

science



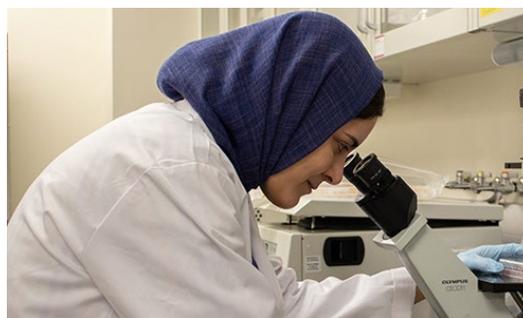
Dean's Round-up: January 2020

Faculty Highlights



The Faculty hosted its annual Honours & Awards Ceremony on January 29 to celebrate the hard work and achievements of faculty and students. More than 400 students, family members, faculty members and staff attended the event.

[Read more](#)



The Faculty announced a call for student applications to the Dean's Undergraduate Research Awards and the NSERC Undergraduate Student Research Awards.

[Read more](#)

Congratulations

Eric Hessels (Physics & Astronomy) received a \$900,000 grant from the Gordon and Betty Moore Foundation for the project "EDM3: an electron Electric Dipole Measurement using Molecules in a Matrix." See the full story in [yFile](#).

Derek Wilson, (Chemistry) received an NSERC Collaborative Research and Development [Grant](#) worth \$1,040,000 for his project “The Technology-Enhanced Biopharmaceuticals Development and Manufacturing (TEBioDev) initiative.” With additional cash and in-kind contributions from industry, the total funding comes to \$2.2 million over four years.

Postdoc **Nicola Luigi Bragazzi** (Laboratory for Industrial and Applied Mathematics) received a 2019 Mosaic of Autoimmunity Award, a bi-annual award established to encourage progress in autoimmunity research. The ceremony for the Award will be held during the International Congress on Autoimmunity in May 2020.

Yisub Kye, former PhD student of Ed Furman (Mathematics & Statistics) and an associate scholar with the Risk and Insurance Studies Centre, has accepted the position of E.R. Hedrick Assistant Professor in the Department of Mathematics at the University of California in Los Angeles.

Other News

York University hosted the annual Winter Training Camp of the Canadian Mathematical Society. The sixteen top high school students attending were the most promising contenders for Canada's 2020 teams for the International Mathematical Olympiad and the European Girls' Mathematical Olympiad. The main local organizer was **Neal Madras** (Mathematics & Statistics), supported by **Hongmei Zhu**, **Norm Purzitsky**, **Ann-Marie Carless**, and the staff at Bethune College, as well as other members of the Department of Mathematics and Statistics.

Laurence Packer (Biology) presented “The biogeography of extreme bees in extreme environments” at the Biology Department Seminar at University of Rochester.

Master's student **Nargol Ghazian** (supervised by Chris Lortie, Biology) is collaborating with scientists at Microsoft to advance the use of machine learning and artificial intelligence in the study of wildlife biology and ecology. See the full story in [yFile](#).

Research by PhD student **David Rocco** (supervised Jean-Paul Paluzzi, Biology) on how mosquito spermatogenesis is regulated, which could inform

pest control strategies, was covered by [Brainstorm](#).

Research Highlights

Christopher Bergevin (Physics & Astronomy) and his team published [Evidence supporting synchrony between two active ears due to interaural coupling](#) in *The Journal of the Acoustical Society of America*. The research was featured on the front cover of the journal as well.

Chris Lortie (Biology) and his team, including his MSc student **Jenna Braun**, former PhD student **Alessandro Filazzola** and former postdoc **Florencia Miguel**, published "[A checklist for choosing between R packages in ecology and evolution](#)" in *Ecology and Evolution*.

Ron Pearlman (Biology) and his team published [Nucleus-specific linker histones Hho1 and Mlh1 form distinct protein interactions during growth, starvation and development in *Tetrahymena thermophila*](#) in *Scientific Reports*.

Cora Young and **Trevor VandenBoer** (Chemistry) published [Quantitation of amino sugar stereoisomer and muramic acid biomarkers by hydrophilic interaction liquid chromatography-mass spectrometry](#) in the *Journal of Chromatography A*.

PhD student **Andrea Durant** (supervised by Andrew Donini, Biology) published [Development of *Aedes aegypti* \(Diptera: Culicidae\) mosquito larvae in high ammonia sewage in septic tanks causes alterations in ammonia excretion, ammonia transporter expression, and osmoregulation](#) in *Scientific Reports*.

Media

Dawn Bazely (Biology) spoke to [The Star](#) about strategies to restore and protect the biological richness, including many hectares of healthy oak savannah, in High Park.

Paul Delaney (Physics & Astronomy) spoke to *AM1010*, *AM640*, *CHML900*, and *Sirius XM* about a number of astronomy topics including STEVE and Aurora phenomena, Helen Sharman, fast radio bursts, new astronauts graduating, Murchison meteorite and ancient dust grains, among others. He also spoke to [CBC News](#) about radio bursts.

Postdoc **Nicola Luigi Bragazzi** (Laboratory for Industrial and Applied Mathematics) spoke to the Canadian Press about the difficulty in naming infectious diseases. The article appeared in the [Huffington Post](#), [Winnipeg Free Press](#) and other media outlets.

Upcoming Events

February 27 – *Beyond Media Interviews: How museums provide powerful, creative opportunities to do science communications*, presented by York Science Communicator in Residence Patchen Barss. [More details](#)

February 27 – *Death of a Universe*, presented by Dr. Katie Mack. Tickets are free with registration at <http://katie-mack.eventbrite.com>