

THE (PETRI) DISH

Faculty of Science Newsletter



A full house for the inaugural Gong Show, part of the 2023 Scientific Endeavours in Academia Conference.

In the News

Dr. **Ken Fowler**, Psychology, says social media has enhanced the ability to connect to people, but taken to the extreme, it can be damaging. [Saltwire](#)

Dr. **Hilding Neilson**, Physics and Physical Oceanography chats about the 2024 total solar eclipse and plans to celebrate it in Gander. [CBC On the Go](#)

Ever wonder what a cod sounds like underwater? Dr. **Len Zedel** and **Axel Belgarde**, Physics and Physical Oceanography chat about the world of ocean acoustics. [CBC Morning Show](#)

Dr. **Sheila Garland**, Psychology, on healthy ways to wake up. [CBC Morning Show](#)

Dr. **Karl Jobst**, Chemistry, discusses chemicals recently found in kids' toys. [Global News](#)

Dr. **Jacqueline Blundell**, associate dean (research and graduate)/Psychology, explains The Gong Show, a SEA Conference event. [NTV](#)

The work of Dr. **Fran Kerton**, Chemistry, to find new ways to process seafood waste in collaboration with local producers, is highlighted. [Chemistry World](#)

What do sunshine, coffee and shoelaces have to do with immortality and the research of Biology's Dr. **Craig Purchase**? [Thousand Islands Life](#)

Nucliq Biologics, a biotech startup founded by Science graduates, Drs. **Nikitha Kendyala**, Biology, and **Purvikalyan Pallegar**, Biochemistry, is helping Canadians understand their gut health. [Saltwire](#)

Dr. **Bill Montevicchi**, Psychology, was recently featured in a documentary on his work with seabirds. [CBC Ideas](#). He says avian influenza is a cause for concern for the province's seabird colonies. [CBC NL](#)



DEAN'S MESSAGE

With winter 2023 behind us, many of our researchers will be ramping up their efforts in the lab and in the field. You will also see more young students on campus and in our buildings this spring as our outreach activities also begin to pick up before schools let out for the summer.

Let's Talk Science just held their Lab Extravaganza for Grade 11 and 12 students and many more junior and senior level students are eager to experience what science has to offer. This is very important work as our future students taking part in these activities, and they will look back on these experiences when they are applying to universities. Faculty, staff, and students who engage on the front lines of outreach are also who these students will remember. On May 13th we will also host Science Rendezvous for budding scientists and their parents. I want to extend my well wishes to everyone involved in research, outreach, and teaching activities this spring, and remind us all to keep safety at the forefront of our minds.

An enormous thank you to students, staff, and faculty who attended, presented, and/or judged at this year's SEA conference. Your contributions were crucial to making this year's event another resounding success. Additionally, I would like to express my gratitude to the staff in the Dean of Science office and the student volunteers who were responsible for the organization of the conference. Your hard work and dedication are greatly appreciated. This edition of the *Petri Dish* is bursting with the remarkable accomplishments of you and your colleagues in the Faculty of Science. Together, we are creating headlines, enlightening the people of Newfoundland and Labrador, and finding solutions to the challenges that impact their daily lives. Our collective efforts are being recognized through awards, grants, and publications of papers and books. Moreover, as evidenced by the list of service milestones for 20, 25, 30, 35, 40, 45, and even 50 years, we are deeply committed to our work and to the university, our students, and the province.



Dr. **Karen Hattenhauer**, Chemistry, conducts experiments and demonstrations with visitors from Big Brothers Big Sisters.

In the News (cont'd)

Dr. **Andrew Lang**, Biology, adds that avian influenza is still circulating in bird populations and caution is necessary following bird deaths in the city. [CBC NL](#) He notes various species are faring differently with the virus, potentially impacting their subsequent migration patterns. [The Weather Network](#)

Dr. **Hilary Corlett**, Earth Sciences, is delving into past marine life to better comprehend modern climate issues. [NSERC](#)

FACULTY NEWS

Dr. **Julissa Roncal**, Biology, has been named associate editor of the *American Journal of Botany*.

