THE (PETRI) DISH

Faculty of Science Newsletter



Big blue - The blue whale skeleton hangs in the Core Science Facility.

In the News

Dr. Bill Montevecchi, Psychology, says while a lot of the province's seabird population are doing quite well, despite a changing marine environment, it's important to keep monitoring them. Saltwire

Newfoundland will soon have a Local Meteoric Water Line – an important framework for understanding groundwater, climate change, humidity, and more. Earth Sciences researcher Dr. Penny Morrill and B.Sc. student Kendra Revoy talk about their project and the role citizen science can play in university research. Tandem

Dr. Sheila Garland, Psychology, and her Sleep, Health and Wellness Lab are creating an app for cancer patients with sleep difficulties. <u>VOCM</u>

Dr. **Sherri Christian**, Biochemistry, says it's still important to get a flu shot this year. <u>CBC NL</u>

AquaBounty's genetically modified salmon, which has roots at the Department of Ocean Sciences, is now available for sale in Canada. <u>CBC NL</u>

Dr. Sean Boyle, a post-doctoral fellow in the Department of Biology, says salamanders are quite common in this province and an important part of the ecosystem. <u>CBC NL</u>

The work of Dr. Eric Vander Wal and M.Sc. student Joanie Kennah of Biology's Wildlife Evolutionary Ecology lab are featured in this story. <u>CBC NL</u>

Scientists are on the hunt for a fish that can handle the heat. This story features the research of Dr. **Kurt Gamperl**, Ocean Sciences. <u>Hakai Magazine</u>

The work of Dr. Carole Peterson, Psychology, is featured in this article. <u>Huffpost</u>

Dr. **Craig Purchase**, Biology, talks about low river levels and impacts on salmon with CBC's The Morning Show. CBC NL



DEAN'S MESSAGE

As the semester winds down, I want to thank all faculty; teaching, research, and administrative staff; and graduate and undergraduate teaching assistants for all your hard work this semester.

It wasn't an easy semester, I know, transitioning back to face-to-face instruction from over a year of remote instruction. Your efforts are more than appreciated by me, by the University, and most importantly by our students. Our faculty, staff, and student researchers should also be applauded for keeping their research programs thriving. I hope over the holidays you find some time to kick back and relax and regenerate. Thank you!

On that note, I hope that you can join the Whale of a Time Social during Research Week. I believe that there are some fun things planned for the evening and I hope to see you there.

As you may have seen, the Faculty of Science partnered with Landwash Brewery to create a special beer that is now available. It kicks off what we hope will be a continued series of collaborations that highlights our hashtags #scienceiseverything #everythingisscience.

Finally, I hope you enjoy reading the summaries of all the amazing things that our faculty, staff, and students have been up to over the past few months, and don't forget to click on the links to find out more if any of the stories catch your attention. I'm sure those involved would also love to answer any questions you may have.



Dr. Suzanne Dufour unveils a plaque to recognize the 60th anniversary of Science Atlantic. With her is Dr. Grant Gardner, former Associate Dean of Science; Zoe Rowe, Biochemistry; and Dr. Travis Fridgen.

FACULTY NEWS

Dr. David Pike, Math & Stats, has been named a Fellow of the Canadian Mathematical Society (CMS) for 2021. Dr. Pike is currently the CMS president-elect.

Dr. Danny Dyer, Math & Stats, co-organized the Association of Atlantic Universities' Institutional Teaching Award Recipients' Retreat where Dr. **Kris Poduska**, Physics & Physical Oceanography, won the 2020 President's Award for Distinguished Teaching.

Dr. Danny Dyer and Dr. David Pike, Math & Stats; along with Dr. Jared Howell and Dr. Rebecca Milley, cross-appointed from Grenfell Campus; Dr. Andrea Burgess, an adjunct from UNB, St. John; and Dr. Stephen Finbow, an adjunct from St. Francis Xavier, are all part of a new Graph Searching in Atlantic Canada Collaborative Research Group, funded by the Atlantic Association for Research in the Mathematical Sciences.

Dr. Sue Ziegler, Earth Sciences, has been named to the Council of Canadian Academies Expert Panel on Canada's Carbon Sink Potential.

Dr. Duncan McIlroy, Earth Sciences, has been appointed geological advisor to the Discovery UNESCO Global Geopark.

Dr. Ross McGowan and Dr. David Heeley, Biochemistry, have been appointed as honorary research professor.

Dr. Fereidoon Shahidi, Biochemistry, has been named number one most cited researcher in food science and engineering at Memorial University, Canada, North America and the world according to the <u>AD Scientific Index 2021</u>. Out of more than 706,000 researchers worldwide, he is also in the top 1,000 in total h-index and i10 index and in the top 1,500 in total citations.

BIRTHS

A boy, Alexander King-Hill, to **Stephen Hill**, Ocean Sciences A boy, Averie Ernest, to **Sheldon Huelin**, Chemistry

NEW STAFF

Maggie Flynn, Biochemistry

PASSINGS

Dr. **Michael Newlands**, former head, Chemistry Dr. **Tom Calon**, Earth Sciences

In the News (cont'd)

Dr. Evan Edinger, Geography/Biology, says deep sea corals are oceanographic recorders and studying them can provide information on oceanographic change. <u>CBC NL</u>

STUDENT AWARDS

Sam Bauer and Anders Cornect, Math & Stats, won the Science Atlantic Undergraduate Math Competition. Memorial has won five of the last six competitions, with a second-place finish in 2019.

