

Dean's Round-up: February 2024

FACULTY HIGHLIGHTS



On February 6, we hosted our annual <u>Honours & Awards Ceremony</u> to celebrate our students, instructors and researchers for their achievements and service. More than 200 people attended the event, including students and their family members and supporters, faculty members and staff. A keynote address was presented by Faculty of Science alumna Naz Chaudary (PhD '04), a cancer research scientist at Princess Margaret Cancer Centre.

The ceremony recognized about 400 postdoctoral Fellows and undergraduate and graduate Science students who received awards and scholarships between September 2022 and August 2023. We also announced the recipients of the Faculty of Science Excellence in Educational Leadership Awards – an inaugural award category – as well as the Excellence in Teaching Awards and Excellence in Research Awards. The recipients of these awards were

- Excellence in Educational Leadership Award, Faculty category: Amenda
 Chow (Mathematics & Statistics), and Department Chair Vera Pavri (Science, Technology & Society)
- Excellence in Educational Leadership award, Graduate student category: PhD students Laura Keane and Yohana Solomon (Mathematics & Statistics)
- Excellence in Teaching Award, Junior Tenure Stream Faculty category:
 Stephanie Domenikos (Science, Technology & Society)

- Excellence in Teaching Award, Contract Faculty category: Charlotte de Araujo (Biology)
- Richard Jarrell Award of Excellence for Teaching Assistants: recent MSc graduate Amanvir Virdi (Biology)
- Early Career Research Award: Elizabeth Clare (Biology)
- Established Research Award: Randy Lewis (Physics & Astronomy)
- Excellence in Graduate Mentorship Award: lain Moyles (Mathematics & Statistics)

Congratulations to all of our award recipients!



The Allan I. Carswell Observatory's **Astronomer in Residence** Program, run in partnership with Killarney Park, is returning for 2024. Applications are now open. More details:

yorku.ca/science/observatory/air/

CONGRATULATIONS

Twenty-six Faculty of Science researchers, including current and emeriti, were among the top two per cent most cited researchers worldwide, according to data compiled by a team at Stanford University: Thomas Baumgartner, Peter Backx, Samuel Benchimol, Diethard Böhme, Kenneth Davey, Patrick Hall, I. Brent Heath, John Heddle, Sergey Krylov, A.B.P. Lever, Roger Lew, Clifford Leznoff, Christopher Lortie, Peter Moens, Seyed Moghadas, Laurence Packer, William Pietro, Jeffrey Schall, Bridget Stutchbury, Gary Sweeney, Nikolaus Troje, Rui Wang, Andrew White, Hugh Wilson, Jianhong Wu, and Norman Yan.

Mary-Helen Armour (Science, Technology & Society) was profiled in a blog by <u>Ontario Parks</u> for International Day of Women and Girls in Science. The blog highlighted the research she was conducting around the Brent impact structure, a bowl-shaped crater located within Algonquin Provincial Park.

Former PhD students **Ksenia Timonina** and **Anna Kotova** (Georg Zoidl lab) launched a gene diagnostic company called <u>Agenek</u>.

Tao (Toby) Zeng (Chemistry) received the 2024 <u>Tom Ziegler Award</u> from the Chemical Institute of Canada (CIC).

MORE NEWS

The **Allan I. Carswell Observatory**, directed by **Elaina Hyde** (Physics & Astronomy), hosted a Valentine's Day tour that featured heart-shaped astronomical objects and live viewing of the skies.

Director of International Collaborations & Partnerships **Hugo Chen** has been selected for the Multisector Cohort for the World Trade Centre Toronto - Trade Accelerator Program (TAP). By joining TAP, York Science has gained access to an extensive array of resources to assist in structuring a new market entry for student recruitment, develop recruitment strategy for emerging market, and its subsequent implementation.

Elizabeth Clare (Biology) presented the honorary Finlayson Biodiversity lecture, "<u>A chance to measure life on land – the promise and challenge of airborne eDNA</u>," at Simon Fraser University.

Kelly Ramsay (Mathematics & Statistics) presented an invited talk titled "<u>Nonparametric</u> and <u>Robust Inference for Covariance Operators</u>" at the McGill seminar series.

