

THE (PETRI) DISH

Faculty of Science Newsletter



Faculty of Science graduate students who participated in the Three Minute Thesis event hosted on November 21. **Yvonne He**, Biology, was awarded first place. **William Kellough**, Mathematics and Statistics, was the runner-up.

In the News

Newfoundland and Labrador's 2024 Rhodes Scholar answers 20 questions. [The Telegram](#)

PhD student using insects to create more sustainable feed for farmed fish. [The Telegram](#)

Major discoveries in the Galapagos Islands. [The Telegram](#)

Faculty and Staff News

Dr. Jie Xiao, Mathematics and Statistics, was appointed Section Editor-in-Chief of the section "Geometry and Topology" in *Axioms*.

Dr. Fereidoon Shahidi, Biochemistry, was the recipient of IFT's 2023 Lifetime Achievement Award.

Dr. Zahra Farahnak, Biochemistry, received a Janeway Research Foundation Award.

Drs. Jie Xiao and Yiqiang Zhou, Mathematics and Statistics, were featured in the World's Top 2% Scientists list in 2023.

Dean's Message

Happy New Year to all of our faculty, staff, and students returning for the winter semester and also to those students beginning their studies at Memorial!

Some of our (many) exceptional students received some phenomenal news to end off 2023. Chemistry and Political Science major Katherine Dibbon is off to Oxford after being named Newfoundland and Labrador's 2024 Rhodes Scholar. Cognitive and Behavioural Ecology PhD student Jessika Lamarre took home the Diamond Award, Leadership Award, Social Impact Award, and the Community Choice Award at Illuminate hosted by the Memorial Centre for Entrepreneurship. Current science student Kaitlyn Breon is Memorial's newest Loran Scholar.

Not to be outdone, our faculty came up big at the Presidents Awards in December. Dr. Sukhinder Cheema now goes by the title University Research Professor. Dr. Eric VanderWal won the President's Award for outstanding Graduate and Postgraduate Supervision. Dr. Amy Hurford received the President's Award for Distinguished Teaching and Drs. James Leblanc and Jonathan Fawcet received the President's Award for Outstanding Research. Congratulations to all!

Finally, I hope everyone comes out to the Faculty of Science Social Night on Friday, January 19th to cheer on the Women's and Men's Sea-Hawks basketball teams! The games begin at 6 and 8 pm and at least the first 50 students to register will get free tickets to the game. We are really excited to see faculty, staff, and students as we cheer on both our teams but especially our Science-Sea-Hawks! Please see social media to sign up!

Alumni News

Gabriel Sindol, Earth Sciences, and Dr. Michael Babechuk were featured in a NSERC Impact Story. [Read](#)



Student News

Katherine Gibbon, Chemistry, has been named Newfoundland and Labrador's Rhodes Scholar for 2024.

Jessika Lamarre, Cognitive and Behavioural Ecology, took home top prize at Illuminate 2023.

Renan Danielski, Biochemistry; Arshad Ali Shaikh, Yvonne He, and Deepal Despande, Biology; Sara Jobson and Raquel Ruiz-Diaz, Ocean Sciences; Wei Wei, Chemistry; Stephanie Salia and Emily Row, Psychology; Thamalikha Dissanayake, Mathematics and Statistics, won Best Oral Presentation at the 2023 Aldrich Conference.

Lucas Fowler and Caitlyn Meaney, Science, won best Poster Presentation at the 2023 Aldrich Conference.

Yvonne He, Biology, and William Kellough, Mathematics and Statistics, placed first and second at the Faculty of Science 3-Minute Thesis Competition.

Kaitlyn Breon has been named Memorial University's Loran Scholar.

Myrah Graham, Environmental Science, won the "Arctic Science to Art" poster contest for early-career researchers.

Save the Date!

The Dr. and Mrs. Satti Paddi and Parvati Reddy Public Lecture is scheduled for January 31 at 7:00 pm. This year's speaker is Dr. Cécile Fradin from McMaster University. More details [here](#).

The Faculty of Science is hosting a social night on **January 19** to support the Sea-Hawks at the first double header of the new year!

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

Retirements

Dr. Martin Mulligan, Biochemistry

New Hires

Jamie Soto Neira, Ocean Sciences, Post-Doctoral Fellow

In the Gazette

Faculty of Science PhD student wins big at Illuminate 2023. [Read](#)

Interdisciplinary research team embarks on expedition in the Galapagos. [Read](#)

Drs. Michael Babechuk and Steven Denyszyn co-authored an op-ed. [Read](#)

Newfoundland and Labrador's 2024 Rhode's Scholar. [Read](#)

Memorial University's newest Loran Scholar. [Read](#)

Recipients of the 2023 President's Awards. [Read](#)

Student swaps career as dentist for computer programming. [Read](#)

Faculty and Staff News (cont'd)

Dr. Amy Hurford, Biology and Mathematics & Statistics, received the President's Award for Distinguished Teaching.