Ilth Annual Biochemistry Symposium B.Sc. Best Poster Presentation Awards Willow Squires - 1st Jenna Caines - 2nd

Best Presentation Awards
Zack Clancy, M.Sc. - Lori M. Stead Oral
Competition Award
Renan Danielski, PhD - Lori M. Stead Oral
Competition Award

Dean's Awards 2021

Dr. Pat Gagnon, Ocean Sciences - Distinguished Teacher Award

Dr. **Suzanne Dufour**, Biology - Distinguished Teacher Award

Dr. Michael Katz, Chemistry - Distinguished Emerging Scholar Award

Dr. J. Kim Welford, Earth Sciences -Distinguished Emerging Scholar Award

Dr. Matt Rise, Ocean Sciences - Distinguished Scholar Medal

Nancy Bishop, Dean's Office - Distinguished Service Award

Suhail (Suha) Hassan, Psychology - Co-Op Student of the Year

Video of the event can be found <u>here</u> and photos from the event can be found <u>here</u>.

STUDENT NEWS

Andrew Pearce and Caleb Jones, Math & Stats, and Mohammadhossein Moghaddas Jafari, Computer Science, gave talks at the recent Science Atlantic Math, Stats and Computer Science Conference.

Gerry Harris-Pink, Caleb Jones, Liam Newhook and Andrew Pearce gave talks based on their summer research at the Math & Stats Summer Undergraduate Research Forum.

Program Completion

Sheyla Montero Vega, M.Sc., Biochemistry Indrayani Phadtare, M.Sc., Biochemistry Janet Ferguson-Roberts, M.Sc., Marine Biology Nicole Smith, Ph.D., Marine Biology



The science of beer - The Faculty of Science is partnering with Landwash Brewery on the creation of a special dry-hopped saison using Canadian-made yeast and experimental hops. It is anticipated to be ready later this month. Dr. Travis Fridgen, Dr. Mark Berry and Dr. Darlene Skinner, here with Christina Coady of Landwash Brewery, joined other Science and Memorial leaders for the mashing in.

In the Gazette

The Faculty of Science recently recognized Science Atlantic's upcoming 60th anniversary with a plaque unveiling. Read

Students, staff and faculty honoured at Faculty of Science awards. Read

A Q&A with 2021 Alumnus of the Year, Dr. Liqin Chen, Chemistry. Read

Celebrating a decade of Schulich Leader Scholarships, featuring Science alumnus, Cole Wash. Read

More than \$1.3-million provincial investment enhances Memorial's dynamic research capacity. Researchers leading the projects include Dr. **Uta Passow**, Ocean Sciences; Dr. **Karl Jobst**, Chemistry; and Dr. **Kathryn Hargan**, Biology. Read

Science alumna Dr. **Janice Fitzgerald** receives Medicine's honorary white coat. <u>Read</u>

The Office of Alumni Engagement produces video series for MUNalum Days featuring Science alumnus, **Jamie** Parsons. Read

Emerging ocean innovators and entrepreneurs (including Qiwu Jiang, Luke McAllister and MD Ahmed Hossain Ocean Sciences; and Han Peng, Biochemistry) are among the latest cohort of the national Lab2Market program. Read



Plans are currently underway for Research Week 2021. It's is an opportunity for the university community to celebrate the rich depth and breadth of research at Memorial, while encouraging multidisciplinary collaboration.

Events are still being added to the <u>schedule</u>, including events hosted by the Faculty of Science, so be sure to check back for more details.

ALUMNI NEWS

Science alumna **Betty House** has received the 2021 Atlantic Canada Aquaculture Award from the Atlantic Canada Fish Farmers' Association for her three decades of work in the industry. <u>Fish Farming Expert</u>

Science alumni are represented in the latest graduating class of the Genesis Enterprise program including Ramesh Mani (PhD, Chemistry), cofounder of Polyamyna; Ashley Sullivan (B.Sc., Physics), co-founder and COO of SkillsHawk; and Monjur ul Hasan (M.Sc., Computer Science), cofounder and CTO of SkillsHawk. Gazette

Computer Science alumna Lesley Chard, is part of a team of female tech professionals behind Digital Waves, a new contest that aims to narrow the gap in the province's technology sector. <u>CBC NL</u>

A 9/11 scholarship helped Science alumna Dr. Raie Lene Kirby become a doctor. Now she's giving back. CBC NL

A new CBC doc explores NL's tech start up scene and features Science alumni, including Dr. Purvikalyan Pallegar and Dr. Nikitha Kendayla. CBC NL



Hands on science - Three Earth Sciences PhD students are working with the Discovery UNESCO Global Geopark on the Bonavista Peninsula as geoscience communicators to promote local geology to the general public and businesses, and raising awareness of geoeducation, geoconservation and geotourism.

Chris Mckean (above) is spearheading the geoeducation aspect of the work by hosting talks and activities at schools and clubs across the region, as well as developing new material to supplement school curriculum with relevance to local geology and paleontology. Daniel Perez Pinedo and Giovanni Pasinetti are working on geotourism and geoconservation respectively

DID YOU KNOW?

The flu is responsible for approximately 12,200 hospitalizations and 3,500 deaths per year in Canada. It can affect anyone, including those who are healthy.

The virus changes from year-to-year and the flu vaccine's effects can wear off, so you need a booster every flu season. A full listing of flu clinics can be found on the Eastern Health <u>website</u>.