Dr. **Fran Kerton**, Chemistry, has received the Kalev Pugi Award from the Society of Chemical Industry (SCI) Canada. It acknowledges exceptional achievements in research and development which is of benefit to Canada. [Read](#)

Dr. **Kes Morton**, CEO and Founder of Pisces Research Project Management Inc. is a new professional associate in Ocean Sciences.

Dr. **J. Kim Welford**, Earth Sciences, is co-organizer of a YouTube channel, [Rift and Rifted Margins Online Seminar](#), which has become popular in the international rifted margins community. View Dr. Welford's own presentation [here](#), or, more recently, a [presentation](#) by Earth Sciences PhD student, **Michael King**.

Dr. **Laura Fallon**, (pictured below) Psychology, received the Rennie Gaulton Award for Excellence in Teaching from members of the Gaulton family.



In the Gazette

The Department of Psychology celebrated its annual Research Day. [Read](#)

A study, led by visiting PhD student **Hortense Brown**, is underway to shed light on the impact of COVID-19 on the undergraduate experience in Newfoundland and Labrador. [Read](#)

Computer Science student **Masoud Zare** combines coding and storytelling at Celtx internship. [Read](#)

Earth Sciences hosts Marie Skłodowska-Curie researchers - Drs. **Patricia Cadenas Martínez** and **Caroline Lotout**. [Read](#)

From bees to bridge-building - Environmental Science student **Jenit Thomas** leverages his expertise and skills in co-op placements. [Read](#)

SmartBin, led by **Aneesh Raghupathy**, Computer Science, is runner up in Mel Woodward Cup competition. [Read](#)

Funding from NSERC and Memorial's Office of Public Engagement is helping **Fiona Le Taro**, Cognitive and Behavioural Ecology, with conservation efforts for Leach's storm petrels. [Read](#)

Dr. **Hilding Neilson**, Physics and Physical Oceanography, says mark April 8, 2024 on your calendar for a once-in-a-lifetime event - seeing a total solar eclipse in Newfoundland and Labrador. [Read](#)



Drop by the Core Science Facility May 13 from 11 a.m. to 3 p.m. for Science Rendezvous, featuring exhibits and demonstrations for all ages from Science, Engineering, Pharmacy, the Botanical Garden, Let's Talk Science, Newfoundland and Labrador Public Libraries, and much more!



Books from 2020-2022 showcased at the CNS published author reception.

Recognition Event for Published Authors

The Centre for Newfoundland Studies (CNS) held a reception on March 15 to recognize published books authored or edited by members of the Memorial community from 2020 to 2022.

Below are a list of authors from the Faculty of Science recognized at the event. To be included in a future event, please notify Colleen Field (cfield@mun.ca), CNS, of newly published books.

Dr. Yolanda Wiersma, Biology, *Experimental Landscape Ecology*. Cham, Switzerland: Springer Nature Switzerland AG, 2022.

Dr. Michael Slawinski, Earth Sciences, *Waves and Rays in Elastic Continua*. Fourth edition. Hackensack, NJ: World Scientific, 2021.

Dr. Michael Slawinski (co-author), Earth Sciences, *Wavefronts and Rays as Characteristics and Asymptotics*. Third edition. Singapore: World Scientific Publishing Co. Pte. Ltd., 2021.

Dr. Michael Slawinski, Earth Sciences, *Waves and Rays in Seismology Answers to Unasked Questions*. Third edition. Singapore: World Scientific Publishing Co. Pte. Ltd., 2021.

Dr. Jie Xiao (co-author), Mathematics and Statistics, *Geometric Potential Analysis*. S.I: De Gruyter, 2022.

Dr. Yuri Bahturin, Mathematics and Statistics, *Identical Relations in Lie Algebras*. 2nd edition. Berlin: De Gruyter, 2021.

Dr. Sheila Garland (co-author), Psychology, *Adapting Cognitive Behavioral Therapy for Insomnia*. Amsterdam: Academic Press, 2022.



Dr. Jie Xiao, Mathematics and Statistics, with his book.

