

## Monthly Report to the Provost – Faculty of Science

The Faculty of Science (FoS) has the following to report for the month of **May 2021**:

### Dean's Office:

Each year the Dean of Science in consultation with the science department heads decides recipients of our Faculty of Science AAA Excellence Awards. This year we are pleased to announce that **Dr. Stefania Pizzirani** and **Dr. Afia Raja** from SLUEC are co-recipients of this year's Awesome Achievement Award for overall excellence in academic endeavours. **Dr. Linus Chiang** received the Terrific Teaching Award; **Dr. James Bedard** from Biology received the Remarkable Research; **Dr. Tim Cooper** from Physics for Outstanding Outreach; **Dr. Ian Affleck** from Math and Stats for Superb Service Academic; and **Margret Bollerup** from Math and Stats for Superb Service Staff.

<https://blogs.ufv.ca/science/2021/05/31/congratulations-to-the-2021-faculty-of-science-aaa-award-recipients/>

As UFV will continue to hold the summer semester in an online format only, our *Science Rocks!* summer camps had to be cancelled again for 2021. However, to keep science alive in the community, we are planning a number of one-day events to be held throughout the year for kids from grades 4-7 to come onto the Abbotsford and Chilliwack campus and work in a university lab. These will be called *Science Rocks! Days* <https://www.ufv.ca/science/science-in-the-community/science-rocks/science-rocks-days/>. **Dr. Robin Endelman**, Science Rocks Coordinator, and her team will be hiring 2 student program developers for the summer to plan these open house events. On May 20, Robin received a \$5,000 grant cheque from the Abbotsford Community Foundation to help support our *Science Rocks! Days*. <https://abbotsfordcf.org/grants/smart-and-caring-community-grants/>

The Fraser Valley Regional Science Fair <https://www.ufv.ca/science-fair/> teamed up with other regions across the province to take part in the BC/Yukon Virtual Science Fair held in April. Four of our participants were chosen to advance to the virtual Canada-Wide Science Fair held May 17-21 in Ottawa. <https://youthscience.ca/science-fairs/cwsf/ottawa-2021/>. Raipartap Curry, Grade 7 student from Dasmesh Punjabi School, won bronze for his project "Smart Parking".

**Dr. Lucy Lee** participated in the 60th Canadian Society of Zoologists meeting (May 18-21) virtually judging Post-doc presentations and being a panel member in a session set for students to balance life and academia. Dr. Lee also participated in the annual meeting of the Canadian Council of Deans of Science and has volunteered to run the 2022 meeting at UFV in hybrid format.

### Biology Department:

**Dr. Sharon Gillies** and her research student, **Kristina Brunner** were successful in their Innovation Grant application to the Esposito Family Centre for Innovation and Entrepreneurship (EFCIE). Their team's proposal to promote public awareness regarding micro-plastic pollution was awarded \$3,000.

**Dr. Sandra Gillespie**, along with other great bee scientists, were interviewed by Science World about bees for World Bees Day on May 20, 2021. <https://www.scienceworld.ca/stories/bees-are-small-but-mighty/>

**Kennedy Zwarych**, supervised by **Dr. Sandra Gillespie**, won a UFV Undergraduate Research Award for her research project, "Pathogen Prevalence in Wild Bumblebees (*Bombus* spp.) across the Fraser Valley".

**Dr. Justin Lee** participated in the 60th meeting of the Canadian Society of Zoologists and was a panel member in the student session discussing effective means to landing jobs in academia.

Adjunct Biology Professor, **Dr. Carin Bondar** hosted a couple of science communication workshops this month. The first one was held at Vedder Middle School in Chilliwack and the other in Passaic County, New Jersey. The Passaic County workshop is part of a larger initiative supported by a federal grant from the Department of Education in the US. She will be doing more these workshops this summer for high school seniors and early college-level students at Passaic County Community College.

### **Chemistry Department**

**Dr. Golfam Ghafourifar's** research student, **Connor Frey**, presented their research in poster format at the Canadian National Proteomic Network (CNP) on May 7, 2021 <https://cnpn.ca/cnfn2021/>. Connor's research project "Peptide Mapping Employing Pepsin and Triethoxysilylbutyraldehyde: Optimizing Immobilization Parameters via Capillary Electrophoresis and Mass Spectrometric Analysis" has also won him a 2021 UFV Undergraduate Research Excellence (URE) Award. **Dr. Ghafourifar's** student research team of **Connor Frey** and **Ken Ku** were also successful in their application to the Esposito Family Centre for Innovation & Entrepreneurship for their research. They will also receive \$3000.00 to investigate personalized medicine and proteomics.

### **Mathematics & Statistics Department**

**Dr. Kseniya Garaschuk** was awarded the 2021 Graham Wright Award for Distinguished Service from the Canadian Mathematic Society (CMS). <https://cms.math.ca/news-item/dr-kseniya-garaschuk-to-receive-the-2021-graham-wright-award-for-distinguished-service/>. **Dr. Garaschuk**, along with **Carin Bondar** and student **Isabelle St. Martin** were also successful in the Esposito Family Centre sponsored grant for innovation, to enhance women participation in STEM field.

The core members of the Mathematics Equation SQEP' Team at UFV, **Drs. Kseniya Garaschuk, Vanessa Radzimski, Stan Manu** and UFV Education Librarian **Heather Compeau**, joined forces this year with a math-ed team at UBC to organize the 2021 Indigenous Math Symposium. The two-day zoom event was a huge success.

<https://indigenous.mathnetwork.educ.ubc.ca/symposiums/2020-symposium/>

**Drs. Shaun Sun** and **Longlong Huang** are working with Dr. Jenny Ko and her medical student Christine Wang from UBC on a cervical cancer research project. Part of the results were presented at the UBC Obstetrics and Gynaecology 21<sup>st</sup> Annual Academic Day. They were awarded Best Poster in the Medical Student Category.

### **School of Land Use and Environmental Change (SLUEC)**

**Dr. Afia Raja** conducted two CityStudio projects this term. The Best Team Award was won by **Olivia Jackson** from GEOG 252 class for her project "An Analysis of the Mental Health Needs Pre-COVID19 and Post-COVID19 with the use of HelpSeeker Data"; and **James Deering, Jordan Sandhu, and Lauren Best** from GEOG 344 class for their project "A Way Forward". <https://letstalkabbotsford.ca/citystudio-virtual-hubbub-winter2021>

SLUEC students, **Vanessa Brewer** and **Nicola Ferguson (Bangay)**, supervised by **Dr. Olav Lian** won a UFV Undergraduate Research Award for their research project, "Luminescence dating of ancient environments, Hudson Bay Lowlands".

**Dr. Cherie Enns** has several virtual East African Internships with the International Forestry Research (CIFOR) and the Shastri Internship project in progress.

**Dr. Mariano Mapili** produced a report for the National Indigenous Fire Safety Council for establishing regional centres with the aid of GIS analysis in March of 2021. He also produced a report in August 2020 for the City of Abbotsford detailing Starling Management in Blueberry Farms of Abbotsford.

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

**Pizzirani, S.** (2021) *In a nutshell- a community conversation discussing fast fashion*. MCC Webinar, Abbotsford, BC

**Raja, A.Z.** (2021) *Community needs assessment pre and post COVID-19: A comparison of HelpSeeker data collected pre and post COVID-19 for Abbotsford Community*. WDCAG. University of Lethbridge (virtual)

Wang, C., Lester, B., **Huang, L., Sun, S.**, and Ko, J. (submitted) *Survival outcomes in cervical cancer: what factors affect recurrence?* European Society for Medical Oncology, 2021 Congress.