

science



Dean's Round-up: January 2019

Faculty Highlights



Students and faculty received awards and recognition for their hard work and outstanding achievements at the Faculty of Science's annual **Honours and Awards Ceremony** Jan. 16. Awards went to graduate and undergraduate students for both academic excellence and extra-curricular involvement. York alumnus, [Samer Bishay](#), president and CEO of Iristel & Ice Wireless, delivered the keynote speech. For a complete list of awards and recipients, visit the [Faculty of Science](#) website.



The Faculty of Science's newest Science Communicator in Residence [Dan Falk](#) started his residency. Falk is an award-winning freelance science journalist, author, and broadcaster. He has written for *Smithsonian*, *New Scientist*, *Scientific America*, *The Globe and Mail*, *The Walrus*, *Astronomy* and many more.

His most recent book is [The Science of Shakespeare](#). He is also the author of [In Search of Time](#) and [Universe on a T-Shirt](#).



Christopher Caputo (Chemistry), a Canada Research Chair in Metal-Free Materials for Catalysis (Tier 2), was one of five early career researchers to receive Ontario's prestigious John Charles Polanyi Prize. The prize represents the province's next generation of innovators. Dr. Merrilee Fullerton, Minister of Training, Colleges and Universities, said "The Polanyi Prize winners represent some of the best researchers across Ontario universities. Their successes help better the lives of the people in our province and boost Ontario's reputation as a leader in research." Read more in [yFile](#) or on the [Government of Ontario](#) website.

Congratulations

Ozzy Mermut (Physics and Astronomy), and a collaborator, successfully gained almost \$320,000 of Canadian Institutes of Health Research funding over four years for their project – "A universal self-calibrating in vivo real-time optical radiation dosimeter for quality assurance and quality control of radiotherapy treatment."

The Faculty of Science has gained another York University President's Ambassador, **Katrina Carver**, a first-year physics and astronomy student who came to York with a prestigious Schulich Leader Scholarship.

Other News

Saber Saleuddin (University Professor Emeritus, Biology) is co-editor of the

forthcoming book, [Advances in Invertebrate \(Neuro\) Endocrinology: A Collection of Reviews in the Post-Genomic Era](#) (two-volume set), which provides an informative series of reviews from expert scientists at the forefront of their research into the endocrinology of invertebrates.

From Jan. 3 to 8, York once again hosted the **Winter Math Training Camp of the Canadian Mathematical Society** with 13 top hopefuls for Canada's teams at the 2019 International Mathematical Olympiad and the European Girls Mathematical Olympiad. These high school students have been highly successful on recent national and international math competitions. The students and five trainers stayed in York residences, with the daily activities at Bethune College. York's Department of Mathematics and Statistics has hosted this event for about 20 consecutive years. The main local organizer this year was **Neal Madras** (Mathematics and Statistics).

Jane Heffernan was the keynote speaker at the annual Independent Schools of Ontario Mathematics Association (ISOMA). She was also the Joan WHITTEN MILLER 1976 STEM Speaker at the Bishop Strachan School.

Hélène Mialet (Science and Technology Studies) was invited to speak at the Institute for Society and Genetics at UCLA. The title of the workshop was *The Political Rationalities of Conservation of Maintenance: Animals, Infrastructure, Expertise*.

Dawn Bazely (Biology) is the guest speaker at the forthcoming University of Toronto Gerstein Science Library Wikipedia Edit-a-thon About Women in STEM, Thursday, Feb. 7, from 4 to 8 pm, to mark the International Day of Girls and Women in Science.

Research Highlights

An international study looking at vanishing northern lake ice, led by **Sapna Sharma** (biology), was published in the journal [Nature Climate Change](#). The research shows that within the next generation with an estimated 35,300 lakes are likely to lose annual winter ice cover, if the climate warms by a projected two degrees Celsius. That figure jumps to 230,400 lost lakes without annual ice cover under an extreme warming climate scenario of eight degrees Celsius. Among other things, it means the iconic winter traditions of skating outdoors and ice fishing on a frozen lake could vanish across southern Canada and the

Northern Hemisphere by the late 21st century. Read the [media release](#) for more information.

York graduate student **Jenna Braun**, who just defended her MSc, and **Christopher Lortie** (Biology) published a critical review, "[Finding the bees knees: A conceptual framework and systematic review of the mechanisms of pollinator-mediated facilitation](#)" in the journal *Perspectives in Plant Ecology, Evolution and Systematics*, highlighting the need for examining positive plant-pollinator interactions for invasion, agriculture, and conservation.

Christopher Lortie (Biology) and colleagues from China and the United States examined the use of R, an open and free programming language for data and stats, in ecology and evolution and identified a five times increase in its use to code and collaborate openly. The paper, "**Evaluating the popularity of R in ecology**," is in the journal [Ecosphere](#).

Media

Sapna Sharma's (Biology) research on the loss of northern lake ice was covered in the [National Geographic](#), the [BBC](#) in print, radio and TV, [The Globe and Mail](#) and others.

Paul Delaney (Physics and Astronomy) was on a host of radio and television programs, including NewsChannel, CBC The National, CHML900 with Scott Thompson, CTV Toronto, AM1010 with Mark Tawney, and Bellville radio talking about the New Horizons flyby of Ultima Thule. He was also on CTV NewsChannel, CTV National, CHML900 and AM640 discussing China landing on the Moon. He also spoke about the biosphere on the moon and the Aurora Space Station, as well as the Ratan radio telescope signal on AM640's The Exchange, about the lunar eclipse on CTV National and AM1010.

Upcoming Events

February 21: The third annual **Tri-Sci Tourney** for Grade 11 students with a host of activities will take place in the Life Sciences Building.

February 20: The Adobe Connect workshop will take place from 2 to 3:30 pm

in DB 1014. This hands-on workshop will introduce the basics of the Adobe Connect, a web conference software supported by York University and embedded in Moodle. The workshop is co-facilitated by **Hovig Kouyoumdjian** (Chemistry), Faculty of Science Committee on Teaching and Learning (CoTL) and the Teaching Commons. Please bring your laptops. **Registration:** <https://teachingcommonsforms.apps01.yorku.ca/forms/view.php?id=597043>
