University Divisional Report – Faculty of Science, October 2019

The Faculty of Science (FoS) has the following to report:

Dean’s Office:
The FoS sent one of our outstanding Biology students, Isabelle St-Martin, to the London International Youth Science Forum (LIYSF) in London, UK from July 24 – August 7, 2019. She joined 500 other leading young scientists from more than 70 participating countries. Isabelle continued her adventure by extending her stay to attend the CERN Summer Student Programme in Geneva, Switzerland. Her activities can be read on the FoS blog at: https://blogs.ufv.ca/science/category/trips/science-in-london/

Our Science Rocks (SR) 2019 Summer Camps finished up August 16TH. It was our most successful year yet! Over the 6 week period, we welcomed 148 campers from grades 4-7. They enjoyed week long science based demonstrations and activities. The SR Camp Coordinator, Dr. Robin Endelman, and science faculty members Dr. Derek Harnett, Dr. Alan Reid, Dr. Ian Affleck, Dr. Pedro Montoya-Pelaez and Biology Lab Technician Avril Alfred supervised a camp each. The Science Rocks Team Leaders who taught each of the camps were UFV students, Korissa Heibner, Raina Goerzen, Nathan Enns, and Philbert Um. Special thanks to UFV Librarian, Martin Warkentin for introducing 3-D Printing to our Abbotsford Campers; and to Agriculture Professor, Dr. Renee Prasad for her time spent with our campers during our Chilliwack Camps. The Canadian Mathematical Society, Abbotsford Community Foundation, Rotary Club of Chilliwack, and the Optimist Club of Chilliwack generously donated funds to assist with the costs of the camps. Williams Engineering, BC Greenhouse Growers Association and the Clearbrook Kiwanis Club sponsored a total of 4 kids to attend a week-long camp.

https://www.youtube.com/watch?v=uSt3UVnna-U

Dr. Carin Bondar joined the faculty in May as resident science communicator and adjunct biology faculty. Bondar brings a wealth of experience and accolades to her position at UFV. She has written three popular science books, hosted science-based television shows (Discovery, The Science Channel, National Geographic, Animal Planet and Netflix) and has written/hosted online science series with over 120,000,000 views. She is working with members of the Faculty of Science to create media that showcases our researchers, our students and our partnerships within the community. Her current projects include: a science faculty magazine, a pamphlet for the new geography school, a suite of promotional videos for our science summer camps (Science Rocks), a short film on soil sampling on Sumas Mountain, and a faculty wide music-video production on the Climate Crisis. The latter production is also supported by Student Services, the VP and the communications team, and involves undergraduate students Abdul Aziz-Abdul Ghafoor, Sasha Tuttle, Nafeel Arshad, Jide Arojoye, Emily Reid, Kaitlin James and Megan Simpson.
The FoS took part in UFV’s New Student Orientation with the Faculty of Science Welcome Session. Chemistry Professor, **Dr. Pedro Montoya-Pelaez** welcomed over 170 incoming science students. Our event was kicked off with an icebreaker game of Classmate Bingo! **Dr. Lucy Lee**, Dean of the FoS welcomed the students and wished them well on their new university adventures. Each of our science departments were well represented and were on hand to promote their program and visit with the students to help make their transition to university life a little easier.

Over 110 UFV science students, faculty and staff came together for the 12th Annual Science Social on September 26th at Evered Hall. Science Student Clubs and Associations were on hand to promote their groups while visiting with classmates, enjoying pizza, music, and games put on Campus Rec. Thanks to the event organizers, **Caroline Majeau** and **Janice Nagtegaal** from the FoS Dean’s Office and **Rilla Apostolakis** and **Karen Cooper** from the Advising Office.

**Biology:**

On May 10, 2019 a group of 23 UFV students with Biology Professors **Allan Arndt**, **Jennifer Barrett**, **James Bedard**, **Sandra Gillespie**, **Carlos Leon**, **Alan Reid**, **Greg Schmaltz** and Biology Lab Technician, **Avril Alfred** returned from the 2-week field school in Tofino where they explored the Wild West coast of Vancouver Island while earning credits towards their degree.

**Dr. Alan Reid** received Vancouver Granville’s 2019 “ Unsung Hero” Award for going above and beyond to serve the community. The award was presented to him by the Honourable Jody Wilson-Raybould, Member of Parliament for Vancouver Granville in Ottawa in June 2019. He was nominated by the Vancouver Botanical Gardens Association for his 17+ years of service. “Alan has provided botanical and interpretation training and inspiration to hundreds of volunteers, enabling them to in turn educate and inspire hundreds and thousands of visitors to the Gardens.”
Over the summer, **Dr. Alan Reid** took our Science Rocks! campers on a tour of UFV’s campus and opened their eyes to the beautiful flora found in our backyard. [https://www.youtube.com/watch?v=8TsaXMrAzxl](https://www.youtube.com/watch?v=8TsaXMrAzxl)


On August 6, **Drs. Lucy Lee** and **Alan Reid** along with recent graduate **Eryn Braley** made an interactive science outreach presentation at Shxwha:y village in Chilliwack. Tony Reymer and elder Eddie Gardner hosted us as we explore ways to indigenize the sciences.

