Monthly Report to the Provost – Faculty of Science – December 2024

Engaging Learners

UN-Habitat - Cherie Enns

A. Duff, K. Garaschuk, L. Pacarynuk, "How do educators' reflections on problem-solving inform our understanding of problem solving" – presented at the 2024 Canadian Math Society Education meeting and at the Fields Math Education forum.

The publication K. Garaschuk (2022), Learning benefits of collaborative exams, Journal for Research and Practice in College Teaching, 7(1), p. 42--55 was featured in the SOTL section of the UFV Teaching and Learning Center webpage: https://www.ufv.ca/teaching-and-learning/scholarship-professional-development/

Transforming Lives

Indigenous Student Visits – On November 13, 166 Indigenous students in grades 11 and 12, and 30 support staff, from local school districts and on-reserve schools visited CEP campus for a chance to check out some of the programs in Science, Health Science, and Technology that run on that campus, to learn about the supports available in the Indigenous Student Centre, and to meet some of the enthusiastic and engaging faculty and staff behind these programs and services.

The event was a team effort, with contributions from Elders, staff, faculty, students and admin from the Indigenous Students Centre, Xwexwilmexwawt, Future Students Office, Student Wellness, Teaching and Learning, Advising, the Faculties of Science, Applied and Technical Studies, Health Sciences, and Education and Community Health and Development, the College of Arts, and UFV Facilities.

The event was made possible thanks in part to generous funding contributions from Xwexwilmexwawt, the Future Students Office, and the Provost's Office. Planning and coordination of the event was led by Leanne Joe (Teaching and Learning), Betty Peters (Director, Indigenous Student Centre) and Ian Affleck (Associate Dean of Science).

Attendees at the event were Indigenous students in grades 11 and 12 from Abbotsford School District, Chilliwack School District, Agassiz High School, Hope High School, Seabird Island School, Sts'ailes School, and Squiala School.

School Visit Photo Album

This is the second year that such an event has been hosted, with roughly half this number of guests attending Abbotsford campus in November 2023. We hope to secure it as an annual event moving forward.

Chemistry Lab Skills – On November 16, 48 local high school students visited UFV's Abbotsford campus to take part in the Art Last Memorial Chemistry Lab Skills competition. Art Last was a long-serving faculty member in the Chemistry Department at UFV, who coordinated an annual Chemistry Lab Skills competition for many years, until his retirement in 2005. There were 12 teams of 4 students from local high schools who competed in the all-day event completing two separate labs demonstrating their lab skill prowess. A magic show run by Faculty, Staff and student volunteers was put on at the end of the day. The top scoring three teams were awarded. <u>Photo Album</u>

The event was coordinated by Jackie Bryce, Leandra Chapman, Shawn Millar, Shawn Dyck, Aileen Ablog, Declan Roshea, Pedro Montoya-Pelaez and Grant Fritzke of the Chemistry Department, and Daylan Pritchard from the Biology Department with help from 17 student volunteers. Organizers hope to continue the competition as an annual event.

Building Community

Linus Chiang – teaching at Université Grenoble Alpes (Grenoble, France) from January to March as part of their international visiting scholar program. Will teach a part of their bioinorganic chemistry course, give two invited research seminars, and be actively participating in research projects based on our existing collaborations.

Golfam Ghafourifar - Two presentations in the 5th Annual Canadian National Proteomics Network Conference: *CNPN* 2024 in November.

- 1. Maor Arad my former student whom I am co-supervising his master at UBC on the topic of Multi-Omics Profiling of Equine Pituitary Pars Intermedia Dysfunction
- 2. Ronald Balagtas another member of my research group who has just graduated on the topic of Enzyme Entrapment within Hydrogel for Rapid Digestion in Bottom-Up Proteomic Workflows.

Their abstracts can be found here: https://cnpn.ca/wp-cnpn/wp-content/uploads/2024/11/Program-Abstracts.pdf

Sandra Gillespie - spoke at the annual meetings of both the Entomological society of BC (at UBC) and the Entomological society of Canada (in Quebec City). The title of the talk at both meetings was "Long-term patterns in pathogen prevalence an

d Bombus impatiens spread in the Fraser Valley, British Columbia."

Sandra Gillespie - joined the board of both societies. I am regional director for the BC society, which means I represent BC on the national society's board.

Sefania Pizzirani Presentations/Events:

- November 9 held the inaugural lwestel qe tótelexwtel sq'ep Gathering (related to the Genome BC research project). Using Sto:lo protocols and ceremony, we brought together several Sto:lo elders, agri-food industry members, Genome BC funders, and UFV researchers to discuss current agri-food technologies.
- November 13, represented PGES (alongside Daniel Iwama) and organized activities for the visiting Indigenous students at CEP campus
- November 18, presented a sustainable clothing activity and discussion at Sandy Hill Elementary school

- November 19-21, attended the Agricultural Excellence Conference in Abbotsford.
- November 19, I was a panel moderator for the "Sustainable Agriculture and the Pathways to Affordability in the Fraser Valley", Agricultural Excellence Conference, Abbotsford
- November 21, I presented "Ultra fast fashion to sustainable fashion: Separating fantasy from reality", City of Abbotsford 2024 Involve Symposium (invited workshop presenter)
- November 27, I presented "The Social Implications of Agri-Genomics", Genome Canada project conference, University of Guelph

List of Publications (UFV student names underlined)

Child Rights and Displacement in East Africa - Cherie Enns

Development of an Automated, Ultra-Rapid Bottom-Up Proteomics Workflow Utilizing Alginate-Based Hydrogels | Analytical Chemistry - Golfam Ghafourifar

A. Duff, **K. Garaschuk**, L. Pacarynuk "Teaching problem-solving using a systematic, deliverable-driven framework", CMS Notes, 56(5), 2024.

K. Garaschuk, "Pre-pandemic versus post-pandemic: how do the students actually compare?", CMS Notes, 56(4), 2024.

<u>UFV Alumni Paper</u>: Mo, M; Sabb, D; LoBello, L; Chambers, K; Kershaw, K; Welles, C; et al.; Arrigo, C (2024). Drosophila kikkawai ortholog of the D. melanogaster Muller D element ash1. microPublication Biology. 10.17912/micropub.biology.001322