FACULTY HIGHLIGHTS

The Faculty of Science welcomed 14 new faculty members who were profiled in YFile’s New Faces feature. Our new members include Nikita Blinov (Physics & Astronomy), Charles-Édouard Boukaré (Physics & Astronomy), Miles Couchman (Mathematics & Statistics), Yuqing Feng (Biology), Gordon Fitch (Biology), Lana Hébert (Chemistry), Bill Kim (Chemistry), Dongchen Li (Mathematics & Statistics), Eryn McFarlane (Biology), Mohamed Omar (Mathematics & Statistics), Luz Adriana Puentes Jácome (Biology), Paul Scholz (Physics & Astronomy), Jeremy Webb (NATS), and Kaiqiong Zhao (Mathematics & Statistics).

The FSc Science Education Book Club is back! Join faculty, postdocs, and graduate students once a month for lively discussions about inclusive teaching practices related to grading. The club will be reading Clark, D., & Talbert, R. (2023). Grading for Growth: A Guide to Alternative Grading Practices that Promote Authentic Learning and Student Engagement in Higher Education. Taylor & Francis – which is available for free through the YorkU libraries.

Sign up for the book club.
CONGRATULATIONS

Peter Backx (Biology) was elected as a Fellow to the Canadian Academy of Health Sciences.

Kohitij Kar (Biology) received a $100,000 grant from Brain Canada’s Future Leaders in Canadian Brain Research program for the project “Translating knowledge from primate neuroscience and artificial intelligence to develop non-invasive behavioral modulation strategies during emotion recognition in autistic adults.”

Research project manager and former postdoc Cindy Sung (supervised by Gary Sweeney, Biology) received the CIHR Research Excellence, Diversity, and Independence Early Career Transition Award.

Undergraduate student Yibin Zheng received the inaugural Faculty of Science Global Engagement Funding Award (GEFA). Spearheaded by the Office of International Collaborations and Partnerships, GEFA aims to nurture the global perspectives of our students by facilitating international academic experiences.

Undergraduate students Ananya Sharma, Saba Tabrizchi, Aardra Suresh, Sathyanarayanan Venkatesan, Naomi Conliffe-Muir and Saania Syed Azam Pasha Albiz received Faculty of Science Summer Transition Program (SSTP) Awards. The SSTP Awards assist and honour international students, aiding their transition into undergraduate programs in our faculty.

MORE NEWS

The Allan I. Carswell Astronomical Observatory, directed by Elaina Hyde (Physics & Astronomy), hosted a grand reopening event on September 6 to celebrate the completion of a series of renovation projects and to kick off the restart of its in-person public tours on Wednesday evenings.


Elizabeth Clare (Biology) presented "Measuring Biodiversity by Harnessing the Wind" as the first of the season's "Evenings at Whitney" public lecture at Whitney Laboratory For Marine Bioscience.

The Global South Artificial Intelligence for Pandemic and Epidemic Preparedness and Response Network (AI4PEP), directed by Jude Kong (Mathematics & Statistics) announced its funding of 16 new projects for a total of more than $5.8 million. The announcement came after a call for proposals by AI4PEP that saw 221 submissions from 47 countries with 142 of them from Africa, 40 from Asia, and 26 from Latin America. READ THE PRESS RELEASE FROM YORK UNIVERSITY and the feature by CTV News.

Science International Recruitment Coordinator Mingming Li and undergraduate student
Gina Quan presented an informational session at Ace Acumen Academy. This event, part of the outreach Elite Pathway Program to Your Science, showcased our Science programs and services to prospective students.

YFile profiled new research led by PhD student Nelson Nunes and supervised by Distinguished Research Professor Emeritus and Senior Scholar Nobert Bartel (Physics & Astronomy) that verified Albert Einstein’s theory of general relativity and the Einstein equivalence principle by measuring gravitational redshift.

YFile profiled an experiential summer boot camp on quantum computing that Randy Lewis and student Sarah Powell (Physics & Astronomy) were invited to lead at the Thomas Jefferson National Accelerator Facility in the U.S.

Lisa Robertson (Biology) held the workshop “Start of Semester Communication Tips for TAs” in which she provided suggestions and reasoning for effective communication strategies with students and course directors.

Sapna Sharma (Biology) organized and moderated the event “Addressing Global Water Insecurity: Harnessing the Power of Big Data, Novel Technologies and International Collaboration” at the UN SDG Summit.

RESEARCH HIGHLIGHTS

Postdoc Nico M. Bonanno, graduate student Fiona Jeeva, postdoc Avik Bhattacharjee, graduate student Charley N. Garrard, graduate student Jesse LeBlanc, NMR Specialist Howard N. Hunter, and Christopher B. Caputo (Chemistry) published Substituent effects of amines on genipin dye formation – Insights into dye origin in Dyes and Pigments.

PhD student Dusty Cadwallader, MITACS intern Dmytro Shevchuk, former MSc student Tristan R. Tiburcio, and Christine M. Le (Chemistry) published Fluoride-Catalyzed Cross-Coupling of Carbamoyl Fluorides and Alkynylsilanes in Organic Letters.

Postdoc Katherine D. Chau, Mariam Shamekh, Jesse Huisken and Sandra M. Rehan (Biology) published The effects of maternal care on the developmental transcriptome and metatranscriptome of a wild bee in Communications Biology. READ THE PRESS RELEASE FROM YORK UNIVERSITY.


