

Dean's Round-up: October 2022



We formally launched our [Community 2022](#) initiative, with events and resources aimed at helping our faculty, staff, and students reconnect in person and support the return to a more robust on-campus presence.



The Faculty published a new [Teaching & Learning section](#) on its website to highlight teaching and learning initiatives, available resources for instructors and students, how our Faculty is recognizing educational excellence, and more.

The Faculty hosted its inaugural Scientists on Science symposium "Where is the pandemic heading?" featuring presentations and a panel discussion with faculty members from Mathematics & Statistics, including **Jane Heffernan**, **Jude Kong**, **Seyed Moghadas**, **Huaiping Zhu**, and **Jianhong Wu**. [Read the recap](#).

CONGRATULATIONS

Jane Heffernan (Mathematics & Statistics) received a [Distinguished Alumni Award](#) from Trent University.

Nik Kovich (Biology) received the [2022 Arthur C. Neish Young Investigator Award](#) for his contributions to knowledge of the genetic regulation of plant natural product biosynthesis and for mentoring students in research.

MSc student **Bibisomaia Rezaee** (Chemistry) was one of five winners in the Green Chemistry and Catalysis theme at the Commonwealth Chemistry Posters – Building Networks to Address the Goals’ virtual poster event. Her poster was entitled "A comparative study between amorphous and crystalline transition metal oxides as catalysts for the oxygen evolution reaction."

Undergraduate student **Carmella Setiabudi** received the 2022 Science Summer Transition Program Award from the Faculty of Science. Awards are presented to top first-year international Science students who completed at least two summer modules in the program.

MORE NEWS

The **Allan I. Carswell Observatory** Astronomer in Residence Program “Stars Over Killarney” Event featured recent York graduate **Quinton Weyrich**, the last astronomer in residence of 2022. A livestream was set up with Director **Elaina Hyde** (Physics & Astronomy) and a recap of the adventure was covered on an Observatory’s [TeleTube episode](#). The Observatory also hosted a [Nuit Blanche](#) event with more than 200 visitors. On Halloween, the Observatory hosted a "Herschel 200th Anniversary: Astronomy, Music, Extraterrestrials" lecture and [concert event](#) in collaboration with AMPD, followed by a haunted telescope tour. The Herschel lecture was delivered by **Parandis Tajbakhsh** (NATS). All programming was planned and spearheaded by Hyde.

[YFile](#) profiled undergraduate student **Haleema Ahmed**, who is on the Prime Minister of Canada’s Youth Council and provides input into government programs and initiatives.

Dawn Bazely (Biology) and Kathryn McPherson (LA&PS) have published the book chapter “Women, Citizen Science, and Botanical Knowledge in Ontario, 1870-1920” (pp 378-402) in Ann Shteir’s edited volume, [Flora’s Fieldworkers: Women and Botany in Nineteenth-Century Canada](#), McGill-Queen’s University

Press. Bazely also spoke at a [book launch](#) event at the Royal Botanical Gardens, Hamilton.

Hugo Chen (Director of International Collaborations & Partnerships) and **Mingming Li** (Science International Recruiting Coordinator) represented York Science at The PIE Live North America conference in Toronto. The conference featured international partnerships, the North American policy landscape for international education, and an international student roundtable. Chen was invited to attend the transnational education roundtable during PIE Live Toronto hosted by Nous Group. He also facilitated the Go Global SDGs in Action Student Challenge workshop, funded by the Government of Canada's Outbound Student Mobility Pilot Program Global Skills Opportunity.

Amenda Chow (Mathematics & Statistics) presented an in-person teaching talk at University of British Columbia's Department of Mathematics. Her talk was entitled "Integrating Experiments into the Teaching and Learning of Mathematics."

Gordon Craig (Mathematics & Statistics) presented "La main invisible chancellante" at the Annual meeting of the Association mathématique du Québec, at the Cégep de Sherbrooke.

Jane Heffernan (Mathematics & Statistics) was the keynote at the [femSTEAM event](#) and presented the inaugural [David Poole Lecture](#) in Mathematics at Trent University.

Robin Kingsburgh (NATS) presented a lecture on "Developing interactive activities to explore the science of colour" as part of the [Colour Literacy Forum](#) on Teaching Colour Online: 3 Perspectives from the Arts and Sciences.

Jude Kong (Mathematics & Statistics) presented a plenary talk at the [Science Atlantic Conference](#) held at Mount Allison University, NB, and presented a talk at the University of Massachusetts Amherst on "Leveraging Artificial Intelligence for Clinical Public Health in the Global South" at the Mathematical Biology Seminar series. He co-published the book chapter "Artificial Intelligence, Law, and Vulnerabilities" in *AI and Society* (pp. 179-196), Chapman and Hall/CRC. He was spotlighted by the *Data & Policy Journal* in their Autumn 2022 newsletter. He was also appointed to serve as member of the InterMaths-MathMods-RealMaths Internal Quality Assurance Board.

Kim Maltman (Mathematics & Statistics) and collaborators Diogo Boito, Maarten Golterman and Santiago Peris presented two papers at the Fifth Plenary Workshop of the Muon g-2 Theory Initiative, in Edinburgh, U.K.

Jihyeon Jessie Yang (Mathematics & Statistics) was a panelist for the Academic Job Search FGS Pilot Workshop Series 2022.

RESEARCH HIGHLIGHTS

Former MSc students **Salwa Afifi**, **Azizia Wahedi** and **Jean-Paul Paluzzi** (Biology) published [Functional insight and cell-specific expression of the adipokinetic hormone/corazonin-related peptide in the human disease vector mosquito, *Aedes aegypti*](#) in *General and Comparative Endocrinology*.

