

Monthly Report to the Provost – Faculty of Science

The Faculty of Science (FoS) has the following to report for the month of **April 2023**:

Engaging Learners

Dr. Alida Janmaat, Biology Associate Professor wrote an article “A Bright but Stinky Sign of Spring: The Western Skunk Cabbage” for the Spring issue of NatureWILD, the magazine of NatureKIDS BC, a club for children and families who love to be outdoors. <https://naturekidsbc.ca/>

Dr. Lauren Erland, Director of Berry Horticulture Research joined the Canadian Journal of Plant Science as an Associate Editor. She further received funding from the BC Cranberry Marketing Commissions to start a study to understand the impact of warming in cranberry field using field based warming chambers, on which Agriculture Technology Department Head, **Dr. Renee Prasad**, is a collaborator.

Dr. Alan Reid, Associate Professor from Biology and **Dr. Lauren Erland** participated in the UFV Library’s first Science Café on March 22. <https://www.flickr.com/photos/ufv/albums/72177720306972835/with/52769413868/>.

Dr. Robin Endelman, Math & Stats Associate Professor and Science Rocks! Coordinator was successful in receiving a \$2,500 grant from the Canadian Mathematical Society to help support our Science Rocks Summer Camps. Registration for our Camps opened this month and are filling up quickly. <https://ufv.ca/science/science-in-the-community/science-rocks/>

The FoS hosted the Fraser Valley Regional Science Fair (FVRSF) on April 6, 2023. Students from K-12 from across the Fraser Valley competed for prizes and a chance to represent the Fraser Valley with Team BC at the Canada Wide Science Fair in Edmonton, Alberta next month. The four finalists are from Dasmesh Punjabi School, R.E. Mountain Secondary School (Langley), Chilliwack Secondary School, and W. J. Mouat Secondary School. On April 15, 2023, the FVRSF Awards Day began with our 4th Annual Science Fair Open House where we welcomed the participants and their friends and families to tour our science labs and take part in demonstrations hosted by some of our amazing UFV faculty and students. Special thanks to the UFV Organizing Committee: **Caroline Majeau**, **Janice Nagtegaal** and **Dr. Ian Affleck** from the FoS Dean’s Office and **Dr. Jake Spooner**, Chemistry Assistant Professor and FVRSF Chief Judge.

Participation was strong from Science students in the 2023 UFV Student Research Day held in person at Evered Hall on April 4, and several of them won awards. **Dr. Sharon Gillies’** student **Aysha McConkey** won the President’s award, **Dr. Mariano Mapili’s** student **Jamie Claire** won the Provost’s award, **Dr. Golfam Ghafourifar’s** student **Maor Arad** won the VP Student’s award, while **Drs. Lucy Lee** and **Justin Lee’s** student **Ryan Goldbach** won the AVP Research award. Three of the Deans awards also went to Science students. The Dean of Science award went to **Laura Bodel** who was supervised by Biology professor, **Dr. Greg Schmaltz**. The Dean of Applied and Technical studies award went to a team of Physics students supervised by **Dr. Lin Long** that included **Helen Davies** and four other students, and the Dean of Business and Computing award went to **Mehak Narag**, who was supervised by Math and Stats professor, **Dr. Lonlong Huang**.

Transforming Lives

Chemistry Associate Professor, **Dr. Golfam Ghafourifar’s** research student, **Maor Arad’s** abstract was accepted for the oral presentation at the Canadian Chemistry Conference and Exhibition (CSC 2023). He will be presenting in the New Horizons in Separations Science and Mass Spectrometry - From Fundamentals to Applications division.

On April 3, the Agriculture Technology Department held a year end/graduation celebration wishing their students who completed their agriculture programs all the best as they embark on their next journey.

Dr. Carin Bondar, Biology Adjunct Professor and SLUEC Sessional received a grant from the United Way to put on a 'Girls in STEM' workshop on June 3, 2023. The documentary, Carbon: an Unauthorized Biography, where Carin appeared explaining photosynthesis and respiration is currently nominated for best Science/Nature Documentary at the 2023 Canadian Screen awards. <https://www.academy.ca/2023/carbon-the-unauthorised-biography/>

Physics student **Catherine Laflamme** and Biology student **Manjot Benning** were the successful candidates for an all expenses paid trip to London, UK, to represent UFV at the 64th London International Youth Science Forum to be held in July.

Drs. Almaz Butaev and **Serhii Myroshnychenko** are the successful candidates for the two positions in the Department of Mathematics & Statistics that became available following recent faculty retirements. They will be joining UFV beginning July 1, 2023.

Building Community

Dr. Lauren Erland, Director of Berry Horticulture Research was invited to give a talk on Impacts of Climate Change on Plant Production Systems at the National Academy of Sciences Food Forum. The topic of the meeting was "Climate: Impact and solutions for nutrition, food safety, and the food supply chain". She shared some of the challenges facing berry producers in the Fraser Valley as well as some of her own past and ongoing research to understand how climate, management strategies and varietal selection can be leveraged to maintain sustainable and resilient plant production systems. She was the only Canadian speaker invited. <https://www.nationalacademies.org/our-work/food-forum>

The AGRI 327: Nursery Production & Propagation: Science & Practice class hosted another successful plant sale this month. It was followed by the Agriculture Technology Department Open House on April 13 and the department retreat on April 17.

Dr. Stefania Pizzirani, Associate Professor from SLUEC and her team of students hosted a table at the Chilliwack Rotary Climate Change Fair April 15-16. They joined over 30 other companies and organization. Included is a job fair and a number of speakers which included **Dr. Carin Bondar**, Biology Adjunct Professor and SLUEC Sessional, and **Elder Eddie Gardner**. <https://www.chilliwackrotary.com/rotary-climate-fair>

SLUEC faculty, **Dr. Mariano Mapili**, **Steve Marsh**, **Dr. Stefania Pizzirani** and two of their students, **Aiden Haagensen** and **Abbey Riddolls** presented to Dr. Dave Schaepe and others at the Sto:lo Research and Resource Management Centre. They presented on their research results from an ongoing project entitled "Forest Systems and Wellbeing" and are planning for continued research in this area.

Students from GEOG 252 (Quantitative methods in Geography) and GEOG 300U (Special Topics) led by **Dr. Afia Raja**, participated in the City Studio HUBBUB held at the Abbotsford City Hall April 11.

Biology Lab Instructor, **Pat Harrison**, recently received the honorary designation of Professor Emeritus for his valued contributions and dedication to UFV.

Sample List of Presentations/Publications (UFV student names underlined> by FoS personnel:

Marlétaz, F., de la Calle-Mustienes, E., Acemel, R.D., Navon, D. *et al.* The little skate genome and the evolutionary emergence of wing-like fins. *Nature* (2023). <https://doi.org/10.1038/s41586-023-05868-1>

Mohamed, H., Kim, G., Macphail, C., Bhuiyan, I., Sidhu, T., Emani, A., Huang, L, Sun, S.Z., Tyldesley, S. and Ko, J.J. 2023. Multicenter population-level analysis of systemic therapy use in metastatic or recurrent prostate cancer. Virtual Poster Presentation at *Canadian Association of Medical Oncologists (CAMO) 2023 Annual Scientific Meeting* on April 27, 2023.

Pizzirani, S., Newell, R., Glaros, A., Rahman, S., and Newman, L. 2003. Vertical Farming Innovation: Improving Food Security & Conserving Biodiversity. *Amplify* 36:3 <https://www.cutter.com/article/vertical-farming-innovation-improving-food-security-conserving-biodiversity>