Years of Service Recognition

John Suvak, Mathematics and Statistics – 50 years

Michael Rayment, Computer Science – 45 years
Dr. Carole Peterson, Psychology – 45 years

Penny Voutier, Psychology – 40 years

Dr. Fereidoon Shahidi, Biochemistry – 35 years

Dr. Steven Carr, Biology – 35 years

Dr. Edward Brown, Computer Science – 35 years

Dr. Gregory Dunning, Earth Sciences – 35 years

Dr. Richard Goulding, Physics – 35 years

Fiona Cuthbert, Biology – 30 years

Dr. Graham Bodwell, Chemistry – 30 years

Dr. Aphrodite-Daphne Indares, Earth Sciences – 30 years

Dr. Hong Wang, Mathematics and Statistics – 30 years

John Jerrett, Physics – 30 years

Kimberly Reid, Faculty of Science – 20 years

Rosemary Maher, Faculty of Science – 25 years

Dr. Robert Bertolo, Biochemistry – 20 years

Dr. Janet Brunton, Biochemistry – 20 years

Dr. Dawn Marshall, Biology – 20 years

Dr. Hélène Volkoff, Biology – 20 years

Dr. Christina Bottaro, Chemistry – 20 years

Dr. Ivan Booth, Mathematics and Statistics – 20 years

Dr. Jie Xiao, Mathematics and Statistics – 20 years

Dr. Yuan Yuan, Mathematics and Statistics – 20 years

Russ Flynn, Mathematics and Statistics – 25 years

Donna Inkpen, Ocean Sciences – 20 years

Danielle Nichols, Ocean Sciences – 20 years

Dr. Todd Andrews, Physics and Physical Oceanography – 20 years



SmartBin, led by Aneesh Raghupathy, Computer Science, is runner up in Mel Woodward Cup competition.

STUDENT AWARDS

Scientific Endeavours in Academia Awards

Julia Ball, Best overall talk

Nicholas Wells, Best overall poster

Sydney Collins, Vice-president (Research) best paper (graduate)

Andrew Harris, Vice-president (Research) best paper (undergraduate)

Sanazgoli Javanbakht Ghahfarokhi, School of Graduate Studies Best PhD presentation (poster or talk)

Brendan Carswell, School of Graduate Studies Best Masters presentation (poster or talk)

Health and Wellness

Ashlee Coles, Bounce Innovation best poster (graduate and post-doctoral fellow)

Ashley Stanford, Bounce Innovation best poster (undergraduate)

Justine Yick, Bounce Innovation best talk (graduate and post-doctoral fellow)

Kelsey Downer, Bounce Innovation best talk (undergraduate)

Technology, Innovation and Exploration

Parham Hajishafiezharamini, Thermo Fisher Scientific best poster (graduate and post-doctoral fellow)

Michael Burke, Thermo Fisher Scientific best poster (undergraduate)

Kyle Nickerson, Thermo Fisher Scientific best talk (graduate and post-doctoral fellow)

Andrew Harris, Thermo Fisher Scientific best talk (undergraduate)

Climate Change and the Environment

Nikita Harvey, Best poster (graduate and post-doctoral fellow)

Isaiah Power Smith, Best poster (undergraduate)

Carlissa Salant, Best talk (graduate and post-doctoral fellow)

Megan Moret, Best talk (undergraduate)

Departmental Awards

Khandkar Hossain, Best Biochemistry/Food Science poster (graduate)

Aliyah Salaam, Best Biochemistry/Nutrition poster (undergraduate)

Renan Danielski, Best Biochemistry/Food Science talk (graduate)

Alain Mutangana, Best Biochemistry/Nutrition talk (undergraduate)

Jordan Wight, Best Biology poster (graduate)

Brendan Carswell, Best Biology talk (graduate)

Julia Ball, Best Biology undergraduate presentation (poster or talk)

Olivia Wyper, Best Chemistry poster (graduate)

Sanazgoli Javanbakht Ghahfarokhi, Best Chemistry talk (graduate)

Darcie Stapleton, Canadian Society for Chemistry best poster (undergraduate)

Jenna Hanrahan, Canadian Society for Chemistry second place poster (undergraduate)

