

Bringing Research to LIFE

In brief

Twice a Winner

Gerarda Cronin, professor and associate head in the Dept. of Pediatrics and Child Health in the Faculty of Medicine; and director of Quality and Decision Support for the Child Health Program at the Winnipeg Regional Health Authority, has received the 2010 Canadian Association of Paediatric Health Centres (CAPHC) Contribution to Child Health Award.

Presented during the 2010 CAPHC Annual Conference, held in Winnipeg from Oct. 17 to 20, the award recognizes Cronin's work in children's health in the areas of research, teaching, safety, leadership and quality.

Cronin, along with colleagues David Horne, John Lee, Mike Maas, Reeni Soni, Murray Kesselman, Tanya Drews, Stasa Veroukis, and BJ Hancock, won best poster in the category of Innovation in Clinical Practice for their work 'Paediatric rescue extra-corporeal membrane oxygenation, without a local paediatric cardiac surgery program: single institutional review.'

The CAPHC annual conference invites abstract submissions for consideration as poster presentations within the conference program. The poster and exhibit fair, showcasing many innovative and transformative child and youth health research and clinical programs from across the country, has grown into one of the premier events at the annual meeting.

Upcoming event

Café Scientifique

Keeping Your Skeleton Healthy

Monday, Nov. 29, 2010, 7 p.m.

McNally Robinson, Grant Park

1120 Grant Ave.

Café Scientifiques bring together experts with non-researchers (like you, me, neighbours, friends) in a relaxed atmosphere to talk about important health questions. Please join us for a lively discussion, debate, and refreshments.

**FREE ADMISSION
EVERYONE WELCOME**

For more information:
http://www.umanitoba.ca/research/cafe_scientifique.html

Seating is limited. Please RSVP to research_communications@umanitoba.ca or (204) 474-9020

Water Woes

U of M researcher investigates Manitoba's water supply

BY KATIE CHALMERS-BROOKS

Trish Stadnyk will never forget the poverty-stricken moms she met in Chile, women who had only filthy water to offer their newborn babies or to drink themselves. Too dehydrated to produce their own breast milk, they were forced to give their infants milk produced by contaminated goats and cows. The animals quenched their thirst at a nearby river tainted by arsenic and soon the local infants were showing signs of poisoning.

It's a difficult scenario for Canadians to grasp, Stadnyk points out, given most of us have access to a clean glass of water with the turn of the tap. The civil engineering and water resources researcher has travelled the world exploring water-related issues—from the Alps in Europe to New Zealand—and has seen first-hand the reality of the planet's water crisis. A big part of the problem is that the global distribution of fresh water is uneven.

"I think in Canada water is viewed as a right, that everyone has a right to it. But in other parts of the world it's viewed as a privilege. If you don't have the money, you don't have the access and it's a basic human survival need," says Stadnyk.

"Canada, for instance, has a very small population but has the majority of the fresh water resource and an area among the highest population, but with probably the least amount of fresh water supply, is Africa."

Despite Canada's apparent abundance of water, scientists don't yet have a clear picture of what the future holds. Stadnyk is investigating the water supply across Canada and zeroing in on Manitoba specifically as she tries to figure out whether there is enough to meet demand down the road. Stadnyk will share her research findings with the public at an upcoming presentation on Dec. 1 at the Fort Garry campus.

Even though there is considerable flooding on the Prairies, this excess water is not conserved. Any water flowing into the province ultimately ends up in the Arctic Ocean. In recent years river levels have risen, which wreaks havoc on basements and city infrastructure, disrupting the natural cycle.

"We have to be a lot more conscience of where water is coming from and where we're taking our supply from," she says.

Over the next decade, Stadnyk will use models to try and predict water supply in the future, as far down the road as 2080. The models are fine-tuned by testing them in real-life weather events. For example, she'll compare a model of what happens in a river following a rain storm with what actually does occur and gauge the accuracy. So far, she has discovered that certain parts of the province



Photo by Katie Chalmers-Brooks

Trish Stadnyk from the Faculty of Engineering will share her research findings at an upcoming public presentation.

are becoming wetter while others are getting dryer.

If Canada one day experiences a water shortage, it would rear its head first on the Prairies, Stadnyk believes. Farmers use up a lot of water to grow crops and raise animals for butchering, products which are ultimately shipped elsewhere.

Manitobans can do their part to protect the water supply here and elsewhere in the world through conservation, says Stadnyk, who won't shower for longer than five minutes. "There is a finite supply on the Earth so the more we use here, in essence, the more we're taking away from the global supply."

She also encourages consumers to buy locally when possible. Often the imported fruits, vegetables, wines and coffee beans we put in our grocery carts are grown in regions where water is scarce and it takes a lot of water

to cultivate these products. "We're harvesting the water away from people who can't afford it," she notes.

Stadnyk also suggests watering lawns less during a dry summer. Not only is it more important to reserve water for drinking or agricultural use but it's actually better for the grass to go dormant during a drought, she says.

It's possible that scientists will one day manufacture water but Stadnyk questions whether that can be done affordably. "I think there is a long way to go. And the places that need the water the most are the places that couldn't afford those kinds of approaches. A better approach is water conservation and water sharing."

Stadnyk will discuss her research Wednesday, Dec. 1, at 7 p.m. at the Robert B. Schultz Lecture Theatre in St. John's College as part of the Bringing Research to Life Speaker Series.