

science

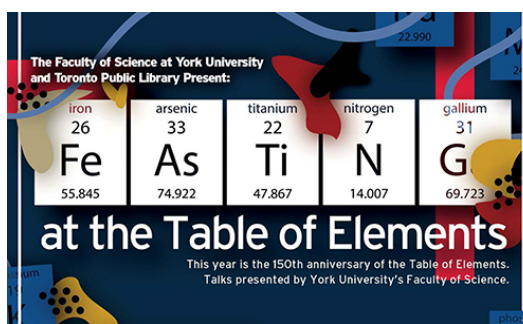


## Dean's Round-up: November 2019

### Faculty Highlights



The Faculty of Science hosted Science Unplugged, which featured talks by **B.D. Colen**, York Science Communicator in Residence; **Sandra Rehan** (Biology); **Eric Hessels** (Physics & Astronomy) and student **Sunna Withers**. Read the recap in [yFile](#).



The Faculty of Science wrapped up its public lecture series at the Toronto Public Library, titled [Feasting at the Table of Elements](#). Thank you to Chemistry Professors **Chris Caputo**, **Cora Young**, **Pierre Potvin**, **Hovig Kouyoumdjian** and **Derek Jackson** for participating and presenting engaging talks in the community.

### Congratulations

**Laurence Packer** (Biology) won a [Nature Inspiration Award](#) (Adult Category) from the Canadian Museum of Nature.

**Sapna Sharma** (Biology) received the [Science Promotion Award](#) from the Canadian Council of University Biology Chairs.

At the [Bryden Alumni Awards](#) event, Alumna **Kim Badal** (BSc '12) was presented with a Bryden Alumni Award in the One to Watch category.

Postdoc **Nicola Luigi Bragazzi** (Laboratory for Industrial and Applied Mathematics) received the 2019 Universal Scientific Education and Research Network (USERN) Prize in the field of medical sciences, sharing the prize with Hongbo Zhang (University of Helsinki, Finland).

At the Graduate Studies Scholars Reception, recent MSc graduate **Azizia Wahedi** (supervised by Jean-Paul Paluzzi, Biology) was presented the Thesis & Dissertation Prize for her “Characterization of the Adipokinetic Hormone/Corazonin-Related Peptide Signaling System in the Mosquito.” In addition, PhD student **Paige Whyte-Fagundes** (supervised by Georg Zoidl, Biology), recipient of the Susan Mann Dissertation Scholarship, spoke about her research on a particular protein channel in the zebrafish that could lead to important developments in understanding epilepsy. See the story in [yFile](#).

## Other News

**Dawn Bazely** (Biology) and **Steven Alsop** (Faculty of Education) created an open-access archive of the extensive research conducted in Churchill over decades by scientists from around the world. [YFile](#) covered the story.

**Tamara Kelly** and **Paula Wilson** (Biology) presented an invited workshop (with Karen Smith from UBC) at the Pearson Biology Leadership Forum entitled “Fostering Success for First Year Students.”

**Hélène Mialet** (Science & Technology Studies) presented several talks: “Tracing metrologies from Concord California to Paris” at TIK, Center for Technology, Innovation and Culture (Oslo); “Animals in Translation,” at Centre for Advanced Study, Academy of Science and Letters (Oslo); and “Managing the Self through Dogs and Machines in the Heart of Silicon Valley” at the Society for the History of Technology (Milan).

**Ed Furman** (Mathematics & Statistics) and Ida Ferrara (Faculty of Liberal Arts & Professional Studies) co-organized the Risk & Insurance Studies Centre

Forum at the Miles S. Nadal Management Centre. See the [yFile](#) story.

**Laurence Packer** (Biology) presented at the "Classifying the new?" event hosted by the Fields Institute for Research in Mathematical Sciences.

Research by **Gary Sweeney** (Biology) and his PhD student **James Jahng** on the impact of iron overload on insulin sensitivity was covered by [Brainstorm](#), a special edition of yFile.

**Paul Delaney** (Physics & Astronomy) presented a talk about York University's new 1-metre telescope at NYAA (Astro Club), and Mars to the Kipling Collegiate Youth group.

PhD student **Alyssa Murdoch** (supervised by Sapna Sharma, Biology), published a [blog](#) titled "Canada's invisible biodiversity crisis" with the Wildlife Conservation Society.

PhD student **Jenna Braun** (supervised by **Chris Lortie**, Biology) published "Video technologies aid in the study of foundation plants: A case example using a shrub-annual facilitation system in the Mojave Desert" in the [Mojave National Preserve Science Newsletter](#).

## Research Highlights

**Rob McLaren** (Chemistry) and his team published [Estimation of NOx and SO2 emissions from Sarnia, Ontario, using a mobile MAX-DOAS \(Multi-AXis Differential Optical Absorption Spectroscopy\) and a NOx analyzer](#) in *Atmospheric Chemistry and Physics*. The study established a modified technique for measuring the emissions of pollutants from small cities and other small footprint areas, using Mobile MAX\_DOAS. In doing so, the team estimated total emissions of NOx and SO2 from the city of Sarnia.

PhD student **Yisub Kye** (supervised by **Ed Furman**, Mathematics & Statistics) published [Computing the Gini index: A note](#) in *Economics Letters*. The paper sheds new light on the meaning of the famous Gini index of income inequality and shows a convenient way to compute the index for virtually any statistical distribution of income.

Master's student **Amanda Jass** (supervised by **Andrew Donini**, Biology)

published [An impressive capacity for cold tolerance plasticity protects against ionoregulatory collapse in the disease vector, \*Aedes aegypti\*](#) in the *Journal of Experimental Biology*.

## Media

The measurement of the proton's size by **Eric Hessels** (Physics & Astronomy) and his team was covered in the print and online edition of [Scientific American](#). The article was written by Dan Falk, former York Science Communicator in Residence.

**Amro Zayed's** (Biology) project on developing a health diagnosis tool for bees continued to receive coverage in the media by [The Weather Network](#) and [Narcity](#).

**Deborah Harris** (Physics & Astronomy) spoke to [Quanta Magazine](#) about neutrinos and antineutrinos, in an article covering the unexpected discovery of a simple math formula by physicists studying the particles.

**Paul Delaney** (Physics & Astronomy) spoke to a number of media outlets about Mercury transit and retrograde, including [The Globe and Mail](#), [Global News](#), *CTV News*, *AM640*, and *AM1010*; he also spoke to *AM640*, and *AM1010* about cookies in space and voyager 2.

## Upcoming Events

**Dec 17:** Faculty of Science Holiday Reception, 2-4 pm, Schulich Dining Hall.  
RSVP <http://science.yorku.ca/HolidayReception2019>

**Jan 29:** Faculty of Science Honours & Awards Ceremony, 7-9 pm Accolade East - Sandra Faire and Ivan Fecan Theatre. Please see your email inbox for RSVP details.

**Until Mar 11** – The [Aquatic Research Group \(ARG\) Seminar Series](#) 2019/2020 features talks on everything from microplastics, pharmaceuticals, road salt, mercury and more that end up in our waterways.