

## Dean's Round-up: August 2020

### Faculty Highlights



The Faculty's 1-meter telescope celebrated its one-year anniversary on August 19 with a [YouTube stream](#) featuring **Paul Delaney** and special guest, **Allan Carswell**.



Nine new faculty members are joining the Faculty of Science for the 2020-21 academic year. For a full list, see below. Profiles of new faculty members are forthcoming in YFile.

### Welcome to our new administrative leaders:

- **Patrick Hall** was appointed as Chair of Physics and Astronomy, succeeding Marshall McCall.
- **Stephen Watson** was appointed as Chair of the Department of Mathematics and Statistics, succeeding Paul Szeptycki.
- **Robert Tsushima** and **Vera Pavri** were reappointed for 2 years as Chairs of Biology and STS respectively.

- **John Amanatides** was reappointed for a 1-year term as Bethune College Head.
- **Mark Bayfield** was appointed as Special Advisor to the Dean on Markham Campus.

#### **Welcome to our new faculty members:**

- **Mark Vicari**, Assistant Professor, Teaching Stream (Biology)
- **Vladimir (Kyle) Belozarov**, Full-Time Sessional Assistant Professor (Chemistry)
- **Christine Le**, Assistant Professor (Chemistry)
- **Pavlos Motakis**, Assistant Professor (Mathematics & Statistics)
- **Pamela Sargent**, Assistant Professor, Teaching Stream (Mathematics & Statistics)
- **Jesse Rogerson**, Assistant Professor, Teaching Stream (Division of Natural Science/Science & Technology Studies)
- **Carly Rozins**, Assistant Professor, Teaching Stream (Division of Natural Science/Science & Technology Studies)

#### *Starting in January 2021:*

- **Ryan Schott**, Assistant Professor (Biology)
- **Kevin McGregor**, Assistant Professor (Mathematics & Statistics)

## **Congratulations**

**Sergey Krylov** (Chemistry) was awarded the title of [Distinguished Research Professor](#).

#### **Congratulations to our newly-promoted colleagues:**

- **Tamara Kelly**, (Biology), promoted to full professor
- **Nicole Nivillac** (Biology), promoted to associate professor
- **Sandra Rehan** (Biology), promoted to associate professor

- **Gerald Audette** (Chemistry), promoted to full professor
- **Ryan Hili** (Chemistry), promoted to associate professor
- **Arturo Orellana** (Chemistry) promoted to full professor
- **Cora Young** (Chemistry), promoted to associate professor
- **Amenda Chow** (Mathematics & Statistics), promoted to associate professor
- **Peter Gibson** (Mathematics & Statistics), promoted to full professor
- **Hanna Jankowski** (Mathematics & Statistics), promoted to full professor
- **Paul Skoufranis** (Mathematics & Statistics), promoted to associate professor
- **Jill Lazenby** (Science & Technology Studies), promoted to associate professor

## Other News

### Welcome to our new administrative staff members:

- Paloma Chaves, Laboratory Assistant, SC-Biology
- Jacklynn Adubofuor, Undergraduate Program Assistant, SC-Chemistry
- Avalon Moore, Accounts Assistant, SC-Biology
- Krenare Aliovski, Graduate Program Assistant, SC-Chemistry
- Maxime Rossato, MS Specialist, SC-ORU Center for Research in Mass Spectrometry
- Camille Diaz, Laboratory Technician, SC-Biology
- Soma Tripathi, Laboratory Technician, SC-Biology
- Hannah Stanley, Marketing & Engagement Communications Coordinator, SC-Academic Services
- Sandra-Maria Dibo-Amany, Program Assistant, SC-Natural Science
- Monique Myers, Operations Manager, SC-Chemistry
- Adam McLean, Machine Shop Technician, SC-Technical Services
- Miranda Ramnaraine, Science Academic Advisor, SC-Academic Services
- Melissa Hughes, Communications Manager, SC-Office of the Dean
- Jerusha Lederman, Research Officer, SC-Office of the Dean
- Mandy Ramnaraine, Undergraduate Program Secretary, SC-Chemistry

**Huaiping Zhu, Jane Heffernan, and Jude Kong** (Mathematics and Statistics) were co-organizers of the CDM Canada-China [Distinguished Lecture Series on Mathematics and COVID-19](#). This weekly lecture series included a total of 18 distinguished speakers from Canada, China, Mexico, and USA, and garnered an average of more than 200 participants for each lecture. The series has generated impact across the fields of mathematical modeling, data science, and public health. It was sponsored by Society of Mathematical Biology (SMB international), Canadian Applied and Industrial Mathematics (CAIMS), Fields, CRM, PIMS and AARMS, the four national mathematical institutes.

