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Dean's Round-up: December 2019

Faculty Highlights

A new gift from Iristel Inc to the Faculty of Science, valued at $470,000, will enhance learning and research opportunities for students studying optical physics at York University by creating awards for graduate and undergraduate students and upgrading a hands-on teaching laboratory for optical physics.
Read more

Two York Science Communicators in Residence are now on campus for their residencies. B.D. Colen has been with us since September 2019 and will continue his residency until the end of April 2020. Patchen Barss started his residency in early January and will be here full-time for two months until mid-March.
Read more

Congratulations

Conor Douglas (Science & Technology Studies) was nominated as Principle Investigator and Canadian Team Leader of a three-year internationally

collaborative project entitled “Social Pharmaceutical Innovation for Unmet Medical Needs.” The grant was announced by the the Trans-Atlantic Platform (T-AP) for the Social Sciences and Humanities. The other team leaders on the project include Fernando Aith (Universidade de São Paulo, Brazil), Vololona Rabeharisoa (ARMINES, France), and Ellen Moors (Utrecht University, Netherlands).

Eric Hessels (Physics & Astronomy) received a grant from the Alfred P. Sloan Foundation totaling $681,000USD over three years for the project “EDM^3: an electron Electric Dipole Measurement using Molecules in a Matrix.” The grant will allow Hessels and the EDMcubed collaboration to begin a program to measure the electric dipole moment of the electron.

Other News

Paul Delaney (Physics & Astronomy) presented two talks about Mars to a Rexdale Youth group.

Patrick Ingram and **Jane Heffernan** (Mathematics & Statistics) organized the Canadian Mathematical Society Winter Meeting, which hosted more than 500 participants. The Scientific Committee was comprised of faculty members in the Department of Mathematics & Statistics, including **Amenda Chow**, **Dong Liang** and **Paul Skoufranis**. Many members of the department were active at the meeting, presenting talks and organizing special sessions. The special session organizers from York University included **Hyejin Ku** and **Michael Chen** (AI/Optimization/Finance); **Jane Heffernan** and **Huaiping Zhu** (Infectious Disease Modelling and Dynamics); **Asia Weiss** et al (Interplay between Discrete Geometry, Analysis and Combinatorics); **Ilijas Farah** et al (Logic and Operator Algebras); **Jianhong Wu** et al (Mathematical Modeling in the Interface of Ecology, Epidemiology and Environment); **Paul Skoufranis** et al (Operator Algebras); **Ada Chan** et al (Quantum Information on Graphs); **Alexey Kuznetsov** et al (Special functions and their applications); and **Amenda Chow** and **Andrew McEachern** (The Art of Mathematics).

Nik Kovinich (Biology) presented two seminars at a Bioinformatics Educational Workshop at Tokyo University of Science, Japan: "Glyceollin transcription factor GmMYB2 is a regulator of soybean resistance to Phytophthora sojae" and "Unlocking the regulation of phytoalexin biosynthesis for human health."

Hélène Mialet published “Becoming the Other: The Body in Translation,” in David Gruber and Lynda Walsh (eds.), The Routledge Handbook of Language & Science (Abingdon and New York: Routledge, 2019); and “The Distributed Centered Subject,” in Jill Bennett (ed.), Thinking in The World (London: Bloomsbury, 2019).

Sandra Rehan and **Laurence Packer** (Biology) presented keynote addresses at the second Australian Native Bee Conference in Brisbane, Australia. They were among five international participants to present a keynote. Rehan presented “Behavioural genetics and social evolution of the small carpenter bees,” and Packer presented “Bees: What’s in a Name.”

Sapna Sharma (Biology) is part of the recently launched $9.1-million Genomics Network for Fish Identification, Stress & Health project at the University of Windsor.

Media

Paul Delaney (Physics & Astronomy) spoke to *AM1010*, *AM640*, *CHML900*, and *Sirius XM* on a range of astronomical topics, including Starlink satellties, comet Birsov, black holes, Artemis mission, Geminid Meteor shower, interstellar colonization, Boeing Starliner and SpaceX Dragon missions, and a Betelgeuse supernova possibility.

Patricia Lakin-Thomas (Biology) spoke to *106.5 ELMNT FM* about how our biological clock becomes out of whack with the annual time changes between Daylight Savings and Standard Time.

Sapna Sharma (Biology) spoke to several media outlets about a recent study she co-authored on the cultural impacts of ice loss on inland lakes and rivers. Stories appeared in the *Ottawa Citizen*, *Winnipeg Free Press*, and *Radio Canada International*, among many other publications.

Bridget Stutchbury (Biology) spoke to *FairchildTV* about the effectiveness of installing bird-friendly window coverings, tagging songbirds and the impact of neonicotinoids.

An editorial in *Canada's Innovation Leaders*, published by Research Infosource Inc., highlighted **Jianhong Wu** (Mathematics & Statistics) and the York-Sanofi

Pasteur collaboration to develop mathematical techniques that identify populations most susceptible to infectious diseases and help manufacturers produce cost-effective vaccines that can be deployed quickly.

Joel Zylberberg (Physics & Astronomy) was interviewed for a *Scientific American* piece about how visual cortex cells process imagery. He also spoke to *STAT* for an article about a recent study's new insights into the workings of the visual cortex.

PhD student **Brendan Boyd** (supervised by **Bridget Stutchbury**, Biology) answered the following question for *CBC Radio*'s Quirks & Quarks program: Do different species of birds understand each other's tweets?

Upcoming Events

January 29 – Faculty of Science Honours & Awards Ceremony

Until March 11 – The **Aquatic Research Group (ARG) Seminar Series** 2019/2020 will feature talks on everything from microplastics, pharmaceuticals, road salt, mercury and more that end up in our waterways.