

Monthly Report to the Provost – Faculty of Science

The Faculty of Science (FoS) has the following to report for the month of **November 2022**:

Engaging Learners

Biology Adjunct professor, **Dr. Carin Bondar**, has been involved in several speaking engagements throughout the month of November. She was invited to speak at the 'Beautiful You' event held at GW Secondary School in Chilliwack; co-hosted the science communication workshop with UFV West; and accepted an invitation to emcee the EnviroTech summit in Whistler next May. Bondar's Swamps and Bogs Class (BIO/GEOG 319) welcomed 7 elementary school classes from Central Elementary, Promontory, Strathcona and Little Mountain to their field site at the Great Blue Heron Reserve.

Dr. Lauren Erland, Director of Berry Horticulture Research, and her **BERRI Lab** <https://www.berrilab.com/> was featured in the Canadian Society of Plant Biologist's Fall Bulletin "New Faculty Feature" Issue 33: 13, Fall 2022. <https://cspb-scbv.ca/bulletin/>

Transforming Lives

Dr. Cherie Enns, Associate Professor from School of Land Use and Environmental Change (SLUEC), and her Queen Elizabeth Scholars (QES) from UFV's East African Internship Program are doing exciting work in Kenya. The QES Program aims to activate a community of young global leaders across Canada and the Commonwealth to create lasting impacts both at home and abroad. Read about the students and the work they are doing here: <https://ufvfoodsecurityinternship.ca/intern-testimonials/>

Dr. Enns was also the recipient of a Women RISE award [Women RISE | IDRC - International Development Research Centre](#) for almost 1 million dollars (CAD) in funding. This is a co-operative project between Kenya's Co-operative University led by Isaac Nyamongo and Dr. Enns as the Canadian Co-Applicant. The project is entitled "Catalyzing Women's Involvement in Post-Covid-19 Recovery through Agricultural Cooperatives in Kenya (WINRACK)"

UFV's Wildlife Protection Club (WPC) hosted a free showing on Nov 30, of the documentary film 'Toad People' which tells the story of families and communities across BC who are taking action to save the wildlife in their backyard, including conservation efforts right here in the Fraser Valley. Student **Molly Tilden**, President of WPC introduced the event to an audience of students, staff, faculty and public at large in B101. **Dr Carin Bondar** introduced the film, albeit virtually due to weather conditions, on how we can all pitch to transform not only human lives but also for wildlife.

Building Community

Math & Stats Associate Professor and Science Rocks Outreach Coordinator, **Dr. Robin Endelman**, joined a panel discussion hosted by the UFV Research Office on November 24 to discuss tips and strategies on developing community connections to initiate community projects with children. This hybrid event highlighted some of the work being done across campus, including Science Rocks! Summer Camp and the Super Science Club.

On November 19th **Dr. Stefania Pizzirani**, Assistant Professor from the SLUEC and Biology Adjunct Professor, **Dr. Carin Bondar**, in collaboration with Sustainable UFV, SLUEC Student Association, UFV English Department and the City of Chilliwack hosted the Clothing Exchange and Repair Fair, Sustainable Fashion event in Chilliwack.

Associate Professors from SLUEC, Steve Marsh and Dr. Mariano Mapili, were invited to give a presentation on earthquake and volcanic hazards to three sections of senior student of Imagine High in Chilliwack earlier this month.

Dean Lucy Lee was invited to Soongsil University in Seoul, Korea (<https://eng.ssu.ac.kr/>) on Nov 16. She met with their President and some of their administrative personnel, including the Dean of the Faculty of Natural Sciences, and the department heads of Mathematics, Statistics & Actuarial Sciences, Computer Science, Physics, and Biomedical Sciences. She gave a presentation entitled “Cross-Cultural Science Education in Canada” to a large audience of students, faculty, staff and public. Possibilities of international collaboration and student exchange were discussed.

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

Karunanayaka, R. and Tang, B. (2022) On the Existence and Constructions of Orthogonal Designs. *Annual Meeting of the Statistical Society of Canada*. (Presented virtually May 30, 2022).

Ku, K., Frey, C., Arad, M., and **Ghafourifar, G.** (2022) Development of novel enzyme immobilization methods employing formaldehyde or triethoxysilylbutyraldehyde to fabricate immobilized enzyme microreactors for peptide mapping *Anal. Methods*. 14:41, 4033-4154. <http://dx.doi.org/10.1039/D2AY00840H>

Qadri, S.M.T. and **Raja, A.** (2022) Impact of November 2021 Pacific Northwest Flood on the Lower Fraser Valley: Stories from Disaster to Revival. *2nd Mediterranean Geosciences Union Conference* (Online Nov 27-30, 2022, Marrakeck, Morocco).

Sentell, Z., **Spooner, J.**, **Weinberg, N.** (2022) Calculation of Molecular Volumes of Amino Acids. *Canadian Journal of Chemistry*. 100(8): 575-582, DOI: 10.1139/cjc-2021-0217

Weinberg, N., Edwards, E., Huber, L., Sentell, Z., **Spooner, J.** (2022) A Newtonian Algorithm for Constant Pressure Molecular Dynamics with Periodic Boundary Conditions. *Molecular Physics*. 120:10, DOI:10.1080/00268976.2022.2060145.