University Divisional Report – Faculty of Science, May 2019

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

Dean's Office:

UFV hosted the Fraser Valley Regional Science Fair (FVRSF) April 3-6, 2019 [http://bit.ly/FVRSF2019]. Students from K-12 from 18 schools within the Fraser Valley competed for prizes and a chance to represent



Raina Goerzen, Lise Nehring, Dr. Nathan Bialas, Aisa Dobie & Shayne Oberhoffner – hosted the Biology Lab Tours during the Open House

Team BC at the <u>Canada Wide</u> <u>Science Fair</u> (CWSF). Thanks to the UFV Organizing Committee **Caroline Majeau** and Janice **Nagtegaal** from the FoS Dean's Office; **Myra Hughes**



Science Fair attendees were treated to Chemistry experiments during the Chem Lab Tours portion of the Open House

and **Drs. Jason Thomas**, Chief Judge and **Linus Chiang**, Awards Ceremony Emcee and project photographer from Chemistry; and Open House organizer **Dr. Nathan Bialas**, Biology. Awards Day began with our 2nd Annual Science Fair Open House. Over 100

people joined us for our lab tours and demonstrations which were hosted by some of our amazing Science faculty and students. Geography, Science Rocks! and the Super Science Club had some great hands on activities for everyone. We were thrilled to send 4 students (3 projects) to the CWSF held in Fredericton, New Brunswick May 11-18. The team Sarah Choi and Neelah Hassanzadeh from R.E. Mountain Secondary School, Langley brought home silver in their division.



Winners of the 2019 FVRSF that participated at the CWSF with their chaperones



Vohn Wise, President, Rotary Club and Dr. Robin Endelman

Registration for our Science Rocks! (SR)

summer camps is now open and over half of our seats are filled. We are going into our 11th year and it wouldn't be possible without the dedication of our SR team and sponsors. **Dr. Robin Endelman**, SR Coordinator and Math & Stats Professor, was presented with a \$2,500 cheque from the Rotary Club of Chilliwack. She has also been invited to the Abbotsford Community Foundation meeting later this month and will be presented with a cheque for \$2,500. SR has received a \$2,000 grant from the Canadian Mathematical Society to help

support the SR Abbotsford and Chilliwack math camps. We also want to recognize the generous

donations from our other 2019 sponsors: BC Greenhouse Growers, Clearbrook Kiwanis Club Abbotsford, Optimist Club of Chilliwack and Williams Engineering Canada – Abbotsford Division.

Dr. Robin Endelman, and SR leaders **Korissa Heibner** and **Nathan Enns** attended the McCammon Elementary School Family Gathering held in Chilliwack on May 1, 2019. They gave away door prizes, SR t-shirts and a complementary spot in a camp of their choice.

Biology technician **Jenny Hamilton**, contributed to "louden singletree" a writing and visual art publication from UFV, and her work is featured in issue 11:68-69.



Nathan Enns & Korissa Heibner Family Gathering Event

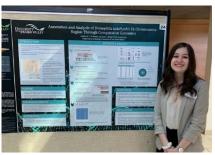


Dr. Golfam Ghafourifar, Chemistry

Due to the weather conditions the UFV Faculty Micro-Lectures Series was rescheduled to April 2. **Dr. Stephen Thomas** from Biology presented on Pioneering Microbes while Chemistry Professor, **Dr. Golfam Ghafourifar** presented on Peptide mapping using IMERs.

Once again, UFV will be sending one student to London, UK, this summer (all expenses paid) to attend the London International Youth Science Forum

(LIYSF). Our finalists were **Connor Frey**, **Rebecca Gourde**, **Jordan Penner**, and **Isabelle St-Martin**. On March 28 each finalist presented on a research topic of their choice to our selection panel. The successful candidate who will represent UFV is Biology student, **Isabelle St-Martin**. She will join 500 other leading young scientists from more than 70 participating countries this July!



Isabelle St-Martin, Biology Student

Pat Harrison, Biology Lab Instructor and Chair of the Centre for Sustainability invited **Dieter Geesing** from UFV's Faculty of Applied and Technical Studies to present at the FoS greenSPEAK Seminar Series held on March 27. His presentation focused on how we maintain a healthy climate and healthy soils in the Fraser Valley. The Seminar Series continued on April 4 with John Vissers, a member of the Abbotsford Environmental Advisory Committee, he presented on the future of public transit in the Fraser Valley.

Biology:

Biology Professors, Drs. Allan Arndt, James Bedard, Sandra Gillespie, Carlos Leon, Allan Reid, as well as Jennifer Barrett, and Lab Technician Avril Alfred along with 24 biology students spent 2 weeks in Tofino exploring the wild west coast of Vancouver Island while earning credits towards their degree.