The One Health Modelling Network for Emerging Infections (OMNI-RÉUNIS) and the Centre of Disease Modelling (CDM), both led by **Huaiping Zhu** (Mathematics & Statistics), hosted their hybrid <u>Annual Meeting</u> on February 20-21 at the inaugural CDM OMNI-RÉUNIS Lab located in Petrie. The meeting also included a lab opening ceremony to celebrate the new research space for the OMNI and CDM teams.

The <u>Global Leaders of York Science</u> became a supporting partner for the <u>Career | Fit</u> Professional Experience Programs offered by the Asian Business and Management Program at York University. The Career | Fit programs are short online programs for currently enrolled university undergraduate students to supplement their academic courses.

RESEARCH HIGHLIGHTS

Miles Couchman (Mathematics & Statistics), Miguel Beneitez, Jacob Page, and Rich Kerswell published <u>Inertial enhancement of the polymer diffusive instability</u> in the *Journal of Fluid Mechanics*.

Patrick Hall, graduate student Erik Weiss, Niel Brandt, and MSc graduate Courtney

Mulholland (Physics & Astronomy) published <u>Quasar outflow deceleration or acceleration:</u> <u>predictions and a search</u> in *Monthly Notices of the Royal Astronomical Society.*

A team including **Balint Radics** (Physics & Astronomy) published <u>Probing light dark matter</u> <u>with positron beams at NA64</u> in *PHYSICAL REVIEW D*. Radics is the York University Team Leader for the NA64 experiment at CERN.

Rosa Orellana, postdoc **Nancy Wallace**, and **Mike Zabrocki** (Mathematics & Statistics) published <u>Representations of the quasi-partition algebras</u> in the *Journal of Algebra*.

A team including **Jianhong Wu**, **Jude Kong** and **Seyed Moghadas** (Mathematics & Statistics) published <u>Redefining pandemic preparedness: Multidisciplinary insights from the CERP modelling workshop in infectious diseases, workshop report</u> in *Infectious Disease Modelling*. The report summarizes the discussions from a two-day workshop that Wu coorganized with the Center of Excellence in Respiratory Pathogens (University of Lyon) and Sanofi; the workshop was focused on infectious diseases modelling and the lessons learnt from the Covid-19 pandemic.

For a full list of publications from the Faculty of Science, see our website.

MEDIA

Elizabeth Clare (Biology) was profiled in <u>UnDark</u> on the history of eDNA technology; the story was republished by <u>MIT Technology Review</u>. She also spoke to <u>CNN</u> and <u>CBC Radio</u> about research (by others) using spiderwebs to monitor biodiversity.

<u>Popular Science</u> covered research led by former PhD student **Kathleen Dogantzis** and **Amro Zayed** (Biology) that found that the entire population of invasive Asian honey bees in Australia originated from a single colony of one breeding queen and her workers.

Elaina Hyde (Physics & Astronomy) was interviewed by *AM 900* about the upcoming solar eclipse.

Alireza Rafiee (NATS) was interviewed by <u>Global News</u> about the science behind leap years and the upcoming solar eclipse.

Sapna Sharma (Biology) spoke to <u>CBC News</u>, <u>CBC Radio</u>, <u>City News</u>, <u>The Guardian</u>, and other media outlets about the impact of climate change on lake ice and how less ice cover negatively impacts water quality and biodiversity.



Apr 8: Solar eclipse viewing for York faculty/staff/students, 2-4pm at Arboretum Parking Garage and Harry Arthur's Common Green Space.

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.



SuOn Academy

SuOn Academy is in the city of Toronto, Ontario, Canada. As a full-time, well-established private boarding secondary school, it has offered the Ontario Secondary School Diploma since 2008.

SuOn offers high school courses in grades 9 to 12 that follow the Ontario Ministry of Education's curriculum. Upon graduation, students receive a globally recognized Ontario high school diploma and are accepted into world-class universities in Canada and abroad. SuOn Academy is an official test centre for SAT, AP, IELTS and Cambridge Assessment.

SuOn currently has two campuses, located on Queenslea Avenue and Heavitree Drive.