Nicholas Wells, Best Computer Science poster (graduate or undergraduate)

Shemonto Das, Best Computer Science talk (graduate or undergraduate)

Ligia Souza, Best Earth Sciences presentation (talk)

Charles Lapointe, Best Earth Sciences presentation (poster)

William Kellough, Best Mathematics and Statistics talk (first place)

Gerry Harris-Pink, Best Mathematics and Statistics talk (second place)

Joanna Dicks, Best Ocean Sciences presentation (poster or talk) (graduate)

Kera Whitten, Best Ocean Sciences presentation (poster or talk) (undergraduate)

Chantelle Clermont, Best Innovation and Aquaculture presentation (poster or talk) graduate

Jacob Mercer, Best Innovation and Aquaculture presentation (poster or talk) undergraduate

Mohammad Afkani, Best Physics and Physical Oceanography poster (undergraduate, graduate or post-doctoral fellow)

Matthew Drew, Best Physics and Physical Oceanography talk (undergraduate, graduate or post-doctoral fellow)

Makenna Taylor, Best Psychology/Behavioural Neuroscience poster (undergraduate or graduate)

Laura Dawson, Best Psychology/Behavioural Neuroscience talk (undergraduate or graduate)

Parker Doiron, Best Interdisciplinary Program talk

Emmeline Williams, Best Interdisciplinary Program poster



Dr. Sherri Christian (left), Biochemistry, helped welcome Fred Fox, brother of Terry Fox, to Memorial's St. John's Campus as he learned more about our cancer research and expertise.

Psychology Research Day Award Winners

Rachel Lee, Best Talk Award

Laura Dawson, runner up, Best Talk Award

Francine Burke, Graduate Psychology Society Award for Academic Excellence

Brianna George, Graduate Psychology Society Award for Community Excellence

Taylor Anthony, Best Honours Thesis Poster

Laura Au, Robert Ademec Award for Best Neuroscience Poster

Alison Randell, Bill McKim Honours Thesis Award

Molly Downey, Bill McKim Honours Thesis Award

Courtney Loveless, Psychology and Behavioural Neuroscience Society Award

Maliha Dew, Psychology Social Media

Committee's infographic competition winner

STUDENT AWARDS

Earth Sciences Scholarships and Awards

Brandon Collins, 4th Atlantic Conjugate Margins Conference Bursary; Frank J. Ryan Earth Sciences Award

Taylor Mugford, AUGC Frank S. Shea Memorial Award for Best Presentation, Economic or Applied Geology; Dennis R. Prince Memorial Scholarship; Eugene Vincent Memorial Scholarship; PDAC Student-Industry Mineral Exploration Workshop (S-IMEW) Candidate

Leonard David Chingis-Jenkins, BP Canada Energy Company Scholarship in Earth Sciences; Chevron Canada Ltd. Term Scholarship (CCT) in Business, Earth Sciences, Economics, and Engineering

Kira Evans, BP Canada Energy Company Scholarship in Earth Sciences

Alexis Johnson, Buchans Scholarship Fund of ASARCO Incorporated; Chevron Canada Resources Scholarship in Geology and Geophysics; Ernst R. Deutsch Memorial Scholarship in Geophysics; Maureen Penney Memorial Scholarship

Noah Slaney, Buchans Scholarship Fund of ASARCO Incorporated; PEGNL Past President's Geoscience Scholarship; Williams Scholarship for Earth Sciences

Julianna Whelan, Canadian Institute of Mining, Metallurgy and Petroleum Silver Jubilee Scholarship (Newfoundland Branch); Dean of Science Book Prize; Hebron Women in Science and Engineering Scholarship

Tyler Boyce, Chevron Canada Ltd. Endowed Scholarship in Business, Earth Sciences, Economics and Engineering; PEGNL Past President's Geoscience Scholarship

Joshua Maloney, Chevron Canada Ltd. Term Scholarship (CCT) in Business, Earth Sciences, Economics, and Engineering; James (Jay) Stackhouse Memorial Scholarship

