

THE (PETRI) DISH

Faculty of Science Newsletter



Faculty of Science Book Prize winners with Dr. Travis Fridgen. The annual Dean's List and Awards Ceremony was held on September 20. The Dean's List recognizes the top 10% of students in the Faculty of Science. This year, 356 students were honoured. Several staff and faculty members were also presented with awards during the ceremony.

IN THE NEWS

Dr. Oscar Meruvia-Pastor, Computer Science, on the uses of ChatGPT and AI technologies in the university classroom. [CBC NL](#)

Dr. Travis Fridgen, Dean of Science, discussing the retirement plan for the OSC seals. [NTV](#)

Dr. Antonina Kolokolova, Computer Science, and her research were mentioned in a recent publication. [Quanta Magazine](#)

Dr. Shawn Leroux, Biology, discussing his current research project at Pippy Park. [CBC](#)

FACULTY AND STAFF NEWS

Andrea Darby-King, Biology, was awarded the Dean of Science Distinguished Service Award.

The Grants Facilitation Team--Drs. Lynn Frizzell and Jennifer Major and Phillip MacCallum--were the inaugural recipients of the Team Science Award.

Dr. Patrick Gagnon, Ocean Sciences, and Dr. Yildiz Yilmaz, Mathematics and Statistics, were the inaugural recipients of the Dean of Science Distinguished Service by Faculty Members Award.

Dr. Ian Fleming, Ocean Sciences, was the recipient of the Distinguished Scholar Award.

Dr. Michael Babechuk, Earth Sciences, and Dr. Jane Stockmann, Chemistry, were awarded the Emerging Scholar Award.

Dr. Valerie Booth, Biochemistry, received the Distinguished Teacher Award.

DEAN'S MESSAGE

While it seems like such a long time ago, the Dean's List and Awards Ceremony for the Faculty of Science seemed to go off as a huge success. We had over 300 Dean's List students, 11 Book Prize Awards and 23 Visentin Award recipients. Along with the Distinguished Teacher, Distinguished Scholar, Emerging Scholar, and Distinguished Service awards, we honoured faculty, staff, and graduate students with three new awards.

The inaugural Dean of Science Distinguished Service (Faculty) was awarded to Drs. Pat Gagnon and Yildiz Yilmaz, the Team Science award was presented to Drs. Lynn Frizzell, Jennifer Major, and Phillip MacCallum, and the Graduate Leadership Awards were presented to Francine Burke, Brianna George, and Arshad Shaikh.

While these awards showcase some of the outstanding achievements of our faculty, it is the collective dedication of our students, faculty, and staff that makes the Faculty of Science at Memorial University a transformative place to work and learn, and I applaud everyone's efforts.

Besides looking forward to a well-deserved holiday break, I hope everyone is looking forward to the upcoming Research Week events, including our annual Three Minute Thesis Competition on November 21 and Whale of a Time. This is a time for all faculty, staff, and research students and postdocs in the Faculty of Science to get together and celebrate our research efforts.

RESEARCH WEEK 2023

NOV. 20-24

mun.ca/researchweek

MEMORIAL
UNIVERSITY

ALUMNI NEWS

Dr. Jingjing Zheng, Computer Science, received the [AI Borealis Fellowship](#) for her research on machine learning and artificial intelligence.

Mrs. Heidi Kavanagh, Earth Sciences, received the Prime Minister's Award for Teaching Excellence in STEM.

Blue Lake, Biochemistry, co-authored a recent publication in [Nature](#).

Mahek Parmar, Computer Science, received the Colbourne Family Scholarship and the Dr. J. Douglas Eaton Scholarship.

IN THE GAZETTE

Drs. Shyamchand Mayengbam (Biochemistry), Kapil Tahlan (Biology) and Guangju Zhai (BioMedical Sciences) received funding from the Canada Foundation for Innovation (CFI) John R. Evans Leaders Fund. [Read](#)

R.F. Blackwood Memorial Award in Geoscience established to recognize the contributions of Memorial alumnus, Frank Blackwood. [Read](#)

Memorial University is a partner in creating the first-in-Canada, virtual chronic pain management portal. [Read](#)

Faculty of Science hosts annual Dean's List and Awards Ceremony. [Read](#)

Ocean Sciences Centre finalizes retirement plan for seals. [Read](#)

STUDENT NEWS

Rafia Akter, Economics, and Yaksh Haranwala, Computer Science, received the Co-op Student of the Year Award.

Brianna George, Psychology, Francine Burke, Psychology, and Arshad Shaikh, Biology, were the inaugural recipients of the Graduate Student Leadership Award.

Emmerson Wilson, Biology, and Mohammadali Mirmojarabian, Computer Science, were awarded the Albert George Hatcher Memorial Scholarship.

Nicole Collins received the 2023-24 FFF Charlotte Penwell Dolimount Memorial Scholarship.

