

## Dean's Round-up: July 2024

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### CONGRATULATIONS

Science undergraduate students **Vivien Ayllon-Kovacs**, **Huda Jirreh** and **Sajeela Rana** were selected to participate in the 2024 [Ward Family Summer Student Research Program](#) at Holland Bloorview Kids Rehabilitation Hospital.

PhD students **Nicholas Bragagnolo** and **Christina Rodriguez** (Chemistry, Audette lab) won awards at the annual meeting of the [ACA: The Structural Science Society](#). Bragagnolo was awarded second place in the Three-Minute Thesis competition and was also an Etter Student Award winner for his presentation of "TraG-ed to Triumph: How Challenges in Crystallization Efforts of TraG Led to Success." Rodriguez won the Delbaere/Pauling Poster Prize for her research "Structural Studies of an F-plasmid Protein TraW." Both Bragagnolo and Rodriguez were awarded ACA Travel grants to attend the meeting.

**Trevor VandenBoer** (Chemistry) is co-principal investigator (with Tara Kahan, University of Saskatchewan) on the project "Assessing and communicating opportunities and barriers to improving indoor air quality in Canadian residences," which received \$250K from the New Frontiers in Research Fund Exploration competition. Other York U collaborators on this project include Evan Light (Glendon College) and Shirley Roburn (Liberal Arts & Professional Studies).

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### MORE NEWS



The Office of International Collaboration and Partnerships hosted events and groups at the Faculty of Science:

- Science International Recruitment Coordinator **Mingming Li** coordinated an educational event for the International Association for College Admission Counseling (IACAC) counsellors. **Steven X. Wang** (Mathematics & Statistics) presented on Data Science, with insights into career opportunities. The event also featured contributions from other members of the Office of International Collaborations and Partnerships, including **Hugo Chen, Gina Quan, Amit Bijlani, Tien Hoang, Amna Imran** and the members of the **Global Leaders of York Science** program.
- The Office of International Collaboration and Partnerships and **Science Engagement Programs** team hosted an inaugural Biomedical Science Day Camp, which welcomed students from Ace Acumen Academy for a day filled with innovative biomedical workshops. The camp was a part of the York Science Elite Pathway Program, which aims to enhance international student recruitment from local public and private high schools.
- In partnership with the Asian Business and Management Program, the Faculty of Science hosted a group of medical students from Shandong Second Medical University for a comprehensive three-week career boot camp. The "Jumpstart Your Future: A Career Bootcamp for Undergrads" is designed to immerse students in the North American medical landscape, enhancing their understanding and skills through a series of workshops, lectures, and site visits.

**Mary Helen Armour** (NATS) was an Astronomer in Residence at Killarney Park, a program run in partnership with the **Allan I. Carswell Observatory** at York.

**Kelly Ramsay** (Mathematics & Statistics) presented two invited talks: "Changepoint detection in the variability of multivariate and functional data" at EcoSta, and "Differentially

private projection-depth-based medians” at ICORS meets DSSV.

**Carly Rozins** (NATS) and **Jeremy Webb** (NATS) hosted two high school summer interns in cooperation with [Visions of Science](#). Adnaan Haneef is worked with Rozins to mathematically model the environmental microbiome in poultry houses. Beulah Santhakumar worked with Webb to evaluate the effectiveness of machine learning techniques at identifying stars in the Milky Way that potentially formed from the same giant molecular cloud. These internships were funded through a YUFA Junior Faculty Fund Award. Any faculty members interested in hosting interns next summer or serving as mentors should contact Webb at [webbjj@yorku.ca](mailto:webbjj@yorku.ca) .

**Sapna Sharma** (Biology) organized and presented a panel at the [United Nations High-Level Political Forum on Sustainable Development](#).



**Robert Tsushima** (Biology) helped organize and run the national high school program [Shad](#) at York, which hosted 63 students who attended lectures and workshop and met with York Vice-Presidents, Deans, and Associate Deans. The highlight of the program was the students' design entrepreneurship project and pitch to a panel of faculty and entrepreneurs.

