



**News Digest of the Canadian Association of Geographers
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Queen's Melissa Lafrenière on the contributions and future of ArcticNet: Melissa Lafrenière does the kind of climate-change research “you can't do unless you're actually on the ground,” she says. An associate professor in the department of geography and planning at Queen's University, she collects samples of snow, rain, soil and groundwater from Arctic watersheds. “These are not measurements you can obtain by remote sensing or other means,” she says. “You have to be there to capture what is happening.” It is costly work – one flight to get people and gear from Resolute Bay to her field site in Cape Bounty, Nunavut, is about \$9,000 – as well as labour- and time-intensive. Despite the obstacles, the last decade or so has generally been good times for Arctic researchers. “The state of Arctic research in Canada is really the best it's ever been, in my mind,” says Dr. Lafrenière. “I've watched as the [local] populations and the number of students and researchers involved grow. But what's really amazing, and what has pushed Arctic research forward, is the degree of networking, collaborations and integrated work that goes on.” Dr. Lafrenière says these advances were made possible through [ArcticNet](#), a network that coordinates and supports multidisciplinary research into the impacts of climate change and modernization in the coastal Canadian Arctic. Created in 2003, ArcticNet is headquartered at Université Laval and funded through the federal Networks of Centres of Excellence program, or NCE. It facilitates the work of about 1,000 graduate students, postdoctoral fellows, researchers, technicians and specialists from 34 Canadian universities. ArcticNet also collaborates with more than 150 international organizations. [University Affairs](#)

McMaster U undergraduate geography students winners in International Year of Global Understanding Esri Story Map competition: Two undergraduate students from the School of Geography & Earth Sciences at McMaster University were winners in the International Year of Global Understanding (IYGU) Esri Story Map competition. The IYGU competition challenged young people from around the world to help raise awareness of the global implications of local everyday actions. **Spencer Elford** was the 2nd place winner for his story map [Concrete Jungle: Urban Expansion and the Rise of the Megacity](#). Since the early days of civilization, people have been attracted to cities. From ancient Rome, to modern day New York, cities have been seen as epicenters for knowledge, culture, wealth and religion. With cities being the home of over half of Earth's inhabitants, it is safe to say that we are living on an urban planet. **Karl Chastko** placed 3rd for his presentation [Food, Water and 7 Billion People: Improving Water Efficiency in Agriculture](#). Every day the average person drinks 2-4 liters of water while they effectively consume approximately 2000-5000 liters of water indirectly through the food they eat. In his presentation Karl explores how water is utilized to feed over 7 billion citizens of planet earth. [International Year of Global Understanding](#)

U British Columbia's Dan Hiebert finds refugees have same economic success as other

Canadians: Dan Hiebert says the financial status of refugees living in Canada's six biggest cities will eventually mirror the rest of the population, although it can take up to 20 years. "Really tough times at the beginning, high levels of poverty, high levels of social assistance, as much subsidized housing as they can find," said Hiebert. "After those investments in the beginning years, you find a steady improvement in their economic fortunes over time, [and] refugees end up with the same income distribution at the household level as other Canadians and also with the same level of home ownership." Hiebert says the things that keep refugees poorer when they first come to Canada, like language barriers, can't be fixed quickly. Another hurdle they face, unlike many other immigrants, is the trauma of the refugee experience. "That can have lingering effects over the first number of years," he said. "People need help and resources to get past that." Another early barrier is the lack of an existing social network in Canada, which can hurt job prospects early on. Hiebert's research did not factor in upfront costs of refugee settlement programs. [CBCNews | British Columbia](#)

U British Columbia's Arthur Gill Green is helping redefine the concept of online textbooks:

[Arthur Gill Green](#) traces his conversion to using open educational resources, or OER, back to a specific day in his introductory geography class in 2010. That day, after the lecture, he noticed students taking photos at the back of the classroom and wondered why. It turns out they were photographing the textbook. "Two of us every week get digital pictures of the textbook pages, and one of us gets to take it home," a nervous student confessed upon Dr. Green's approach. He reassured the students he wasn't upset, but the professor now sees the incident as a disruptive moment. "It made me realize that I was putting students into a position that was untenable, that they basically could not afford the books that I was choosing," Dr. Green recalls. "I started to really think about my principles as a teacher. I came to the conclusion that I needed to find open education resources for my students, because if I was creating barriers to their learning, then I was violating my own core principles in my pedagogy." Fast forward several years and Dr. Green, an affiliate assistant professor at the University of British Columbia and instructor at Okanagan College, not only uses open educational resources, broadly defined as openly licensed teaching tools, he's collaborating on two open geography textbooks and has developed a virtual field-trip app called [Field Trip](#). It's no coincidence that Dr. Green teaches in British Columbia – if OER has an origin story in Canada, it's with an organization called [BCcampus](#). Founded in 2003, BCcampus supports the province's postsecondary education institutions in the evaluation and development of educational technologies. [University Affairs](#)