Veronica Kobes, 3rd year UFV Biology student appeared in the April 24 issue of Varsity Letters –



Tofino Field School 2019

with Howard Tsumura "UFV's Veronica Kobes: The walk-on who refused to walk away speaks to her dual dreams of a career with Cascades hoops and a med school future". In addition to holding a 4.3 grade-point

average, she's a research assistant with Dean **Dr. Lucy Lee**, and a rising fourth-year forward with the Cascades' women's basketball team. <u>http://bit.ly/2JGjAzJ</u>

On March 30, Biology Professor, **Dr. Nathan Bialas** along with a number of UFV Biology students attended the Annual Undergraduate Research Conference held at the University of British Columbia Okanagan Campus. Students who presented were: **Eryn Braley, Cassandra Friesen, Brayden Griffiths, Brenna Hay, Ajeet Singh Klaer, Ajdin Masic, Shayne Oberhoffner, Isabelle St-Martin, Mark Stephens**, and **Ceilidh** Welch.



Valley Fest was celebrated March 11-16 across the UFV Campus in Abbotsford. As part of this event, Biology Professor, **Dr. Alan Reid** hosted two guided lunchtime walking tours of the Abbotsford campus.

Chemistry

The Chemistry department opened their doors to some eager scientists. On April 23, students from MEI threw on their lab coats and took part in some chemistry experiments with Lab Instructor, **Grant Fritzke** and Lab Tech, **Aileen Ablog**. Students from South Poplar Elementary School had the opportunity to hang out at UFV for the afternoon with **Dr. Cory Beshara**, Chemistry Department Head. They enjoyed a pizza lunch and then headed to the Chemistry lab for some demonstrations with help from **Dr. Pedro Montoya-Pelaez** and **Aileen Ablog**.



Dr. Cory Beshara with students from South Poplar Elementary School, Abbotsford

Chemistry Lab Technician, **Aileen Ablog** hosted a book signing for her "Ketogenic Pressure Cooker" cookbook on March 16, 2019 Coles Bookstore in Chilliwack.

SAGE

As of April 1, 2019 UFV Geography and the Environment became part of the Faculty of Science as part of the newly approved School of Agriculture, Geography and Environment (SAGE). The school whose name may still change, is currently under the interim directorship of **Dr. Greg Schlitt**, Associate Professor of Math & Stats, who is leading the implementation of this school within FoS.



Steve Marsh at Stoney Creek, Abbotsford

Steve Marsh, Associate Professor in Geography and his research student, **Donovan Toews**, hosted a Jane's Walk on May 5 with exploring Stoney Creek. The topic of the walk was the health and threats to the local water courses. **Dr. Cherie Enns**, yes! she successfully defended her PhD last term and is busy as always. She continues coordinating the Queen Elizabeth Scholars (QES) program where UFV is one of 20 universities receiving funding. Four students will depart for Kenya

with the QES funding and two scholars from Kenya have just arrived to UFV for an international internship.

Dr. Lenore Newman can add a new book to her list, "Lost Feast: Culinary Extinction and the Future of Food". It will be available October 8, 2019 and can be pre-ordered on Amazon.ca.

Math & Stats

The Annual BC Secondary Schools Math Contest, organized by **Dr. Ian Affleck** and many volunteers from the Math & Stats department, was held at the Chilliwack Campus on May 3, 2019. Over 100 students competed for prizes and UFV tuition waivers.

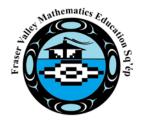
47 Rick Hansen Secondary School dual-credit students are getting a taste of university. They have signed up for STAT 106 this May-June which is being taught by **Drs. Longlong Huang** and **Ruwan Karunanayaka**.



BC Secondary Schools Math Contest

The inaugural *Fraser Valley Mathematics Education Sq'ep* was held at the Chilliwack Campus Gathering Place on February 22. This one-day event brought together about 70 participants which included local teachers,

UFV math faculty, TEP faculty, TEP students, and MATH 105 students who shared ideas, examples, resources, teaching practices and research activities that "weave" Indigenous knowledge and world views of knowing and connecting with mathematical learning. **Drs. Stan Manu, Kseniya Garaschuk, Vanessa Radzimski** were part of the steering committee that brought this event to fruition. Next year's event is now being planned thanks to a FIT grant and assistance from the Math &



Stats faculty as well as from the office of the Senior Advisor on Indigenous Affairs. The Official Logo (above) for the annual *Fraser Valley Mathematics Education* Sq'ép was designed by a local indigenous artist, Michael Russel.

The Math and Stats Centre has hired a DAC Co-op student, **Nooshin Lary**, to work in the centre this summer. She will be helping students and doing some analysis of centre usage data.

Dr. David Chu, through a work study grant, and the Career Centre have jointly hired a DAC Co-op student to do stats research this summer.



Math Mania at the Family Gathering Event

Math Mania was invited to attend the McCammon Elementary School Family Gathering held in Chilliwack on May 1. Dr. **Cindy Loten, Karin Loots** and two student volunteers took their math fun to the event. The final Math Mania of the year was held at Auguston Traditional Elementary School, Abbotsford on May 1⁵. **Cindy Loten** and 10 faculty and student volunteers held an evening of fun math activities for parents and students in the community.

The Math and Stat Centres were open until midnight in Abbotsford and 10:00 PM in Chilliwack as part of the Long Night Against Procrastination event held on March 6 and 7. Thanks to our

instructors Anna Kuczynska, Erik Talvila, Ruwan Karunanayaka, and students Kennedy Zwarych, Tanner Boos, and Aaron Kornelson for making this possible.