**Cora Young** (Chemistry) was the successful co-grantee on an NSERC Alliance grant (led by University of Alberta). The funding allocated to Young's team is \$75,000.

**Edward Furman** (Mathematics and Statistics) is co-organizing the inaugural [International Student Research Competition \(SRC\)](#) of Risk and Insurance Studies Centre (RISC).

**Hélène Mialet** (Science and Technology Studies) was a discussant on a panel titled "Disrupting Biomedicine: The Politics and Practice of Open Source and Biohacked Drug and Devices" at the 4S/EASST conference 2020 (Prague/virtual meeting).

**Georg R. Zoidl** (Biology) accepted an invitation to join the Editorial Board of the *International Journal for Molecular Science (IJMS)*.

**Pei Yuan**, PhD student, supervised by **Huaiping Zhu** (Mathematics and Statistics) received a Mitacs Research Training Award (RTA) for the internship period of Aug 30, 2020-Dec 29, 2020 to carry out mathematical modeling study for control of COVID-19.

## Research Highlights

PhD student **Ryan W. Scott** and **Roberto Quinlan** (Biology) published, “[Are different benthic communities in Arctic delta lakes distinguishable along a hydrological connectivity gradient using a rapid bioassessment approach?](#)” in *Arctic Science*.

Former York PhD student **Brock Harpur**, **Mohammad A. Imrit**, **Kathleen A. Dogantzis**, and **Amro Zayed** (Biology) published “[Eusociality influences the strength of negative selection on insect genomes](#),” in *Proceedings of the Royal Society B – Biological Sciences*.

**Christopher Lortie** and **Malory Owen** (Biology) published, “[Ten simple rules to facilitate evidence implementation in the environmental sciences](#),” in *FACETS*.

**Michael Cohen**, **Derek J. Wilson**, and **D. Andrew James** (Chemistry), in collaboration with a group led by Sanofi Pasteur Ltd. Canada, published “[Genetically detoxified pertussis toxin displays near identical structure to its wild-type and exhibits robust immunogenicity](#)” in *Communications Biology*.

Graduate student **Zoe Davis** and **Robert McLaren** (Chemistry) published “[Recommendations for spectral fitting of SO<sub>2</sub> from miniature multi-axis differential optical absorption spectroscopy \(MAX-DOAS\) measurements](#)” in *Atmospheric Measurement Techniques*.

**Sapna Sharma** (Biology) published “[Integrating perspectives to understand lake ice dynamics in a changing world](#)” in *Journal of Geophysical Research-Biogeosciences*. **Professor Sharma** also published “[Lake ice](#)” in State of the Climate in 2019, in *Bull. Amer. Meteor. Soc.*

**Hélène Mialet** (Science and Technology Studies) published “[How Dogs Become Accurate Instruments: Care, Attunement and Reflexivity](#)” in *Humanities and Social Sciences Communications*.

Former York Science Fellow **Colin Bridges** and **Thomas**

**Baumgartner** (Chemistry) published a review article, "[Lewis acids and bases as molecular dopants for organic semiconductors](#)" in the *Journal of Physical Organic Chemistry*. Their article was featured on the cover page, with the image designed by **Tihana Mirkovic** (Chemistry).

## Media

**Dasantila Golemi-Kotra** (Biology) was quoted on [CBC.ca](#) commenting on vacation rental safety and COVID-19, on [Global News](#) regarding the effectiveness of 'neck gaiters,' and appeared on [CTV News](#) discussing the best face masks for kids.

Obesity research by **Jianhong Wu** (Mathematics and Statistics) was covered in the [Toronto Sun](#).

Undergraduate student **Darren Singh** (Physics and Astronomy), who started at York in the **Faculty of Science's Integrated Science program**, is doing an internship with the collision reconstruction unit of the York Region Police. Darren spoke with [Global News](#) about how physics is used in automobile collision reconstruction.

**Dawn Bazely** (Biology) was interviewed by [The Environmental Urbanist](#) radio show at CFMU, McMaster University's radio station. She discussed what ecologists do, her research and her virtual field course, and how citizen scientists can increase native biodiversity in urban areas.

**Paul Delaney** (Physics and Astronomy) did nearly a dozen media hits this month, including a spot on the shape of the heliosphere on [AM1010](#), interviews on the Perseid meteor shower, and an interview discussing the SpaceX constellation satellites on [CTV News](#).

A feature in the Summer 2020 issue of [York U Magazine](#) profiled faculty of science research into prevention of mosquito-borne illness in the lab of **Jean-Paul**

**Paluzzi** (Biology). Paluzzi oversaw the research by **Azizia Wahedi**, which earned her a prestigious Faculty of Graduate Studies (FGS) Thesis & Dissertation Prize in 2019.

Research by **Sapna Sharma** (Biology) on lake ice and global warming was featured in [Eos](#).