

# Bringing Research to LIFE

## Upcoming Events

### Visionary Conversations

#### The Truth North: Canada's Final Frontier

Join our panelists in a discussion of the issues that impact Canada's North: resource development, climate change and sovereignty, as well as the interests and effects on Indigenous populations.

#### Featured Speakers:

**James Ferguson**  
Professor, Political Science,  
Faculty of Arts

**Norman Halden**  
Dean, Clayton H. Riddell Faculty  
of Environment, Earth, and  
Resources

**Chris Trott**  
Associate Professor,  
Native Studies, Faculty of Arts;  
Warden and Vice-Chancellor,  
St. John's College

**Umut Özsü**  
Assistant Professor,  
Faculty of Law

Wednesday, Nov. 21, 2012  
Robert B. Schultz Theatre  
St. John's College  
Fort Garry Campus

Reception in gallery 6:30 to 7:00 p.m.  
Panel discussion 7:00 to 8:30 p.m.

RSVP to:  
Visionary.Conversations@  
ad.umanitoba.ca

### Undergraduate Research Poster Competition

Come and check out the best in student research as participants showcase their projects and compete for cash prizes.

Thursday Nov. 1, 2012  
1:00-4:30 p.m.

Manitoba Rooms 210-224  
University Centre  
Fort Garry Campus

For more information:  
[umanitoba.ca/postercompetition](http://umanitoba.ca/postercompetition)

## Curriculum with culture

### Researchers hope to boost high school graduation rates in Nunavut by making classroom lessons more relevant

BY KATIE CHALMERS-BROOKS  
For The Bulletin

Barbara McMillan knows it's the smallest moment that can make the biggest impact.

A champion for Nunavut's children, the education professor remembers vividly a Grade 3 student she met in a remote school in Canada's far North, a boy who at first appeared quiet and hard to reach.

McMillan was in the country's northernmost territory to develop more relevant science curriculum for Inuit students and was teaching his class about how light and sound travel. To do so she explained how, while seal hunting on the ice, their ancestors stood on caribou skins so the prey beneath wouldn't see the shadows of their bodies or hear their footsteps through the water and decide not to emerge through an air hole.

The boy had something to say about that. Excitedly, he relayed to McMillan his experiences while hunting on the ice with his father.

"It was absolute exuberance. It just became clear that he knew so much and he was really interested in sharing with someone else, especially someone from the South who hadn't had those experiences," says McMillan.

The roles of teacher and student quickly reversed.

"He was teaching me," she says.

The Social Sciences and Humanities Research Council announced in April funding for a three-year project led by McMillan to further improve what students are being taught in science in Nunavut, focusing on elementary and middle-school aged kids in Igloodik and Arviat.

She and her colleagues Brian Lewthwaite and Robert Renaud, fellow



Photo by Mike Latschislaw

Prof. Barbara McMillan and her team are helping to bring Inuit culture and traditions into Nunavut classrooms.



Submitted photo

Inuit children learn about light and shadows with a lesson that incorporates traditional seal hunting.

Faculty of Education professors, will build on the previous work they've done over the last five years with the NSERC-funded Centre for Research in Youth, Science Teaching and Learning, known as CRYSTAL. But this time, they will be joined by curriculum, teaching and learning professor Frank Deer.

Their ultimate goal is to increase graduate rates among Inuit youth. According to a report two years ago by the Auditor General of Canada, 70 per cent of Nunavut students don't graduate from high school. Some drop out even before completing elementary school.

McMillan's strategy to reverse this trend? Teach the teachers and provide them with the tools to offer lessons that reflect the unique place where these students call home and the equally unique traditions born out of this environment, ones that span generations and are in danger of being lost forever. Before teaching students in Nunavut about tigers and forests, teach them about belugas and tundra.

"A lot of the material they have really isn't suited for the area in which they live. We're trying to help change that, make more relevant resources. It's more engaging for children when it's things that they have experience with," McMillan says.

Not only is it more engaging it encourages a sustainable way of thinking, which can benefit the larger Arctic community.

"If you know your place well, you appreciate it better and all that's been written on sustainability suggests that you have to really inhabit a place to care for a place, you can't just live in it," she says.

One of the biggest challenges for this research team is the high turnover rate of

teachers in the North, especially among those coming from the South. Nunavut Arctic College is trying to graduate more Inuit teachers; McMillan will be working with some of them over the next three years, along with interviewing Elders about when they felt successful or unsuccessful in school, providing support for teachers in the classrooms, and gauging how the students are responding.

McMillan says their efforts are in sync with the goals of the greater education system in Nunavut to return to a holistic approach, one that's based on the premise that "a wise person is not just someone who is cognitively intelligent." Their philosophy—both ancient and forward-thinking—recognizes that other aspects need to be developed as well, including an understanding that you don't act just for yourself but rather for the betterment of the greater community.

"We're hoping that working with the kids up until Grade 8 will give them the confidence about believing in themselves as learners, that they'll be successful in high school."

And from there continue on to university so they are prepared to secure the top jobs in the region as the Arctic opens up to more industry. A warming planet has meant less ice and more open water for ships to navigate.

But for now, McMillan will continue to teach—and be taught—by Nunavut's youngest citizens. She returns from every visit with greater insight.

"Being there I see how resilient these people are, who live with so little compared to what we have here and yet have such rich lives. It makes you realize that you don't need many of the things that you think you need."