that cannot be reached otherwise. Their instructors are mostly young women who make wonderful role models because they are pursuing degrees in Science, Engineering, and Education. Annually, the WISE Kid-Netic Program reaches almost 30,000 students.

#### VERNA J. KIRKNESS PROGRAM

"Increasing the number of First Nations, Métis and Inuit students graduating from science and engineering programs in Canada."

On May-18, 2012 CWSE-Prairies hosted a pair of students from the Frontier School Division as part of the Verna J. Kirkness Education Foundation Program. A total of 8 students were selected from that school division, and were hosted by 4 different professors at the University of Manitoba.



We had the pleasure of working with Verla and Dale from Frontier Mosakahiken school in Moose Lake, Manitoba. The students met a number of different faculty, research staff, and graduate students in the Department of Soil Science. Throughout the week, Verla and Dale participated in hands on learning and research related to green house gases, soil fertility, and water quality. On the last day of the program, the students made a poster that they were able to take home to their community and school. One of the CWSE-Prairies' summer students put together a short video of the water sampling and testing that took place during the week.





#### CONTACT US

Do you want to collaborate with us and co-host an event for women in science and engineering? Do you want to work with us to enable more Aboriginal women to consider careers in Science, Technology, Engineering and Math (STEM)? Do you have ideas how to encourage more high school girls to consider careers in STEM? Do you want to become a mentor for women in STEM? Please contact us: <a href="mailto:cwse\_prairies@umanitoba.ca">cwse\_prairies@umanitoba.ca</a>

#### ON THE INTERNET!

CWES-Prairies is building its internet presence. Our facebook page has an average weekly reach of over 330 people.

Our regular profile articles average 130 reads during the month when they are featured. The profiles continue to be read even after they have been archived. Our first profile has been viewed 4x more since being archived.









## THE CWSE-PRAIRIES TEAM



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