

Dean's Round-up: March 2020

Faculty Highlights



The Faculty of Science stands tall and firm in facing the challenges of the COVID-19 pandemic. Faculty members, staff and students are commended for their hard work and resilience during this challenging time. Read the [Dean's message](#) sent on March 23, 2020.



The Faculty of Science is once again inviting applications to its **Science Communicator in Residence Program**, for the 2020-2021 academic year. The deadline has been extended to May 11, 2020. [Read More](#)

Congratulations

Seyed Moghadas, and **Jianhong Wu**, **Jane Heffernan** and **Huaiping Zhu** (Mathematics & Statistics) received funding from the Government of Canada for [COVID-19](#) rapid research projects.

Ed Furman (Mathematics & Statistics), PhD student **Andrew Fleck**, and Yang Shen of University of New South Wales (Australia) were awarded a grant from the Casualty Actuarial Society to explore the effects of rare risk events, such as pandemics, natural disasters, and financial market crashes, on the reserves of property and casualty insurers

Other News

From January to March, volunteer undergraduate and graduate students in the **Department of Mathematics & Statistics**, along with education students, hosted weekly learning sessions for grade 1-8 students to prepare them for a Canadian Math Kangaroo Contest scheduled at York University in March (unfortunately the event was cancelled due to COVID-19).

Ilijas Farah (Mathematics & Statistics) published the book [Combinatorial Set Theory of \$C^*\$ -algebras](#) (Springer), which explores and highlights the fertile interaction between logic and operator algebras.

Jane Heffernan (Mathematics & Statistics) was interviewed about social distancing and why it works during the COVID-19 pandemic in a [yFile](#) article.

The [York University Magazine](#) profiled an NSERC grant received by **Ryan Hili** and **Sergey Krylov** (Chemistry) to boost early-stage drug development research, and the precise measurement of the proton radius by **Eric Hessels** (Physics & Astronomy) and his team.

[YFile](#) profiled research by **Christopher Lortie** (Biology) and his team that showed that climate change puts blunt-nosed leopard lizards, an endangered species, at risk of local extinction.

Adam Muzzin (Physics & Astronomy) was featured in York University's [People of YU](#) campaign.

Laurence Packer (Biology) presented "The Wild and Wonderful World of Bees" at the North American Native Plant Society Speaker Series, and "Bees" at a Vaughan Public Library branch.

Jianhong Wu (Mathematics & Statistics) joined the Expert Group on Modelling Approaches of the Office of the Chief Science Advisor of Canada; the COVID-19 Modelling Table, a committee sponsored by the Ontario Ministry of Health, Ontario Health, and Public Health Ontario; and the Public Health Agency of Canada Modelling Expert Group for COVID-19 - Canadian Projections.

PhD student **Saeed Ghorbani** and his supervisor **Nikolaus Troje** (Biology) published [MoVi: A Large Multipurpose Motion and Video Dataset](#).

Research Highlights

Thomas Baumgartner and his postdoc **Monika Stolar** (Chemistry) published [Phosphaviologen-Based Pyrene-Carbon Nanotube Composites for Stable Battery Electrodes](#) in *Batteries & Supercaps*. The paper was also featured on the cover for the journal. Read the [media release](#) from York University.

Chris Bergevin (Physics & Astronomy) and his team published [Overtone focusing in biphonic tuvan throat singing](#) in *eLife*. Read the [media release](#) from York University.

Chris Lortie (Biology) and his students published [Shrub and vegetation cover predict resource selection use by an endangered species of desert lizard](#) in *Scientific Reports*.

Jianhong Wu (Mathematics & Statistics) and his postdocs **Francesca Scarabel** and **Nicola Bragazzi** published [Canada Needs to Rapidly Escalate Public Health Interventions for Its COVID-19 Mitigation Strategies](#) on SSRN. Read the [media release](#) from York University.

Postdoc **Nicola Bragazzi** (Mathematics & Statistics) co-authored [Novel Coronavirus Infection \(COVID-19\) in Humans: A Scoping Review and Meta-Analysis](#), published in the Special Issue Real Time Clinical and Epidemiological Investigations on Novel Coronavirus of the *Journal of Clinical Medicine*. Read the [media release](#) from York University.

PhD student **Zoe Davis** and her supervisor **Robert McLaren** (Chemistry) published [Validation of MAX-DOAS retrievals of aerosol extinction, SO₂, and NO₂ through comparison with lidar, sun photometer, active DOAS, and aircraft measurements in the Athabasca oil sands region](#) in *Atmospheric Measurement Techniques*.

Media

Gerald Audette (Chemistry) participated in a Q & A about COVID-19, transmission and staying safe for an article in [YorkRegion.com](#).

Research by **Thomas Baumgartner** and his postdoc **Monika Stolar** (Chemistry) on creating environmentally friendly lithium-ion batteries led to

interviews with [BBC World Service](#), [Inverse](#), and others.

Dawn Bazely (Biology) was featured in a [CBC News](#) video clip debunking myths about COVID-19 precautions. She also spoke about what to do and not do during the pandemic on [Global News Radio](#).

Paul Delaney (Physics & Astronomy) spoke to *AM1010*, *AM640* and *Sirius XM* on a variety of topics, including lava tubes and life on Mars, water and habitability on mini Neptune K2-18b, and a black hole "explosion" in Ophiuuchus. He was also quoted in an article in [University Affairs](#) about the new one-metre telescope at the Allan I. Carswell Observatory.

Dasantila Golemi-Kotra (Biology) spoke to *CBC News Toronto* on the topic of the general public using face masks during the COVID-19 pandemic.

Jane Heffernan (Mathematics & Statistics) spoke to a number of media outlets about infectious disease modelling and the impacts of social distancing, including [CTV News](#), [Global News](#), [The Globe and Mail](#), and [The Star](#).

Patricia Lakin-Thomas (Biology) was interviewed by [CBC Radio](#), [CTV News](#), *CP24* and *900CHML* about how time changes impact our biological clocks and why she supports sticking to Standard Time.

Sapna Sharma (Biology) spoke about climate change and lake ice with the [Chicago Tribune](#) and [National Geographic](#).

Jianhong Wu (Mathematics & Statistics) and his postdocs **Francesca Scarabel** and **Nicola Bragazzi** spoke to numerous media organizations about their predications of the growth rate of COVID-19 under various scenarios of public health interventions. Media included *OMNI TV*, [CTV News](#), [Toronto Star](#), [Global News](#), and many more.

Upcoming Events

Apr 2: Virtual Town Hall, 3-4 pm: <https://conversations.info.yorku.ca/>