Y. Cendes, E. Berger, K. D. Alexander, S. Gomez, A. Hajela, R. Chornock, T. Laskar, R. Margutti, B. Metzger, Research Associate **M. F. Bietenholz** (Physics & Astronomy), D. Brethauer, and M. H. Wieringa published [A Mildly Relativistic Outflow Launched Two Years after Disruption in Tidal Disruption Event AT2018hyz](#) in *The Astrophysical Journal*. **Read the press release from the Center for Astrophysics | Harvard & Smithsonian, entitled [‘We’ve Never Seen Anything Like This Before:’ Black Hole Spews Out Material Years After Shredding Star](#).**

Jingyi Cao (Mathematics & Statistics) and Virginia R. Young published [Asymptotic analysis of a Stackelberg differential game for insurance under model ambiguity](#) in the *Scandinavian Actuarial Journal*.

Neal Madras (Mathematics & Statistics) published [Adsorption of lattice polymers with quenched topologies](#) in the *Journal of Statistical Physics*.

Ozzy Mermut (Physics & Astronomy) and **William Pietro** (Chemistry) published [A SiPM-Enabled Delayed Fluorescence Photon Counting Device: Climatic Plant Stress Biosensing](#) in *Biosensors*.

Robert Reynolds and **Allan Stauffer** (Mathematics & Statistics) published [Extended Wang sum and associated products](#) in *PLoS ONE*.

Amirsaman Sajad, Steven P. Errington and **Jeffrey D. Schall** (Biology) published [Functional architecture of executive control and associated event-](#)

[related potentials in macaques](#) in *Nature Communications*.

R. Iestyn Woolway, Lei Huang, **Sapna Sharma** (Biology), Sun-Seon Lee, Keith B. Rodgers, and Axel Timmermann published [Lake Ice Will Be Less Safe for Recreation and Transportation Under Future Warming](#) in *Earth's Future*.

Elena Aruffo, postdoc **Pei Yuan**, PhD student **Yi Tan**, Evgenia Gatov, Effie Gournis, Sarah Collier, Nick Ogden, Jacques Bélair and **Huaiping Zhu** (Mathematics & Statistics) published [Community structured model for vaccine strategies to control COVID19 spread: A mathematical study](#) in *PLoS ONE*.

READ THE [PRESS RELEASE](#) FROM YORK UNIVERSITY.

For a full list of publications from the Faculty of Science, see our [website](#).

MEDIA

Professor Emeritus **Paul Delaney** (Physics & Astronomy) was interviewed by *Newstalk1010* and *AM640* about the Orionid Meteor shower.

Dasantila Golemi-Kotra (Biology) spoke to [Global News](#) about COVID rapid tests still being reliable with new variants.

Elaina Hyde (Physics & Astronomy) spoke to *CTV News* about the SpaceX launch, *CBC Radio* about James Webb telescope image of the pillars of creation, as well as *AM640* about marsquakes.

Jude Kong (Mathematics & Statistics) was interviewed by [CTV News](#) about his work to use artificial intelligence to help governments and communities in the global south proactively prepare and respond to diseases. [The York University Magazine](#) also profiled his efforts to inspire and support Black students in mathematics.

Jesse Rogerson (Science, Technology & Society) was interviewed by [CTV News](#) about the Orionid meteor shower. He also spoke to *Newstalk1010*, *AM800*, and *AM900* about NASA's DART mission, NASA's heatshield, and the 'burping' black hole.

Sarah Rugheimer (Physics & Astronomy) spoke to *CTV News* about the

purpose of NASA's SpaceX crew-5 mission to the ISS.

MSc student **Ghassan Sarrouh** (Physics & Astronomy) was quoted by [The Globe & Mail](#), [The Star](#), [CityNews](#), [CTV News](#) and other media about research on star clusters that he collaborated on using James Webb data.

Huaiping Zhu (Mathematics & Statistics) spoke to [Nature News](#) and [NBC News](#) about the risk of monkeypox spreading to animal hosts and potential implications.

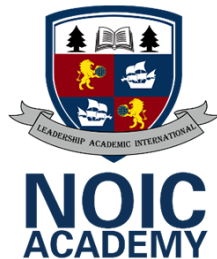
EVENTS

Nov 22: [York Science Social](#)

For a full list of events, visit our [Community 2022 website](#).

INTERNATIONAL PARTNER INSTITUTION PROFILE

The Faculty of Science has established multiple partnerships with various international institutions. In order to better inform the York Science community of these international partner institutions, we will provide a brief profile of each of them in our Dean's Round-up.



NOIC Academy

NOIC ACADEMY, located in Markham, Ontario, is a full-time private boarding secondary school that has offered the Ontario Secondary School Diploma since 2004. In March 2015, it was authorized by the International Baccalaureate Organization (IBO) to become an IB World School, offering the International Baccalaureate Diploma Programme. NOIC ACADEMY is co-inspected by the Ontario Ministry of Education and IBO.

NOIC Academy provides comprehensive, one-stop and individualized VIP teaching service. Secondary credit courses, IELTS/TOEFL, university application counseling and social activities are integrated on campus. Leading figures from many different fields in North America are often invited to introduce both opportunities and challenges in their respective domains, which can guide students to make the right major choice, plan their career in advance, obtain wide international views and stimulate them to study harder. Their mission is to assist Chinese students in successfully being admitted by world-famous universities.

