

CONCRETE ACTION

Memorial geographer and Inuit-led project lauded for 'exceptional' climate change solution

Research

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BY JEFF GREEN

A Memorial researcher is the inaugural recipient of a major international honour for his groundbreaking work on climate change adaptation.

[Dr. Trevor Bell](#), University Research Professor, Department of Geography, Faculty of Humanities and Social Sciences, has received the [Frederik Paulsen Arctic Academic Action Award](#), valued at €100,000.

Presented by the [University of the Arctic](#) (UArctic) and the Iceland-based organization the [Arctic Circle](#), the award recognizes action-oriented scientific initiatives aimed at improving and reversing the effects of climate change in a concrete way.

A fellow of both the [Royal Society of Canada](#) and the [Royal Canadian Geographical Society](#), and a Memorial alumnus, Dr. Bell (M.Sc.'87) is co-creator of [SmartICE](#), the world's first climate change adaptation tool to integrate Inuit knowledge of sea ice with advance data acquisition and remote monitoring technology.



Dr. Trevor Bell
PHOTO: CHRIS HAMMOND

Dr. Bell was honoured during the [2021 Arctic Circle Assembly](#) on Oct. 15.

“Much of my work is at the community level, sitting in gathering places with half a dozen hunters and ice experts, perhaps in the middle of the dark season, it couldn’t be farther from the bright lights and buzz of an international award ceremony,” Dr. Bell told the *Gazette* during an interview.

“This award recognizes [Inuit communities], too, and I am most humbled and grateful to receive it on their behalf.” — *Dr. Trevor Bell*

He says that without the collaboration, support and knowledge of Inuit communities, the success of SmartICE as a climate change solution would not have been possible.

“This award recognizes them, too, and I am most humbled and grateful to receive it on their behalf.”

Indigenous-led

SmartICE originated at Memorial through a partnership between Dr. Bell and the Nunatsiavut Government in response to dangerous ice conditions.

Monitoring systems provide invaluable data-driven insights into ice thickness and local conditions that are instantly made available to communities via an online platform and social media.

The project benefits Inuit and their communities and employs many Inuit as part of its growing operation. SmartICE also supports community economic development such as outfitting and fisheries.

“Dr. Trevor Bell has a long history of research work in Nunatsiavut, primarily focused on issues of importance for Labrador Inuit.” – *Johannes Lampe*

“I was super excited to receive the phone call from the UArctic President Lars Kullerud,” Dr. Bell noted.

“His message came totally out of the blue. As he described the international selection process to me, I was incredibly honoured to have been chosen by a committee of global experts.”

That committee consists of leading authorities from around the world with decades of experience in all fields of Arctic-related disciplines. Its members have made considerable contributions to understanding climate change and its impact on the Arctic and globally.

Worldwide recognition

The Frederik Paulsen Arctic Academic Action Award is the latest in a long list of honours for both Dr. Bell and SmartICE.

Dr. Bell received the Arctic Inspiration Prize twice for knowledge-to-action plans that benefit Arctic peoples — once in 2014 and again in 2016.

In 2017 SmartICE was the only Arctic-focused recipient of the United Nations Momentum for Change Climate Solutions Award, and in 2019, Dr. Bell and SmartICE received the prestigious Governor General’s Innovation Award for “truly exceptional, transformative and positive impact on quality of life in Canada.”

Last year, SmartICE received the Newfoundland and Labrador Environmental Industry Association Cleantech Innovation Award and Memorial and SmartICE were the recipients of the President’s Award for Public Engagement Partnerships.

Understanding climate change

SmartICE’s social enterprise business model is consistent with Inuit societal values and inspires a new generation of Inuit to embrace both traditional knowledge and technology to benefit their communities.



SmartICE is an award-winning technological innovation for the North.

PHOTO: SUBMITTED

Johannes Lampe, president, Nunatsiavut, says Dr. Bell has a long history of research work in Nunatsiavut.

“He has examined the glaciers in the Torngat Mountains, partnered with the Nunatsiavut Government to develop the original SmartICE technology and is now working to implement the SmartICE Social Enterprise across Inuit Nunangat,” he said.

“Dr. Bell has dedicated a significant portion of his life to helping Inuit better understand climate change, and the Nunatsiavut Government would like to congratulate him on receiving the Frederik Paulsen Award.”

‘Exceptional research’

President Vianne Timmons commends Dr. Bell and the SmartICE team for leading research that is making a difference.

“Through a positive community-led partnership, Dr. Bell and Inuit collaborators and contributors have found innovative ways to improve the safety of ice travel that is vital to Northern communities and the Indigenous people who live in them,” she said.

“Dr. Bell has used his exceptional research for advocacy, care, well-being, and education and training. This recognition elevates Memorial’s international reputation for truly innovative research.”

Solid solutions

Both UArctic, a network of more than 200 universities, colleges and research institutes, and the Arctic Circle, which brings together the largest network of experts focused on the future of the Arctic, created the Frederik Paulsen Arctic Academic Action Award.

“As the award identifies, ‘solutions will not come from hope alone.’” – *Dr. Trevor Bell*

The prize is named after a prominent Swedish executive who is a longtime supporter of Arctic and Antarctic research and co-operation, and partnerships with Indigenous peoples. Memorial is a member institution of UArctic.

“The Frederik Paulsen Award is recognition for academic action on Arctic climate change,” Dr. Bell told the *Gazette*.

“As the award identifies, ‘solutions will not come from hope alone.’ Over the past decade or so, I have devoted my academic career to action-oriented collaborative research that aims to support Inuit in their adaptation to increasingly more unpredictable and dangerous sea ice travel conditions.”

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During the [Arctic Circle assembly](#), Catharyn Andersen, vice-president (Indigenous), took part in a session on Oct. 15 titled Global-Arctic Indigenous Dialogue that included participants from around the world.

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