Memorial U's Rodolphe Devillers says DFO needs to make science a priority in decision making:

Rodolphe Devillers, who specializes in marine conservation, says the Department of Fisheries and Oceans needs to make science more important in decision making. "I'm very sympathetic for fishers. I understand that they're angry and they have to talk and DFO has to listen to them," he said. "What I'm less sympathetic with is the organizations that are around the fisheries that are very strong at lobbying and that can pressure DFO to actually modify and increase the quota systematically despite the advice of science." Devillers said if the scientific data states what is acceptable, the fishing industry will then push to make the quota higher. "Our oceans are very dynamic and the environment is changing and fishers also have to accept that every year is not going to be the same because the environment is changing and we have to adapt our practice with that," he said. "We're trying to come up with solutions that ensure that we don't go through those cycles of high fisheries, low fisheries, high fisheries, low fisheries, but we have something that is healthy and sustainable full time for different fisheries." While a long term solution is needed to ensure a healthy and sustainable ecosystem, fishers need to understand how dire the situation is in the short term, Devillers said. "There has always been a disconnect, a very strong tension, between DFO and the fishers and the role of science and all that," he said. "DFO has to work toward more sustainable solutions in the way they integrate science into their policy and the way they consider protecting the environment." [CBCNews | Newfoundland & Labrador](#)

U Waterloo's Brent Doberstein co-leads project focused on development of amphibious homes for marginalized and vulnerable populations in Vietnam: The University of Waterloo project is headed by Dr. Elizabeth English of the School of Architecture, with two other UW team members: Dr. Brent Doberstein of Geography and Environmental Management, and Dr. Carrie Mitchell of the School of Planning. The team will pilot the use of low cost amphibious houses, used in flood-prone areas of Louisiana, USA for decades, by adapting the design for the local communities in the Mekong Delta. Work is already underway on the project. Dr. Doberstein confirmed that "the team has already identified recipient communities in the Mekong Delta, and the project will build one or more prototype amphibious houses before the June-October rainy season when flooding is likely to occur across the Delta". Prototype houses will be monitored throughout the flood season, and interviews will be held with housing beneficiaries to better understand how amphibious housing operates during the Mekong's flood events. Several undergraduate and graduate UW students will be involved in various phases of the project, helped to research housing design, amphibious housing community acceptability, and flood risk reduction themes. [U Waterloo Geography](#)



Simon Fraser U undergraduate student Michelle Chen presented her work on GIS-based network analysis of municipal waste management at the FENV Environment Research Talks 2017 symposium. The work demonstrated how GIS can be used to optimize municipal waste management by integrating street networks into the GIS-based analysis for Surrey, BC, Canada. Michelle is a graduating Bachelor of Environment student in the Global Environmental Systems major and the research work was completed as part of a directed studies course with Dr. [Shiv Balram](#) of Geography. [SFU Geography](#)

U Victoria's Ken Josephson from the Department of Geography was recently presented with the @UVicSocialSci Meritorious Staff Contributions Award for his work with connecting communities.

Simon Fraser U's Department of Geography and Faculty of Health Sciences recently hosted Dr. Jamie Pearce, a Professor of Health Geography at the University of Edinburgh. Dr. Pearce presented a lecture entitled "Can a 'lifecourse of place' approach enhance our understanding of health, place & inequalities?" at the Annual Distinguished Speaker event. [SFU Geography](#)

Brock U student Luke Gray recipient of the 2017 Esri Canada Scholarship Competition, for his project entitled "*Hibernation of the Massasauga Rattlesnake in the Wainfleet Bog, Ontario.*" [Brock News Around Campus](#)

U Waterloo's Susan Elliott and Johanna Wandel, were awarded funds as part of Waterloo's submission to the Queen Elizabeth Advanced Scholars (QES-AS) 2016 call: The Waterloo project, "Water Security as a Foundation for Healthy Communities and Sustainable Livelihoods" is led by the [Water Institute's](#) Executive Director, Roy Brouwer, and includes Elliott, Wandel, and researchers in public health. Funds will be used to bring PhD students and early career researchers to Canada to work on water related projects, including safe water and sanitation in Africa (Elliott) and agriculture and food security in India (Wandel). This round of the QES-AS program is funded by IDRC and SSHRC. [U Waterloo Geography](#)

Hot Papers by Canadian Geographers

Marco G. Jorge and Tracy A. Brennand. 2017. [Semi-automated extraction of longitudinal subglacial bedforms from digital terrain models – Two new methods](#). *Geomorphology* 288:148–163.

