

March 2018

DEAN'S ROUND-UP



In partnership with the Fields Institute, the Faculty of Science hosted a sold-out York Science Forum with Nobel Laureate Arthur McDonald. McDonald presented “From the smallest particles to the evolution of the universe: Amazing measurements made 2 km underground,” which was followed by a panel discussion also featuring **Sampa Bhadra** and **Scott Menary** (Physics & Astronomy). The event was moderated by York Science Communicator in Residence **Matt McGrath**

(BBC).



The Faculty's Science Unplugged event, which featured a presentation by Science Communicator in Residence **Matt McGrath** and the unveiling of YSciCore (which also included presentations by specialists **Howard Hunter**, **Magdalena Jaklewicz** and **Peter Liuni**), brought together nearly 100 faculty members, students and staff.

Ed Furman (Mathematics & Statistics) received an NSERC Connect Grant (level 2) in support of the RISC (Risk and Insurance Studies Centre) Forum Conference to be held on May 23, 2018. Other sponsors include the Fields Institute for Research in Mathematical Sciences, York VPRI office.

Thomas Baumgartner (Chemistry) co-edited the book "**Main Group Strategies towards Functional Hybrid Materials.**"

The Laboratory for Industrial and Applied Mathematics completed two contracts with the Public Health Agency of Canada: (1) An agent-based simulator development for the gastrointestinal pathway of *L. monocytogenes*, by postdoc **Ashrafur Rahman** and **Jianhong Wu** (Mathematics & Statistics); and (2) Modeling contamination dynamics in a three-stage poultry scalding tank, PhD student **Zack McCarthy** and **Jianhong Wu**.

Members of the Department of Mathematics & Statistics, including **Steven Chen, Kosal Chin, Jane Heffernan, Robert Jordan, Neal Madras, Varvara Nika, Jianhong Wu, Jane Zhang,** and **Hongmei Zhu** organized a three-day "Math for Real" workshop at the Fields institute. The event included 28 high school students from seven cities.

The Centre for Disease Modelling (including **Jane Heffernan, Jianhong Wu, Neal Madras, Seyed Moghadas** and **Huaiping Zhu** in the Department of Mathematics & Statistics), and **Cora Young** (Chemistry) were featured in the winter edition of the **York U Magazine.**

PhD student **Andrea Durant** (Biology, supervised by Andrew Donini) published "**Ammonia excretion in an osmoregulatory syncytium is facilitated by AeAmt2, a novel ammonia transporter in Aedes aegypti larvae**" in the journal *Frontiers in Physiology*.

Three students in **Jean-Paul Paluzzi's** (Biology) lab contributed to the paper "**Anti-diuretic action of a CAPA neuropeptide against a subset of diuretic hormones in the disease vector, Aedes aegypti**" in the *Journal of Experimental Biology*.

PhD student **Amanda Lizner** (Biology, supervised by Sheila Colla in FES) authored a **blog post** about the her research on bumble bee habitats for the Nature Conservancy of Canada blog.

- **Functional plasticity of the gut and the Malpighian tubules underlies cold acclimation and mitigates cold-induced hyperkalemia in Drosophila melanogaster** – *Journal of Experimental Biology*
 - Research led by graduate student **Gil Yerushalmi** (Biology, supervised by Andrew Donini) found that fruit flies survive low temperatures by drastically altering their guts in a manner that helps to minimize potential water and salt-imbances. See the story in **yFile.**

Hélène Mialet (Science & Technology Studies) spoke about Stephen Hawking's legacy with several media outlets, including *The Globe and Mail*, *L'Express*, *Radio Canada*, *CTV News*, and CBC Radio's *Quirks & Quarks*. Her research on Hawking was cited by *The New Yorker* and *New Scientist*, among others. She also authored "Stephen Hawking Lived Beyond His Body" in *The Atlantic*.

Bridget Stutchbury (Biology) spoke to the *Ottawa Citizen* about why some birds are migrating north sooner and how they are surviving the cold.

Sapna Sharma (Biology) spoke to CBC Radio's *Metro Morning* about her science outreach efforts with newly arrived refugees.

Paul Delaney (Physics & Astronomy) spoke to *CTV News*, *CFRB 1010*, *AM640*, and *Sirius XM* about Stephen Hawking's death. He also spoke about Proxima centauri b flare activity, NASA Twin study results and the date of spring with the above-mentioned media outlets.