

Monthly Report to the Provost – Faculty of Science

The Faculty of Science has the following to report for the month of November 2019:

Dean's Office:

- On November 29 UFV Science Communicator, **Dr. Carin Bondar**, directed a faculty wide music-video production on the Climate Crisis. The production involved undergraduate students **Abdul Aziz-Abdul Ghafoor, Sasha Tuttle, Nafeel Arshad, Jide Arojojoye, Emily Reid, Kaitlin James** and **Megan Simpson**. Faculty members appearing in the video are **Cherie Enns, Stefania Pizzirani, Michelle Rhodes, Olav Lian, Jonathan Hughes, Afia Raja, Ian Affleck, Kseniya Garaschuk, Vanessa Radzimski, Alan Reid, Tim Cooper, Linus Chiang, Pedro Montoya-Pelaez** and of course, **Deans Lucy Lee** and **Jacqueline Nolte** along with **UFV President Joanne MacLean** just to name a few.
- The newly formed UFV Women in Engineering, Science and Technology (UFV-WEST) Student Group hosted their first Career Panel event on November 28. The panelists included: **Angela Bedard**, Genetic Counsellor, BC Cancer Agency (Biology Adjunct Faculty); **Dr. Carin Bondar**, UFV Science Communicator, Biologist with a Twist (also a Biology Adjunct Faculty); **Emily Prachnau** (UFV Alumnus), Software Developer; Eryne Croquet, Agrologists and Geoscientist, Statlu Environmental Consulting; and Kara Jefford, Manager of Transportation & Drainage, City of Chilliwack.
- **Dr. Carin Bondar** welcomed the UFV community to the film screening of 'Heart of the Fraser' on November 22, 2019. The event was hosted by the Watershed Watch Salmon Society, NERV Productions and the **Faculty of Science** at UFV. The documentary calls attention to the continuing destruction of a culturally-rich ecosystem in the lower Fraser River; the gravel reach from Hope to Mission, British Columbia.
- **Dr. Lucy Lee** gave presentations to Abbotsford Learning Plus on November 5 and to the Abbotsford-Matsqui Rotary Club on November 7. She was also an external reviewer for the Biology Program at Vancouver Island University where she visited for November 21 & 22. She also participated as an Academic Representative to the BC Food Security Task Force Academic Roundtable held November 28, whose membership includes **Dr. Lenore Newman** as a member of the Provincial Task Force.
- **Caroline Majeau** and **Janice Nagtegaal** have secured close to \$2000 in additional funds for the Science Fair awards.

Biology Department:

- **Dr. Alan Reid** continues his Bloedel Conservatory Docent Training Program at VanDusen Botanical Gardens. He hosted two talks for the Agassiz Garden Club and an ongoing set of presentations will resume in January 2020. He continues to offer his walks and talks around campus for indigenous students on food plants in IPK 100 with Julia Shoker and Rebekah Bracket.

Chemistry Department:

- **Aileen Ablog**, chemistry technician, has a new book being released this coming June 2020. This is her second book in a series of Ketogenic diet cookbooks <https://www.chapters.indigo.ca/en-ca/books/contributor/author/aileen-ablog/> and the new cookbook is entitled Keto BBQ. In the past few months she has treated us with samples of the various sauces which were finger-licking good. This is

quite the talent for our chemistry technician who can combine many different food ingredients to come up with superb chemical reactions for the palate.

Mathematics & Statistics Department:

- UFV BSc graduate, **Duncan Dillon** (Major in Math and Physics), now a UFV DAC student, gave a talk on November 19th about his work-study experience with **Dr. Shaun Sun** this past summer. Together, they published a R package “cvmdisc” in CRAN that implements Cramer-von Mises Statistics for resting fit to discrete and grouped data distributions.

School of Land Use and Environmental Change (SoLUEC)

- **Dr. Afia Zubair Raja's** GEOG 360 Community Planning Class will be showcasing their Abbotsford Bike Share projects at the CityStudio HUBBUB event on December 3, 2019 at Abbotsford City Hall.
- UFV BSc geography student, **Cassandra Shewchuk**, began her honours thesis under **Dr. Olav Lian's** supervision this semester. The title of her thesis is: "Detecting porphyry Cu ± Mo ± Au mineralization using major oxides and pathfinder elements in subglacial till near the Guichon Creek batholith, southcentral BC". It reports on research in economic geology done in collaboration with scientists at the BC Geological Survey (Victoria, BC). Cassandra's research was a great success, and she is now putting the final touches on a manuscript based on her honours thesis that will appear in a peer-reviewed government journal. Cassandra is currently working as an NSERC Undergraduate Student Research Award (USRA) student UFV's Luminescence Dating Laboratory

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

1. **Enns, C.** and Otieno, S. 2019. Can city food policy address the food security needs of immigrant and refugee children? Lessons from Nairobi, Kenya and Dar Es Salaam, Tanzania. Hungry Cities Partnership, New Directions in South-South Migration Workshop, Waterloo, ON Nov 19-20.
2. **Fotouhi, A.R.** 2019. Bayesian analysis of dynamic binary data: A simulation study and application to economic index SP. arXiv.org (<http://arxiv.org/abs/1910.02501>)
3. **Kuczynska, A.** 2019. *Intermediate Algebra and Trigonometry*. Victoria, B.C.: BCcampus. Accessed from <https://open.bccampus.ca/browse-our-collection/find-open-textbooks/>
4. **Lee, L.E.J.** 2019. Saving the Ocean Fish: Growing Fish Meat in a Lab. Abbotsford Learning Plus. Nov. 5, Abbotsford, BC. <https://learningplus.ca/calendar/15-saving-ocean-fish-growing-fish-meat-lab-lucy-lee-ufv?occurrenceID=121>
5. **Lian, O.B.**, Wolfe, S.A., Neudorf, C.M., Hickin, A.S., and Gingerich, T.B. 2019. Optical dating of eolian landforms using quartz in British Columbia and western Alberta – challenges and opportunities. 2019 GSA Annual Meeting September 22-25, Phoenix, USA. Program with Abstracts, 237-6 <https://gsa.confex.com/gsa/2019AM/meetingapp.cgi/Session/47459>.
6. Neudorf, C.M., **Lian, O.B.**, McIntosh, P.D., and Augustinus, P.C. 2019. Time constraints on the oldest record of aeolian deposition in lowland and mid-latitude Tasmania. *Quaternary Geochronology*, 53: 101005.
7. **Reid, A.** (2019, December). Plants. *The Jewel atop Vancouver: 50 Years at the Bloedel Conservatory*, 20-31.
8. Rice J.M.*, Ross, M., Paulen, R.C, Kelley, S.E., Briner, J.P., Neudorf, C.M., and **Lian, O.B.** 2019. Refining the flow chronology and subglacial dynamics of the migrating ancestral Labrador Divide of the Laurentide Ice Sheet with age constraints on deglaciation. *Journal of Quaternary Science*, 34: 519–535.
9. Wolfe, S.A., and **Lian, O.B.** 2019. Timing, rates and geomorphic controls on Holocene eolian deposition in the eastern Canadian Rockies, Canada. 2019 GSA Annual Meeting October 22-25, Phoenix, USA. Program with Abstracts, 188-3 <https://gsa.confex.com/gsa/2019AM/meetingapp.cgi/Session/48598>.