Madison Kennedy received the Bob Dawson Post-Secondary Entrance Scholarship with the Community Centre Alliance

Axel Belgarde, Physics & Physical Oceanography, and his band Port-Aux Poutines were awarded the French Speaking Artist of the Year award at the Music NL Awards.

Abigail Kennedy, Earth Sciences, won the Science Atlantic Best Paper Award at The Atlantic Universities Geoscience Conference.

Kira Evans, Earth Sciences, received the Canadian Energy Geoscience Association (CEGA) Award at The Atlantic Universities Geoscience Conference.

FUNDING ANNOUNCEMENTS

2023-2028 Canadian Institutes of Health Research Project Grant. Defining the mechanisms underlying the sex bias of neurodevelopment disorders in preclinical models of autism spectrum disorder (ASD) PI: Dr. Ashlyn Swift-Gallant; Co-PIs: Drs. Jacqueline Blundell, Lindsay Cahill, Deepak Kaushik, Susan Walling; Total funds: \$933,300 CAD.

SAVE THE DATE!



Dr. Daniel Drucker is presenting **The Brosnan Lecture in Biochemistry**. Dr. Drucker is an Endocrinologist and Professor of Medicine at the University of Toronto.

His lecture is titled 'GLP-1 Based Therapies: A New Era for Cardiometabolic Medicine'.

The lecture will take place on **November 15** at 1:00 pm in Room CSF-1302.

SAVE THE DATE!



The **3 Minute Thesis Competition** is back! The deadline to register is **November 8**. The competition is scheduled for November 21 from 11:00 am to 1:00 pm in C-2039.

More information about the competition is available [here](#).



The **Scientific Endeavours in Academia (SEA) Conference** is happening **April 5-6, 2024!** More details coming soon.

PUBLICATIONS

Biology

Multiple mitogenomes indicate Things Fall Apart with Out of Africa or Asia hypotheses for the phylogeographic evolution of Honey Bees (*Apis mellifera*). *Scientific Reports*, authored by Dr. Steve Carr.

Can cryptic female choice prevent invasive hybridization in external fertilizing fish? *Wiley*, co-authored by Tyler Lantiegne and Dr. Craig Purchase.

Earth Sciences

Mineralogy and mineral chemistry of the mineralization at the ABM replacement-style volcanogenic massive sulfide deposit, Finlayson Lake district, Yukon, Canada. *Mineralium Deposita*, co-authored by Drs. Nikola Denisová, Stephen Piercey and Markus Walle.

Zircon and the role of magmatic petrogenesis in the formation of felsic-hosted volcanogenic massive sulfide (VMS) deposits: A case study from the mid-Paleozoic Yukon-Tanana terrane, northern Canadian Cordillera. *Mineralium Deposita*, co-authored by Drs. Matthew Manor, Stephen Piercey and Markus Walle.

Convergent margin metallogenic cycles: a window to secular changes in Earth's tectonic evolution. *Earth Sciences Reviews*, co-authored by Dr. Stephen Piercey.

Early Ordovician seamounts preserved in the Canadian Cordillera: implications for the rift history of western Laurentia. *Geosphere*, co-authored by Rose Cobbett and Drs. Luke Beranek and Stephen Piercey.

Trace element composition of chalcopyrite from volcanogenic massive sulfide deposits: variation and implications for provenance recognition. *Economic Geology*, co-authored by Dr. Stephen Piercey.

Volcanogenic massive sulfide (VMS) deposits of the Dunnage Zone of the Newfoundland Appalachians: setting, styles, key advances, and future research. *Canadian Journal of Earth Sciences*, co-authored by Dr. Stephen Piercey.

Physics and Physical Oceanography

Temperature dependence of the viscoelastic properties of a natural gastropod mucus by Brillouin light scattering spectroscopy. *Soft Matter*, co-authored by Dillion Hanlon and Dr. G. Todd Andrews.

Psychology

Overcoming the forbidden: Identification and stigma of unacceptable thoughts in obsessive-compulsive disorder. *APA PsycNet*, co-authored by Ashlee Coles, Chelsea Lahey and Drs. Emily Fawcett and Jon Fawcett.

When shepherds shed: Trajectories of weight-related behaviors in a holistic health intervention tailored for US Christian clergy. *Springer*, co-authored by Dr. Joshua Rash.

Gremlins in childhood amnesia research. *Journal of Applied Research in Memory and Cognition*, authored by Dr. Carole Peterson.

Does expectancy affect insomnia treatment response in cancer survivors receiving acupuncture and cognitive behavioral therapy? *Springer*, co-authored by Dr. Sheila Garland.

Item-method directed forgetting is (usually) impaired in clinical populations: A meta-analysis. *APA PsycNet*, co-authored by Noah Pevie, Chelsea Lahey, Maddison Baldwin and Drs. Emily Fawcett and Jon Fawcett.

Evidence that Ovarian Hormones, But not Diet and Exercise, Contribute to the Sex Disparity in Post-Traumatic Stress Disorder. *Journal of Psychiatric Research*, co-authored by Dr. Ashlyn Swift-Gallant.