

Monthly Report to the Provost – Faculty of Science

The Faculty of Science (FoS) has the following to report for **March 2024**:

Engaging Learners

Dr. Cherie Enns, Planning, Geography, and Environmental Studies hosted a roundtable ‘Indigenous Knowledge + One Health’ on February 26 with Ramson Sinya Karmushu to discuss the topic of land, health, and Indigenous knowledge. Ramson Sinya Karmushu, Indigenous Movement for Peace Advancement and Conflict Transformation – IMPACT Kenya, led the conversation and shared thought-provoking insights from an Indigenous One Health perspective.

Michelle Morier, Agriculture Technology, represented Agriculture Technology at the Leap into Trades Open House on February 29. This event hosted community members to take a look at the educational opportunities at UFV.

Dr. Robin Endelman, Math & Stats, has organized four Super Science Clubs with local elementary and middle schools. Each club is hosted by two UFV students providing hands-on science demonstrations, activities, and investigations for the students. Each club runs for 4 – 5 weeks.

Dr. Afia Raja and **Dr. Mariano Mapili**, Planning, Geography, and Environmental Studies attended and presented at the Western Division of the Canadian Association of Geographers (WDCAG) on March 15 – 16. In addition, nine PGES students attended the conference, presenting their research.

The PGES Department hosted an “Urban Planning Launch Event” on March 5. The event hosted Planners from the City of Abbotsford and the Fraser Valley Regional District. Their presence enriched the gathering, allowing attendees to engage firsthand with professionals in the field and gain valuable insights into urban planning as a career path.

Transforming Lives

Building Community

Dr. Lauren Erland was announced as Canada Research Chair, Tier 2 at UFV. Dr. Erland, Director of Berry Horticulture Research and now CRC also received funding from the Canadian Foundation for Innovation (CFI) for The Berry Environmental Resilience Research & Innovation (BERRI) lab. Renovations for the BERRI lab have already begun in Q Building at the CEP Campus.

Dr. Stefania Pizzirani, Planning, Geography, and Environmental Studies, is again co-organizing the March for Sustainability event, a series of collaborative events that address sustainability topics such as climate change, biodiversity, EDI, and gender diversity. PGES will be hosting five events for this series, such as Early Earth Day March 14, and Clothes the Loop: Deduce, Renew, Restyle on March 26.

As part of the March for Sustainability events, **Dr. Renee Prasad**, Agriculture Technology, and a few Agriculture students hosted a Know Your Roots which showcased information about locally grown root vegetables and the role they can play in a nutritious, economical, and environmentally conscious diet.

As part of the March for Sustainability events, **Dr. Sandra Gillespie** and **Dr. Renee Prasad** joined the CEP Library’s UFV Science Café series and hosted Sustainability: Plants, Pests, and Pollinators.

Dr. Kseniya Garaschuk, Math & Stats, completed her first year as the Chair of the Equity, Diversity, and Inclusiveness Committee of the Canadian Mathematical Society (CMS). This included overseeing the national committee and implementing several initiatives for the semi-annual CMS meetings. Initiatives included creating and deploying the demographics EDI survey to collect data and inform decision-making, advocating for free childcare to be available during conferences, implementing conference nametags to include pronouns, establishing the availability of all plenary talks in both official languages, providing all public talks with a slide deck that includes a land acknowledgment and accessibility features of the conference site. They are currently in the process of adding EDI considerations to conference session proposals and will be revising the CMS meeting organizer handbook to include EDI guidelines.

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

Butaev A., Dafni G., Local vanishing mean oscillation, Bulletin de la Société Mathématique de France 151 (3), 541-564 DOI: 10.24033/bsmf.2876

Liu, Y., Z. Gao, J. Jiao, Md. W. Asad, **M. Hitch**, and D. Li (2024) Optimizing a Rock-Like Material Mix Design for Enhancing the Mining Fracture Monitoring Accuracy of Borehole Resistivity Method. *Rock Mechanics and Rock Engineering*. <https://doi.org/10.1007/s00603-024-03778-w> (SJR Q1)

Glaros, A., Pizzirani, S., Newell, R., & **Newman L.** (2024). "Planning Considerations for Vertical Agriculture", UFV Food and Agriculture Institute, Abbotsford, Canada.

Glaros, A., Newell, R., Benyam, A., **Pizzirani, S.**, & **Newman L.** (2024). *Vertical agriculture's potential implications for food system resilience: outcomes of focus groups in the Fraser Valley, British Columbia*, *Ecology and Society*, 29(1), <https://doi.org/10.5751/ES-14547-290112>

Garaschuk, K., MacGillivray, G., "Exploring Mathematics through the Game of Cop and Robber", *Crux Mathematicorum*, 50 (1), p. 25-35.

Sohail, J., Mehmood, S., Jahandad, S., Ehsan, M., Abdelrahman, K., Ali, A., **Qadri, S. M. T.**, and Fnais M. S., *Geochemical Evaluation of Paleocene Source Rocks in the Kohat Sub-Basin, Pakistan*, *ACS Omega* 2024 9 (12), 14123-14141 DOI: 10.1021/acsomega.3c09457