Dean's Round-up: March 2019

Faculty Highlights

The 2018 Annual Review came out with profile of researchers **Tom Salisbury** (Math & Stats), **Sylvie Morin** (Chemistry), **Ozzy Mermut** (Physics & Astronomy), **Conor Douglas** (STS), **Vera Pavri** (NATS/STS), **Thomas Baumgartner** (Chemistry), **Eric Hessels** (Physics & Astronomy), **Hongmei Zhu** (Math & Stats), **Raymond Kwong** (Biology), **Derek Jackson** (Chemistry) and **Sapna Sharma** (Biology), plus so much more. Read it here: https://bit.ly/2UmvvJy

The current Science Communicators in Residence Dan Falk moderated two science communications events, while the upcoming Science Communicator in Residence B.D. Colen participated as a panellist, along with Dawn Bazely (Biology) and *The Globe and Mail* science reporter Ivan Semeniuk. The seminar Issues and Challenges in Science Communications was co-hosted by the Faculty of Health in the afternoon, while Communicating Science in the Age of Fake News workshop took place in the evening.

Congratulations

Steven Wang (Math & Stats) is one of the co-principal investigators with the principal investigator, Associate Vice-President Research Rebecca Pillai Riddell, to receive a $1M CHIR grant for the project, Rebooting Infant Pain Assessment: Using Machine Learning to Exponentially Improve Neonatal Intensive Care Unit Practice.

Other News

The Modeling Food-borne Infection and Food Safety workshop took place April 1 to 3 and covered topics at the interface of mathematical science, public policy and regulation relevant to infectious disease prevention and control. **Jianhong Wu** (Math & Stats), along with **Zachary McCarthy**, **Daniel Munther** and **Ashrafur Rahman**, organized the event which brought speakers from Canada and the United States, including Christopher Caputo (Chemistry) and Jane Heffernan (Math & Stats). http://www.liam.yorku.ca/wp-content/uploads/2019/03/Modeling-Food-Borne-Infection-and-Food-Safety-2019-poster-Final.pdf

Conor Douglas (Science & Technology Studies) gave the presentation titled "Can we Put a Financial Value on Life? Coverage Decision-Makers and Future Challenges and Uncertainties Related to Drugs for Rare Diseases," as part of the STS Department Seminar Series on March 26.

On March 24, the Department of Math & Stats hosted the annual Canadian Mathematics Kangaroo Contest for the fourth year, reaching about 7,000 students across Canada of which 300 Grade 1 to 12 participants were hosted at York. About 20 volunteers helped out, including faculty members, undergraduate math students math graduate students, math alumni and undergraduate math education students. To learn more about the Canadian Mathematics Kangaroo Contest: https://kangaroo.math.ca/index.php Leading up to the Kangaroo Contest, York hosted almost weekly learning sessions starting in January to enrich contest participants knowledge of mathematics in preparation for the contest for the second year. About 35 kids attended each of this year's learning sessions. Learning session leaders were all volunteers with an expertise in mathematics. To learn more about our department's kangaroo contest learning session: http://mathstats.info.yorku.ca/outreach/math-kangaroo/

Research Highlights

[Denuded Dwarfs Demystified: Gas Loss from dSph Progenitors and Implications for the Minimum Mass of Galaxies](#) by **Marshal McCall** (Physics & Astronomy) and **Nina Ivkovich**,(an undergraduate major in astronomy whose work as a summer research assistant helped forged the way forward), was published in the *Monthly Notices of the Royal Astronomical Society*. Their research helps explain why dwarf galaxies in a state of transition are rare and consequently why dwarfs with a potential shallower than the critical value form two distinct sequences.

"[Proteomic Analysis of Histones H2A/H2B and Fariant Hv1 in Tetrahymena thermophilaII Reveals an Ancient Network of Chaperones](#)," by **Ronald Pearlman** (Biology) and his former grad students **Kanwal Ashraf** and **Jeff Fillingham** (now at Ryerson), along with research associate **Jyoti Garg**, and others was published in the journal *Molecular Biology and Evolution*. It provides the first comprehensive view of *T. thermophila* histones H2A, variant Hv1 and H2B protein-interaction networks.

Grad students **Shelby Gibson** and **Amanda Liczner** (Biology), along with **Sheila Colla** (FES/Biology) published a new paper in the *Journal of Insect Science*: "[Conservation Conundrum: At-risk Bumble Bees (Bombus spp.) Show Preference for Invasive Tufted Vetch (Vicia cracca) While Foraging in Protected Areas](#)." The research found differences in foraging preference between common and at-risk bumble bee species.

Media

Dorian Deshauer was quoted in the New Yorker – [The Challenge of Going off Psychiatric Drugs](#) – about his doctoral research. His supervisor included Kenton Kroker (Science & Technology Studies).

Paul Delaney (Physics & Astronomy) talked to AM640 about the Lunar Gateway and Canada, ISS medical results, and the NASA spacewalk and ET, as well as with Newstalk 1010's Mark Tawney about the CSA and the Lunar Gateway. He was also on the AM1010 John Moores show discussing the Crew Dragon.

Upcoming Events

April 9: Learn more about your math courses, how the new Experimental Math Space will play a role in your math lectures**,** and talk to professors at the **Open House, from 10am to 12pm in ROSS N619**. To RVSP and for a list of math courses: https://science.apps01.yorku.ca/machform/view.php?id=177271.

May 11: Science Rendezvous is once again gearing up for another successful event with DNA bracelets, giant scrabble, water piano, a fire tornado and more. It will take place on Main Street in Markham (132 Robinson St.), from 10am to 3pm.

May 13: The conference, **50 Years of Set Theory in Toronto**, will introduce and/or survey contemporary work in the areas currently investigated by Seminar members. The conference will take place at the Fields Institute in Toronto, and is supported by the Fields, NSF and NSERC. For more information, including registration, fees and abstract submission, visit the conference website.

May 13: The Association for Women in Mathematics student chapter at York University is hosting a free Celebration of Women in Mathematics at The Fields Institute, Stewart Library, from 9:30am to 1pm. The gallery presentation of achievements made by women in mathematics is honour of Maryam Mirzakhani's birthday. A brilliant mathematician, Mirzakhani was recently honored as the first woman to receive a Fields medal. Register here: https://www.eventbrite.ca/e/celebrating-women-in-mathematics-registration-59197309747

June 13 to 16: The General Assembly for the Royal Astronomical Society of Canada will be held at York University. Check here for the schedule and more information: https://www.rasc.ca/ga2019