Dr. Jonathan Fawcett, Psychology, and Dr. James LeBlanc, Physics & Physical Oceanography, received the President's Award for Outstanding Research.

Dr. Sukhinder Cheema, Biochemistry, received the President's Award for University Research Professor.

Dr. Eric VanderWal, Biology, received the President's Award for Outstanding Graduate & Postgraduate Supervision.

A recent publication listed Dr. Sheila Garland, Psychology, in the Top 15% Women Professors From CPA-Accredited Clinical Psychology Programmes by Career Status

An article by Dr. Stephen Piercey, Earth Sciences, was ranked at #6 by The Canadian Journal of Earth Sciences for the most read articles of 2023.

Articles by Dr. Michael Babechuk, Earth Sciences, were ranked at #4 and #3 by the Canadian Journal of Earth Sciences for the most read articles of 2023.

Funding & Grants

2023-25 Atlantic Fisheries Funds. Addressing the challenges faced by Atlantic salmon at cold temperatures. PI: Dr. Kurt Gamperl; Co-PI: Dr. Javier Santander. Total funds: CAD \$1,071,800.

2023-24 CCORE-Exxon-Mobil. Assessment of injection of natural gas into seawater for the Flemish pass. PI: Dr. Vandad Talimi; Co-PI: Dr. Javier Santander. Total funds: CAD \$93,750.

Publications

Biology

Small tube-nosed seabirds fledge on the full moon and throughout the lunar cycle. *Biology Letters*, co-authored by Sydney Collins.

Evolutionary origins of honey bees. *BeeCraft*, authored by Dr. Steven Carr.

Why do so many Indian men have hairy ears? i wonder..., co-authored by Dr. Steven Carr.

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. Steven Carr.

Chemistry

Perceptions of magnetic resonance imaging during pregnancy: A Newfoundland and Labrador perspective. *Journal of Obstetrics and Gynaecology Canada*, co-authored by Catherine Barrett, Darcie Stapleton, Lauren Ringer, Nikita Harvey, and Dr. Lindsay Cahill.

Earth Sciences

New taphonomic and sedimentological insights into the preservation of high-relief Ediacaran fossils at Upper Island Cove, Newfoundland. *Lethaia*, co-authored by Christopher Mckean and Drs. Rod Taylor and Duncan Mcilroy.

Ocean Sciences

Evaluation of an autogenous *Vibrio anguillarum* vaccine in lumpfish (*Cyclopterus lumpus*) under controlled and field conditions. *Frontiers in Aquaculture*, co-authored by Dr. Javier Santander.

Comparative genomics analysis of a novel *Vibrio* sp. isolated from an ulcer disease event in Atlantic salmon (*Salmo salar*). *Microorganisms*, co-authored by Dr. Javier Santander.

Psychology

Emerging adult perceptions of cannabis consumption post-legalization: Considering age and sex differences. *Journal of Adolescent Health*, co-authored by Laura Harris-Lane, Dalainey Drakes, Emily Rowe, and Dr. Nick Harris.

The relationship between difficulties in the regulation of positive and negative emotions and binge-eating symptoms in young adults. *Eating Behaviors*, co-authored by Rachel Howells, Leigh Dunn, and Dr. Jacqueline Carter.

Organizational effects of gonadal hormones on human sexual orientation. *Adaptive Human Behavior and Physiology*, co-authored by Dr. Ashlyn Swift-Gallant.

A cross-sectional survey of the prevalence and patterns of using cannabis as a sleep aid in Canadian cancer survivors. *Journal of Cancer Survivorship*, co-authored by Rachel Lee and Drs. Jennifer Donnan, Nick Harris, and Sheila Garland.

Positive mental health in adults with bipolar disorder: Exploring social support subtypes, negative social interactions and potential to flourish. *BMC Psychiatry*, co-authored by Dr. Ken Fowler and Kaya Dooley.

Inequality in researchers' minds: Four guiding questions for studying subjective perceptions of economic inequality. *Journal of Economic Surveys*, co-authored by Dr. Martin Day.

Perceived and ideal inequality in university endowments in the United States. *Personality and Social Psychology Bulletin*, co-authored by Dr. Martin Day.

Insights into the accuracy of social scientists' forecasts of societal change. *Nature Human Behavior*, co-authored by Dr. Martin Day.