**Wendy Taylor** (Physics & Astronomy) began her role as [Vice-President Elect](#) of the Canadian Association of Physicists, which represents 1,800 physicists nationally.

**Walter Tholen** (Mathematics & Statistics) presented a plenary talk titled “Cauchy convergence for normed categories” at the [International Category Theory Conference CT2024](#) held in Santiago de Compostela (Spain), and an invited talk titled “From distances and operator norms to normed categories” at the 38th [Summer Conference on Topology and its Applications](#) held in Coimbra (Portugal).



From the Zoidl lab (Biology), PhD student **Georg S. Zoidl** presented an invited talk at the International Gap Junction Conference in Arlington, Virginia, USA. The presentation was titled “Ablation of Panx1 Aggravates Neuroinflammation and Cell Death by Altering Molecular and Bioelectrical Properties of Synapses in the Zebrafish In Vivo.” PhD students **Fatema Nakhuda** and **Riya Shanbhag** presented at the conference as well.

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## RESEARCH HIGHLIGHTS

Former MSc student **Arnold Apostol**, PhD student **Christina Rodriguez**, PhD student **Nicholas Bragagnolo** and **Gerald F. Audette** (Chemistry) published [Structural insights into the disulfide isomerase and chaperone activity of TrbB of the F plasmid type IV secretion system](#) in *Current Research in Structural Biology*.

**Elizabeth Clare** (Biology) and co-authors published [Thresholds for adding degraded tropical forest to the conservation estate](#) in *Nature*. The research was covered by [Nature News and Views](#).

PhD student **Alessia A. Colussi**, PhD student **Daniel Persaud**, former MSc student **Melodie Lao**, Bryan K. Place, Rachel F. Hems, Susan E. Ziegler, Kate A. Edwards, **Cora J. Young**, and **Trevor C. VandenBoer** (Chemistry) published [Cost effective off-grid automatic precipitation samplers for pollutant and biogeochemical atmospheric deposition](#) in *Atmospheric Measurement Techniques*. [View the video abstract](#).

PhD student **Maryam Jabbarpoor**, PhD student **Jesse LeBlanc**, undergraduate student **Zichuan Chen**, PhD student **Dusty Cadwallader** and **Christine M. Le** (Chemistry) published [Pd-catalyzed Suzuki-type cross-coupling of 2-pyridyl carbamoyl fluorides](#) in *Chemical Communications*.

PhD student **Laura M. Keane** and **Iain R. Moyles** (Mathematics & Statistics) published [An Asymptotic Analysis of Space Charge Layers in a Mathematical Model of a Solid Electrolyte](#) in *SIAM Journal on Applied Mathematics*.

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

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## MEDIA

An [NPR](#) podcast featured an annual Bat-a-thon in Belize that **Elizabeth Clare** (Biology) is a part of and some of the work she was conducting as part of the event.

Professor Emeritus **Paul Delaney** (Physics & Astronomy) was interviewed by [CBC News](#) about new findings related to the gas giant exoplanet named Epsilon Ind Ab.

**Elaina Hyde** (Physics & Astronomy) spoke to *AM900* about asteroids travelling towards Earth, *AM640* about NASA's Starliner, *CBC Radio* about the impact of solar flares and the centre of the Milky Way, and *Insidehalton.com* about a [nova outburst](#) and the [Sun's distance from the Earth](#).

An [NPR](#) podcast featured PhD student **Gliselle Marin** and her research on bats in Belize.

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## EVENTS

**October 16:** [Fall convocation](#), at 10:30am

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## 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.



### FPT UNIVERSITY

**FPT University** is Vietnam's first private university, created to meet the needs of Vietnam's higher education students by applying practical experience in fields related to business and technology to their academic curriculum. The university is owned by the FPT Corporation, the largest information technology company in Vietnam, resulting in opportunities for job-specific training, internships and employment connections.

FPT University Da Nang is a campus that annually welcomes nearly 1,000 international students from Asian countries including Japan, Thailand, Laos,

Myanmar, Brunei and Indonesia to study and exchange their knowledge and cultures. The Hanoi Campus is located in Hoa Lac.