Toby Butt, Chevron Canada Ltd. Term Scholarship (CCT) in Business, Earth Sciences, Economics, and Engineering

Juvani Bryce, David Strong Scholarship in Geology; Dr. Werner D. Bruckner Scholarship; PEGNL Connections East Award in Earth Sciences

Emma Mercer, Dr. V. Stephen Papezik Scholarship; PEGNL Past President's Geoscience Scholarship, Noranda Scholarship

Richard Smith, E.R.W. Neale Undergraduate Scholarship of the Geological Association of Canada (NL Section); Hebron Diversity Award

Shramana Sarkar, Eric A. Swanson Scholarship in Earth Sciences; PEGNL Past President's Geoscience Scholarship

Kyra Kennedy, H.R. Peters Award for Best B.Sc. Dissertation

Ian Coxon, Hugh Lilly Memorial (Geosciences) Scholarship; School of Graduate Studies F. A. Aldrich Fellowship

Hayley Fitzgerald, Husky White Rose Extension Diversity Project Scholarship

Anna Malone, PEGNL Connections East Award in Earth Sciences

Mackenzie Patrick, Buchans Scholarship Fund of ASARCO

Mateo Acuña Uribe, Canadian Society of Geophysicists (CSEG) Scholarship

Gabrielle Ledesma, R.F. Blackwood Memorial Award in Geoscience

Alicia Escribano, Mineralogical Association of Canada (MAC) Award 2022; Chevron Canada Limited Rising Star Award 2022

Michael King, Elizabeth Mounter Scholarship in Earth Sciences

Abolfazl Khan Mohammadi, Chevron Canada Limited Rising Star Award 2022

Ali Abdelsamad Elbaklishi, Chevron Canada Limited Rising Star Award 2022

Mitra Kangazian Kangazi, Chevron Canada Limited Rising Star Award 2022

Fatma Gumus, Chevron Canada Limited Rising Star Award 2022

Santiago Alberto Serna Ortiz, Chevron Canada Limited Rising Star Award 2022

STUDENT NEWS

Madi Gregory, Psychology, Outstanding Student Abbreviate Paper ("Data Blitz") award, American Psychology-Law Society Conference 2023

Kelsey Downer, Psychology, Psychology and Behavioural Neuroscience Society Community Involvement Award

Gretchen McPhail, Marine Biology, honourable mention for Best Talk by a B.Sc. Student at the 40th Annual Meeting of the Pacific Seabird Group.

NSERC Canada Graduate Scholarships - Doctoral

Oliva Dutton, Psychology, CGSD3

Alec Robitaille, Biology, CGSD3

NSERC Postgraduate Scholarships - Doctoral

Sara Jobson, Ocean Sciences, PGSD3

Xiaolei Li, Chemistry, PGSD3

Hayley Paquette, Biology, PGSD3

Ryan Warren, Chemistry, PGSD3

Computer Science Graduate Students Awards

Aria Sardari Loudaricheh, Academic Excellence

Wanglong Lu, Research (PhD) Award

Rezvan Karaji, Research (Masters) Award

Prudhvi Kommareddi, Workterm Award

Amin Taheri, Teaching Assistant Award



Earth Sciences graduate student **Gabrielle Ledesma**, with supervisor **Dr. Mike Babechuk** and members of the Blackwood family, received the inaugural R. Frank Blackwood Memorial Award in Geoscience at the Earth Sciences Scholarship and Awards Recognition Ceremony.

PUBLICATIONS

Biochemistry

[Persimmon Leaves: Nutritional, Pharmaceutical, and Industrial Potential—A Review](#), *Plants*, co-authored by Drs. Abul Hossain and Fereidoon Shahidi

[Consumption of Solnul™ Resistant Potato Starch Produces a Prebiotic Effect in a Randomized, Placebo-Controlled Clinical Trial](#), *Nutrients*, co-authored by Dr. Scott Harding

Biology

[Advances in Nitric Oxide Signalling and Metabolism in Plants](#), *International Journal of Molecular Sciences*, co-authored by Dr. Abir Igamberdiev