Ivette Perfecto, Luis Fernando Chaves, Gordon M. Fitch (Biology), Zachary Hajian-Forooshani, Benjamin Iuliano, Kevin Li, Nicholas Medina, Jonathan Morris, Beatriz Otero Jiménez, Iris Saraeny Rivera-Salinas, Chenyang Su, John Vandermeer, Alexa White, and Kimberly Williams-Guillén published Looking beyond land-use and land-cover change: Zoonoses emerge in the agricultural matrix in One Earth.

Postdoc Qing Han, former postdoc Nicola Bragazzi, Ali Asgary, James Orbinski,
Jianhong Wu and Jude Dzevela Kong (Mathematics & Statistics) published Estimation of epidemiological parameters and ascertainment rate from early transmission of COVID-19 across Africa in the Royal Society Open Science Journal. READ THE PRESS RELEASE FROM YORK UNIVERSITY.

Professor Emeritus Scott Menary (Physics & Astronomy) and a team of international scientists published Observation of the effect of gravity on the motion of antimatter in Nature. READ THE PRESS RELEASE FROM YORK UNIVERSITY.

Christopher W. Schruder, Christopher J. Barrett, William J. Pietro (Chemistry), and Ozzy Mermut (Physics & Astronomy) published Geiger Mode Single Photon Counting: A Laboratory Experiment Exploring Delayed Fluorescence in Plants in the Journal of Chemical Education.

Balint Radics (Physics & Astronomy) and a team of international researchers published Search for Light Dark Matter with NA64 at CERN in Physical Review Letters.

Arezoo Khalili, former PhD student Nickie Safarian, Ellen van Wijngaarden, PhD student Georg S. Zoidl, Georg R. Zoidl (Biology), and Pouya Rezai published Loss of Panx1 function in zebrafish alters motor behavior in a lab-on-chip model of Parkinson's disease in the Journal of Neuroscience Research.

Nicholas Gaspelin, Dominique Lamy, Howard E Egeth, Heinrich R Liesefeld, Dirk Kerzel, Ananya Mandal, Matthias M Müller, Jeffrey D Schall (Biology), Anna Schubö, Heleen A Slagter, Brad T Stilwell, and Dirk van Moorselaar published The Distractor Positivity Component and the Inhibition of Distracting Stimuli in the Journal of Cognitive Neuroscience.

Jacob A. Westerberg, Jeffrey D. Schall (Biology), Geoffrey F. Woodman and Alexander Maier published Feedforward attentional selection in sensory cortex in Nature Communications.

Gianni M. Castiglione, Yan L.I. Chiu, Eduardo de A. Gutierrez, Alexander Van Nynatten, Frances E. Hauser, Matthew Preston, Nihar Bhattacharyya, Ryan K. Schott (Biology) and Belinda S.W. Chang published Convergent evolution of dim light vision in owls and deep-diving whales in Current Biology.


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

University Professor Dawn Bazely (Biology) spoke to The New York Times about a recent report prepared for the United Nations by the Intergovernmental Science and Policy Platform on Biodiversity and Ecosystem Services detailing the detrimental global impact of invasive species.

New research by postdoc Katherine Chau and Sandra Rehan (Biology) on the effects of maternal care on carpenter bee development was covered by media, including Salon, Yahoo News and MSN.

Professor Emeritus Paul Delaney (Physics & Astronomy) spoke to Sirius XM, AM640, CP24, AM900 CHML, CTV News, NewsTalk 1010, and CJBQ Belleville on numerous astronomical topics, including the NASA UAP report, the OSIRIS-Rex mission, comet Nishimura, exoplanet K2-18b and the Mars Oxygen In-Situ Resource Utilization Experiment.

Jane Heffernan (Mathematics & Statistics) was interviewed by Global News about the upcoming rhinovirus season and whether the common cold has the ability to act as a barrier against other viruses.

Elaina Hyde (Physics & Astronomy) spoke to CityNews about NASA's OSIRIS spacecraft bringing back matter from the surface of an asteroid dating from the early history of the solar system, and CBC Radio about the impact that solar flares have on planets closer to the sun than the Earth.

Research by an international collaboration including Scott Menary (Physics & Astronomy) resolved the enigma of whether antimatter follows the rules of gravity. Their work received extensive media coverage around the world, including by The New York Times and BBC. Menary was interviewed and quoted in a story by CTV News.

Jesse Rogerson (Science, Technology & Society) spoke to CBC News and CBC Radio about the NASA UFO/UAP report.

Sarah Rugheimer (Physics & Astronomy) spoke to Newstalk 1010 about the NASA UFO/UAP report.

In The Globe and Mail, Sapna Sharma (Biology) weighed in on scientists investigating the ecological history of Great Slave Lake and finding that climate change has rewired the lake at the microscopic level.

EVENTS

Oct 30: York Science Social, 2-4pm in Lumbers Lunchroom (Rm 305).
Oct 31: Haunted Hydrogen Halloween at the Allan I. Carswell Astronomical Observatory, 6-9pm. Reserve your ticket.

**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.

**O.P. Jindal Global University (JGU)**

Established in 2009 by the Haryana Government and recognized by University Grants Commission, O.P. Jindal Global University is a non-profit initiative founded by Mr. Naveen Jindal in memory of Mr. O.P. Jindal. JGU, maintaining a 1:9 faculty-student ratio, emphasizes research and upholds values of innovative pedagogy and global engagement across its 12 established schools. As a residential university, it accommodates over 9,000 students.

Awarded "Autonomy" after securing an “A” Grade from the National Assessment and Accreditation Council, JGU was listed in the QS World University Rankings 2021 and QS Young University Rankings 2021. It ranks as India's top private university and is a top contender in social sciences, arts, and humanities, according to the QS World University Rankings 2023.