**Chemistry**

**Dr. Pedro Montoya-Pelaez** has officially joined the Department of Chemistry as a tenure-track Assistant Professor after many years of teaching as a sessional and as a Limited Term Appointment (LTA) Faculty. Pedro’s field of interest is in Organic chemistry and this position is a replacement for the vacancy left with **Dr. Godwin Choy**’s retirement. **Dr. Jacob Spooner** also joined Chemistry this term as an Adjunct Faculty as well as an LTA while **Dr. Noham Weinberg** is on Sabbatical Leave.

**Dr. Linus Chiang** supervised 9 students this summer on various research projects including **Dustin Hurrell** as an NSERC-USRA student. **Dr. Golfam Ghafourifar** also had a busy summer with student researchers. Linus and Golfam along with a large delegation of students from both labs as well as from **Dr. Noham Weinberg**’s lab, participated at the 102nd meeting of the Canadian Chemistry Conference and Exhibition in Quebec City in early June. See details in [https://blogs.ufv.ca/science/2019/06/13/ufv-students-shine-at-the-102nd-canadian-chemistry-conference-and-exhibition/](https://blogs.ufv.ca/science/2019/06/13/ufv-students-shine-at-the-102nd-canadian-chemistry-conference-and-exhibition/)
Dr. Ghafourifar’s student, Kaeden Teindl (pictured below left), won first prize in the undergraduate student poster competition, Analytical Chemistry Division, while Anmol Sharma from the Chiang Lab (pictured below right), also won an award for his poster in the Inorganic Chemistry Division of the Chemical Institute of Canada.

Math & Stats
Drs. Cynthia Loten, Vanessa Radzimski and their Math Mania Team consisting of 20 student volunteers hosted their first event on October 2\textsuperscript{nd} at Centennial Park Elementary, Abbotsford.

A new statistician joined the department August 1, Dr. Ruwan Karunanayaka, as Assistant Professor on tenure-track. Ruwan had been a sessional for the last year and his expertise will add to the complement of statisticians bringing their numbers to six. Dr. Ian Affleck, successfully hosted over 100 students from around the region from grades 6-12, for another round of Math Contest. Many faculty and staff from the Math & Stats department volunteered their time to ensure that this annual competition revolved successfully once again. This year, the competition was held at CEP and news about this event can be read in https://blogs.ufv.ca/science/2019/05/07/ufv-hosts-the-final-round-of-the-annual-bc-secondary-schools-math-contest/

Drs. Stan Manu and Erik Talvila begun their sabbaticals on July 1 and Dr. David Chu will be on sabbatical beginning January 2020.

School of Land Use and Environmental Change
In spring of this year, Geography and the Environment joined the Faculty of Science as a newly established School of Agriculture, Geography and Environment (SAGE) with Dr. Greg Schlitt acting as an interim Director. During the summer months, the School met to plot their mission, vision and values, and recently changed their name to the School of Land Use and Environmental Change (SoLUEC) to better reflect these values. Following a search for a permanent Director, Dr. Jonathan Hughes was selected as the successful candidate, and he will begin as the inaugural Director of SoLUEC in January 2020 for a 5 year term.

Dr. Lenore Newman, Canada Research Chair in Food Security and the Environment and Director of the Food and Agriculture Institute at UFV, has been appointed by the government of British Columbia to a newly created Food Security Task Force. This group will explore and advise on technology and innovations aimed at strengthening the agriculture sector in BC, growing the economy, and boosting farm productivity.
In September, Dr. Newman was interviewed by the National Public Radio in the USA in advance of the publication of her next book, “Lost Feast: Culinary and the Future of Food”.

Dr. Cherie Enns continues to be active with the Queen Elizabeth Scholars (QES) program and various students have benefitted from the exchange opportunities that this program provided. See https://blogs.ufv.ca/blog/2019/06/ufv-queen-elizabeth-scholars-in-spotlight/

Geographers also welcomed two new hires to fill past vacancies from prior vacancies. Drs. Afia Raja and Stefania Pizzirani began as Assistant Professors on tenure-track Aug 1, and have been active participants within SoLUEC, FoS, UFV and the Community at large. Both faculty members are heavily involved with indigenous projects as well as with City Studio projects.

Dr. Michelle Rhodes continues to be active with the District of Mission on Stave West planning process as liaison and coordinator for educational opportunities as well as service and research projects.