[A direct examination of microbial specialized metabolites associated with ocean sediments from Baffin Bay and the Gulf of Maine](#), *Canadian Journal of Microbiology*, co-authored by Arshad Ali Shaikh, Joost Verhoeven, Rupesh Sinha and Drs. Suzanne Dufour and Kapil Tahlan

Chemistry

[Development and application of a thin-film molecularly imprinted polymer for the measurement of mycophenolic acid in human plasma](#), *Journal of Clinical Laboratory Analysis*, co-authored by Evan Langille and Dr. Christina Bottaro

[Maternal exposure to polystyrene nanoplastics impacts developmental milestones and brain structure in mouse offspring](#), *Environmental Science: Advances*, co-authored by Nikita Harvey, Grace Mercer, Darcie Stapleton, Katherine Steeves, Jenna Hanrahan, Megan Cui, Zahra Aghaei, and Drs. Karl Jobst and Lindsay Cahill

[Incorporating Microporous Zn₃ and Zn₂Cd MOFs into Pebax/PVDF Mixed Matrix Membranes for Improved Carbon Dioxide Separation Performance](#), *ACS Applied Energy Materials*, co-authored by Mahsan Basafa, Amanda Parsons, Ellan Berdichevsky, Mason Lawrence and Dr. Michael Katz

Computer Science

[Body composition and lung cancer-associated cachexia in TRACERx](#), *Nature Medicine*, co-authored by Dr. Karteek Popuri

[TFNP Characterizations of Proof Systems and Monotone Circuits](#), Electronic Colloquium on Computational Complexity, co-authored by Dr. Noah Fleming

[Low Degree Testing over the Reals](#), *Proceedings of the 2023 Annual ACM-SIAM Symposium on Discrete Algorithms*, co-authored by Dr. Noah Fleming

[Machine learning corroborates subjective ratings of walking and balance difficulty in multiple sclerosis](#), *Frontiers in Artificial Intelligence*, co-authored by Wenting Hu, Owen Comben, and Dr. Xianta Jiang

[Integrating computer vision to prosthetic hand control with sEMG: Preliminary results in grasp classification](#), *Frontiers in Robotics and AI*, co-authored by Shuo Wang, Jingjing Zheng and Drs. Vinicius Prado da Fonseca and Xianta Jiang

[Human Eyes Move to the Target Earlier When Performing an Aiming Task with Increasing Difficulties](#), *International Journal of Human-Computer Interaction*, co-authored by Dr. Xianta Jiang

[Feature–Classifier Pairing Compatibility for sEMG Signals in Hand Gesture Recognition under Joint Effects of Processing Procedures](#), *Bioengineering*, co-authored by Mohammed Asfour and Dr. Xianta Jiang

[A Neural Network Based Approach to Inverse Kinematics Problem for General Six-Axis Robots](#), *Sensors*, co-authored by Dr. Xianta Jiang

[DL-Net: Sparsity Prior Learning for Grasp Pattern Recognition](#), *IEEE Access*, co-authored by Jingjing Zheng and Dr. Xianta Jiang

[Segmentation-guided domain adaptation and data harmonization of multi-device retinal optical coherence tomography using cycle-consistent generative adversarial networks](#), *Computers in Biology and Medicine*, co-authored by Dr. Karteek Popuri

[Longitudinal Spatial Relationships Between Atrophy and Hypometabolism Across the Alzheimer's Disease Continuum](#), *Journal of Alzheimer's Disease*, co-authored by Dr. Karteek Popuri

[White-matter abnormalities in presymptomatic GRN and C9orf72 mutation carriers](#), *Brain Communications*, co-authored by Dr. Karteek Popuri

[Predicting time-to-conversion for dementia of Alzheimer's type using multi-modal deep survival analysis](#), *Neurobiology of Aging*, co-authored by Dr. Karteek Popuri

[Body composition from single versus multi-slice abdominal computed tomography: Concordance and associations with colorectal cancer survival](#), *Journal of Cachexia, Sarcopenia and Muscle*, co-authored by Dr. Karteek Popuri

[Investigating the temporal pattern of neuroimaging-based brain age estimation as a biomarker for Alzheimer's Disease related neurodegeneration](#), *NeuroImage*, co-authored by Dr. Karteek Popuri

