Monthly Report to the Provost – Faculty of Science

The Faculty of Science (FoS) has the following to report for the month of **December 2021**:

Engaging Learners

Dr. Stefania Pizzirani, Assistant Professor from the School of Land Use and Environmental Change (SLUEC) was invited to lecture at UBC's Applied Science Course for 2nd and 3rd year Engineering undergraduate students. The lecture topic: Coming to know. This term is used to describe the process of developing understanding in Indigenous Science. Her presentation title "A Heiltsuk-designed home: a story of process, protocol, and partners".

Biology Adjunct Professor and Sessional Instructor, **Dr. Carin Bondar** has had another busy month. She gave a daylong biology lesson to students at Central Elementary School in Chilliwack; filmed an episode of a new science series for Snapchat. The topic was keystone species where they used a life-sized Jenga game for the examples. She also filmed the next season of Strange Evidence for the Science Channel.

Drs. Kseniya Garaschuk and **Vanessa Radzimski**, Assistant Professors from the Department of Mathematics and Statistics assisted in organizing a session for the Canadian Mathematical Society's semi-annual conference "I don't write in math, I just do it: Emphasizing communication in mathematical practice". In addition, Kseniya and Vanessa presented at the event. See presentation below.

Transforming Lives

The Faculty of Science contributed \$5,000 to UFV's Esposito Family Centre for Innovation and Entrepreneurship (EFCIE) Innovation Grant for the STEM Stream. Application deadline is January 31, 2022.

Dr. Afia Raja, Assistant Professor from SLUEC and collaborators **Drs. Cherie Enns, Jennifer Hetherington**, and **Talha Qadri** also from SLUEC were successful in their SSHRC Partnership Engagement Grant application "Collaborative Community Planning through tactical urbanism for Mission Water Front Development" in the amount of \$24,723.

Ken Ku, 4th-year BSc student, was featured in a recent article in UFV Today. Having already earned a degree in photography and print making in the United States he recognized that his passion was in science and began his journey into the sciences. Ken talks about how working with Chemistry Professor, **Dr. Golfam Ghafourifar** helped him discover his research strengths. Read the full article: https://blogs.ufv.ca/blog/2021/12/ken-kus-journey-from-photography-to-formaldehyde/

Building Community

Students from **Dr. Mariano Mapili's** GEOG 357: Conservation Geography class participated in the CityStudio Virtual Hubbub #8. The challenge was: To explore how a site to be re-imagined from the perspectives of sustainability, green strategies, and site activation/optimization, and inclusive placemaking. The team of UFV students **Lisa Horton, Ramneek Poonia, Jeevan-Nicole Samra**, and **Jamie Claire** not only won the best Team Award but also the People's Choice Award for their project "Bringing Sustainability and Community to Our Infrastructure". https://drive.google.com/file/d/1zFaXqgRHn2lsiaDI9lfqYnszbtllq8Ai/view https://letstalkabbotsford.ca/citystudio-virtual-hubbub8-fall2021

Simran Gill from **Dr. Carin Bondar's** BIO 420: Methods in Science won the CityStudio Chilliwack Team Award for their project "Water Unsung Hero". The challenge was: When it comes to water access and sustainability, what are some of Chilliwack's biggest challenges? How can we inform the public about the importance of local aquifer management? Listen to the winning podcast here:

https://drive.google.com/file/d/1_fZtVLTMPlv0ryRFp_0K12NXly27d7Op/view

Associate Dean of Science, **Dr. Ian Affleck** and **Dr. Jonathan Hughes**, Director of SLUEC took part in the judging of the CityStudio Team Awards.

Dr. Cherie Enns, Associate Professor from SLUEC was invited to participate in the World Urban Pavilion's: Canada, Women and Urban SDGs earlier this month. The World Urban Pavilion (the Pavilion) is a collaborative initiative between the Government of Canada, UN-Habitat, Urban Economy Forum, and the Daniels Corporation.

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

Garaschuk, K. "Two sides of a coin." Canadian Mathematical Society Winter Meeting, Dec 2-7, 2021, online. https://www2.cms.math.ca/Events/winter21/abs/pdf/mme-kg.pdf

Qadri, T. "An Integrated Approach for Site Characterization to Understand Seismic Vulnerability of the Attock City, Pakistan." AGU 2021 Fall Meeting Dec 13-17, 2021, online.

Radzimski, V. and **Garaschuk, K.** "Learning Journals for Community and Communication." Canadian Mathematical Society Winter Meeting Dec 2-7, 2021, online. https://www2.cms.math.ca/Events/winter21/abs/pdf/ie-vr.pdf