Robert Newell, Rosaline Canessa and Tara Sharma. 2017. [Modeling both the space and place of coastal environments: Exploring an approach for developing realistic geovisualizations of coastal places](#). *Frontiers in Marine Science*. doi.org/10.3389/fmars.2017.00087

Emrys Phillips, David J.A. Evans, Nigel Atkinson and Allison Kendall. 2017. [Structural architecture and glaciectonic evolution of the Mud Buttes cupola hill complex, southern Alberta, Canada](#). *Quaternary Science Reviews* 164:110–139.

Nigel M. Waters, N. M. 2017. [GIS: History](#). In: Richardson, D., Castree, N., Goodchild, M. F., Kobayashi, A., Liu, W. and Marston, R. (Eds.), *International Encyclopedia of Geography: People, the Earth, Environment, and Technology*. Wiley: New York.

Nigel M. Waters. 2017. [Tobler's First Law of Geography](#). In: Richardson, D., Castree, N., Goodchild, M. F., Kobayashi, A., Liu, W. and Marston, R. (Eds.), *International Encyclopedia of Geography: People, the Earth, Environment, and Technology*. Wiley: New York. DOI: 10.1002/9781118786352.wbieg1011

Kathy L. Young, Harold-Alexis Scheffel, Anna Abnizova and John R. Siferd. 2017. [Spatial and temporal dynamics of groundwater flow across a wet meadow, Polar Bear Pass, Bathurst island, Nunavut](#). *Permafrost and Periglacial Processes*. DOI:10.1002/ppp.1931

Other “Geographical” News

The Arctic Ocean is becoming more like the Atlantic: The eastern Arctic Ocean is becoming more like the Atlantic Ocean, a new study combining remote sensing and local data finds. Whereas the Arctic Ocean typically undergoes very little vertical overturn, the eastern Eurasian Basin of the Arctic is now becoming more active, exhibiting vertical mixing more commonly seen in iceless parts of the Atlantic, the study finds. Over the last decade, the Arctic Ocean has experienced record-breaking losses of sea ice in the summers. [ScienceDaily](#)

Trustee wants board to tackle potential bias in TDSB's map collection: A Toronto District School Board trustee is raising concerns about whether the world maps that currently hang on classroom walls are truly representative of the students who use them. At issue is the traditional world map — called the Mercator after the man who drafted it in 1569 — which has been criticized lately for presenting a Eurocentric view of the world and unfairly diminishing Africa and South America. "We have students whose origins are from all over the world," he said Friday. "The objective is to have more meaningful representation on our classroom walls." Kandavel, a former elementary school teacher, says he doesn't want to mothball the board's Mercator maps. He's more interested, he says, in adding other representations of the world that reflect more accurately other land masses that appear diminished in the Mercator — such as Africa, South America and Asia. "There's a teaching moment to talk about bias," he said. "But certainly having a wider, and more representative selection of maps is the objective." He says he got the idea to update the TDSB's map collection from Boston Public Schools, which last month opted to add the so-called Gall-Peters map to some of its classrooms. [CBCNews | Toronto](#)

Logging Lantzville: Small Vancouver Island town fights to save local forest: Every day, Ted Gullison, of Lantzville, B.C. walks his dog in the woods near his small town on Vancouver Island. "It's a really beautiful [high canopy] forest," he said of the region just north of Nanaimo. "There's still the original trees that are two or three feet across. It's a pretty magical experience." The only problem — the forest is regularly logged, and the conservationist fears that the towering coastal Douglas fir trees could soon be lost forever. And he's not the only one who's concerned. Dozens of community members have banded together, spawning the Save Lantzville Forest movement. The group is calling on the provincial government to conserve part of the woods. But the requests have fallen on deaf ears. [CBCNews | Vancouver](http://www.cbc.ca/news/vancouver)

Some Not So “Geographical” News



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