[Multi-view parallel vertebra segmentation and identification on computed tomography \(CT\) images](#), *Informatics in Medicine Unlocked*, co-authored by Dr. Karteek Pouri

Earth Sciences

[Integrating terrestrial and aquatic ecosystems to constrain estimates of land-atmosphere carbon exchange](#), *Nature Communications*, co-authored by Dr. Sue Ziegler

[Fronnd orientations with independent current indicators demonstrate the reclining rheotropic mode of life of several Ediacaran rangeomorph taxa](#), *Cambridge University Press*, co-authored by Daniel Pérez-Pinedo, Jenna Neville, Giovanni Pasinetti, Christopher McKean, and Drs. Rod Taylor and Duncan McIlroy

PUBLICATIONS

Ocean Sciences

Comparative Genomic Analysis of Virulent *Vibrio (Listonella) anguillarum* Serotypes Revealed Genetic Diversity and Genomic Signatures in the O-Antigen Biosynthesis Gene Cluster, *Microorganisms*, co-authored by Dr. Vimbai Irene Machimbirike, Ignacio Vasquez, Joy Chukwu-Osazuwa, Oluwatoyin Onireti, Cristopher Segovia, and Dr. Javier Santander

Role of Riboflavin Biosynthesis Gene Duplication and Transporter in *Aeromonas salmonicida* Virulence in Marine Teleost Fish, *Virulence*, co-authored by Hajarrooba Gnanagobal, Trung Cao, Ahmed Hossain, Ignacio Vasquez, Setu Chakraborty, Joy Chukwu-Osazuwa, Danny Boyce, and Dr. Javier Santander

Physics & Physical Oceanography

Contact Angle Studies on Porous Silicon: Evidence for Heterogeneous Wetting and Implications of Oxidation, *Silicon*, co-authored by Stephen Spencer, Christopher Deacon and Dr. Todd Andrews

Psychology

Experts' opinions on threats to Leach's Storm-Petrels (*Hydrobates leucorhous*) across their global range, *Avian Conservation and Ecology*, co-authored by Dr. William Montevecchi

High-contrast banners designed to deter seabirds from gillnets reduce target fish catch, *Marine Ornithology*, co-authored by Dr. William Montevecchi, Jessika Lamarre and Robert Blackmore

Evaluating the Efficacy of Oxytocin for Pain Management: An Updated Systematic Review and Meta-Analysis of Randomized Clinical Trials and Observational Studies, *Canadian Journal of Pain*, co-authored by Anastasia Mekhael, Drs. Jonathan Fawcett and Joshua Rash

FUNDING ANNOUNCEMENTS

Ocean Sciences

2022-23 MITACS, Lab2Market Program. Assessing market for marine yeasts in aquafeeds, brewing, baking, by-products, and pharmaceuticals Canadian industries. PI: Javier Santander; Co-PI: Joy Chukwu-Osazuwa; Total funds: CAD \$15,000.00

2022-27 FRANTIC-Research Council of Norway. Improving resistance of farmed Atlantic cod to francisellosis: interplay between host-pathogen interactions, environment, and genetics. PI: Anne Kettunen; Co-PI: Javier Santander; Total funds: CAD\$ 1,762,299.23

2022-23 Canadian Center for Fisheries and Innovation. Spotted Wolffish (*Anarhichas minor*) – Refining and Validating Best Practices for Juvenile Production Technologies and Initiating an Aquatic Animal Health Surveillance Program PI: Javier Santander; Co-PI: Danny Boyce, Knut Trellevik, Bjorn Apeland; Total funds: CAD \$304,719.90

2022-23 Canadian Center for Fisheries and Innovation. Cleaner Fish Health 2.0: Refinement and Validation of Lumpfish Resistant to Infectious Diseases and Polyvalent Vaccine. PI: Javier Santander; Co-PI: Danny Boyce, Andrew Swanson; Total funds: CAD \$117,250.00

PHOTO GALLERY

Select photos from the 2023 Scientific Endeavours in Academia Conference

