

Monthly Report to the Provost – Faculty of Science

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

Engaging Learners

On Thursday, Feb 17, 2022 Drs. **Stan Manu** (Math & Stats), **Shaun Sun** (Math & Stats), **Afia Raja** (SLUEC), and **Golfam Ghafourifar** (Chemistry) took part in UFV's Virtual Faculty Micro-Lecture event. They each provided a 'snapshot' of their research in just two minutes!

Our science outreach programs are back in full force. On Feb 12, 2022 **Dr. Robin Endelman**, Math & Stats Associate Professor and Science Outreach Coordinator along with her Super Science Club team of UFV science students, **Rhien Hare**, **Connor Frey**, **Sukhanjote Mann**, **Balsimran Singh Pannu**, and **Lourdes María Torres Goñi** attended a Science World training session in Vancouver. The students are trained by Science World to deliver fun and informative after-school science activities to children in the Fraser Valley <https://www.ufv.ca/science/science-in-the-community/super-science-club/>. The list of interested schools from Chilliwack and Abbotsford continues to grow. **Rhien Hare**, UFV Biology major and Science Outreach Organizer, has been busy with school and community visits. This month she met with the Agassiz Girl Guides and has scheduled upcoming visits for March with the Chilliwack Girl Guides, Greendale Elementary School (primary, elementary, and middle school) and the Agassiz Pathfinders.

Dr. Ben Vanderlei, Math and Stats Department Head, **Dr. Ian Affleck**, FoS Associate Dean, and **Margret Bollerup**, Math and Stats Department Assistant have been busy organizing the BC Secondary Schools Math Contest which is scheduled to run in person in May after being on hiatus for the past 2 years due to the pandemic. The preliminary round will be written at schools in early April and the final round will be written at the UFV campus on May 6. <https://www.ufv.ca/math/contests/bc-secondary-schools-math-contest/>

Registration for the Fraser Valley Regional Science Fair <https://www.ufv.ca/science-fair/> is now open. We are preparing for an in-person science fair to be held on April 7 at UFV. **Dr. Ian Affleck**, **Caroline Majeau** and **Janice Nagtegaal** from the Office of the Dean have been busy confirming award sponsorship and connecting with schools in the Fraser Valley. We are happy to report that all our award sponsors and students are thrilled to be back after a 2-year hiatus due to the pandemic.

Transforming Lives

Dr. Stefania Pizzirani, Assistant Professor from the School of Land Use and Environmental Change (SLUEC), along with other members from across campus have been busy organizing a series of events for *March for Sustainability*. March for Sustainability is a series of five free events that will take place throughout the month of March. <https://blogs.ufv.ca/science/2022/02/16/ufv-march-for-sustainability-events-register-today/>

Dr. Lucy Lee was interviewed for The Scientist in an article entitled "Cultured Meat Advances Toward the Market" on Feb 14, 2022 Cultured Meat Advances Toward the Market | TS Digest | The Scientist (the-scientist.com) <https://www.the-scientist.com/bio-business/cultured-meat-advances-toward-the-market-69616>

Dr. Lenore Newman was featured in CBC's Quirks & Quarks on Feb 25, 2022 on the issue of "Feeding the Future" <https://www.cbc.ca/radio/quirks/quirks-quarks-feeding-the-future-1.6364707>

Dr. Lucy Lee, Dean of the Faculty of Science, has created a scholarship for Aboriginal students named: The Faculty of Science Annual Entrance Scholarship for Aboriginal Students. The \$1000 annual award and will be available Spring 2023.

Building Community

Dr. Stefania Pizzirani from SLUEC was an invited panel speaker February 15 for the BC Campus, HyFlex in Action Conference. The discussion, “The Human Elements of HyFlex”, examined the human aspects of HyFlex learning by bringing together students and instructors to share their lived experiences with teaching and learning in a HyFlex environment. <https://bccampus.ca/event/hyflex-in-action-the-good-the-bad-the-ugly-event/>

Dr. Lucy Lee was appointed to the Biological Systems and Functions Selection Panel for the Natural Sciences and Engineering Research Council of Canada https://www.nserc-crsng.gc.ca/NSERC-CRSNG/committees-comites/Biological-Biologiques_eng.asp and this month, she was involved in the adjudication process for the 2022 Discovery grants in the Evaluation Group 1502.

In the summer of 2021, the Matsqui First Nation Technical Team requested GIS training for their newly created River Steward Program. **Dr. Mariano Mapili**, Associate Professor from SLUEC, delivered the last of six GIS micro-courses this month. The first three GIS micro-courses were conducted in November-December 2021 based on the ArcGIS Pro software. Although the schedule was affected by the historic flooding in Abbotsford, the Matsqui River Stewards were able to finish their GIS micro-courses in digital mapping, creation and editing of GIS data, and geoprocessing and analysis. The Matsqui River Stewards carried out their last three GIS micro-courses in January-February based on ArcGIS Online platform, with the schedule being affected by the Omicron variant. The last three GIS micro-courses focused on ArcGIS Online web mapping and their applications including ArcGIS Online Survey 123, ArcGIS Online Field maps, ArcGIS Online Dashboard and ArcGIS Online StoryMaps.

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

Hakimi, M.H., Varfolomeev, M., **Qadri, S.M.T.** et al. 2022. Overview of the Late Jurassic Madbi-Sab'atayn petroleum system in the Marib Concession, northwestern Sab'atayn Basin (Yemen): hydrocarbon from source to trapping. *Arab J Geosci* 15: 319. <https://doi.org/10.1007/s12517-022-09576-4>

Yaghmaei-Sabegh, S., Pavel, F., Shahvar, M., and **Qadri, S.M.T.** 2022. Empirical frequency content models based on intermediate-depth earthquake ground-motions. *Soil Dynamics and Earthquake Engineering* 155: 107173. <https://doi.org/10.1016/j.soildyn.2022.107173>