

## University Divisional Report – Faculty of Science, September 22, 2017

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

### Dean's Office:

The FoS celebrated convocation awarding 80+ Bachelor of Science degrees, 15 Engineering Physics diplomas and our first Bachelor of Agriculture Science degree. **Darryl Wilson**, BSc graduate and Chemistry Major received the Governor General's silver medal award. **Miranda Louwerse** also a BSc Graduate and Chemistry Major received the FoS Dean's Medal.



**Dr. Lucy Lee**, Dean of the FoS began her administrative leave August 15, 2017. She is currently traveling in northern Europe working on both research project and UFV internationalization initiatives. **Dr. Greg Schlitt** has joined the Dean's Office as FoS Acting Dean from August 1, 2017 – August 31, 2018.



*Perrin, Tessa & other Canadians who attended LIYSF 2017*

The FoS sent 2 exceptional science students, **Perrin Waldock** and **Tessa Webb**, to the London International Youth Science Forum (LIYSF) in London, UK from July 26-August 9, 2017. They joined 500 other leading young scientists from more than 70 participating countries. Perrin and Tessa's activities can be read in the FoS blog articles at <https://blogs.ufv.ca/science/category/trips/science-in-london/>

The Science Rocks 2017 Camp finished up on August 18<sup>th</sup>. Over the 6 weeks, 114 campers from grades 4-7 enjoyed week long science based demonstrations and activities. The Science Rocks Camp Coordinator, **Robin Endelman**, and science faculty members **Dr. Kseniya Garaschuk**, **Dr. Alan Reid**, **Dr. Cory Beshara**, **Dr. Derek Harnett** and **Dr. Pedro Montoya-Pelaez**



supervised a camp each. The Science Rocks Team Leaders who attended each of the camps were UFV students, **Rebecca Robertson**, **Marlee Fisher** and **Ceilidh Welch**. This year, Science Rocks received a generous donation from the Canadian Mathematical Society to assist with the cost of the camp. The BC Greenhouse Growers Association and the Clearbrook Kiwanis Club each sponsored a child this year.



Dr. Gwen Point, UFV Chancellor and Stó:lō leader, mentor, and cultural advisor has been invited to present at the FoS Dean's Seminar Series on Thursday, September 28<sup>th</sup> from 1:30-2:30 pm. Her presentation will present First Nation's perspective on Canada's 150. Following Dr. Point's presentation the FoS will be holding its 10<sup>th</sup> Annual Science Social Event where we showcase our Science Clubs and Associations. This is a great opportunity for students to visit with other science students as well as the science faculty and staff. **Dr. Greg Schmaltz** will be our emcee for this event.

A number of science labs were upgraded over the summer to meet increased demand of regulatory standards, to support research and to refresh the tired face of old millwork. Upgrades included

- New laboratory benches and cabinets
- Enhanced student learning center
- Improved air quality and temperature controls
- LED lighting
- Lighting and equipment controls
- Emergency power to support critical laboratory systems
- Increased electrical distribution to support laboratory equipment
- Provisions for the installation of technology advanced laboratory equipment
- General architectural refreshes which include painting, ceiling and flooring replacements

The Centre for Environment Sustainability (CES) continues to be active in the UFV community with their constant presence at events such as the Welcome Back Barbecue and New Student Orientation. They rolled out the new waste stations at the beginning of the fall semester which now include four separate bins for composting, mixed recyclables, refundable containers, and landfill items.

Their kick off meeting was held on September 21, 2017. They discussed their plans for the upcoming year which include battery recycling, Sweater Week, residence energy efficiency just to name a few things.

Green Party Leader, Elizabeth May, presented to a large group in Evered Hall on September 12<sup>th</sup> as part of the CES greenSPEAK series.



*Elizabeth May  
Green Party Leader of Canada*

## Biology:

Biology Professor, **Dr. Greg Schmaltz** has returned from his sabbatical; while **Christine Dalton** and **Dr. Stephen Thomas** have just begun theirs. The department welcomed a new faculty member, **Dr. Sandra Gillespie** on August 1<sup>st</sup>.



This year's Biology Field School was held in Tofino, BC from May 19-30, 2017. The registration response for this course was so remarkable that a second one was offered. Biology Professors **Dr. Allan Arndt**, **Dr. Nathan Bialas**, **Dr. Alan Reid** and Lab Technician **Avril Alfred** along with 24 upper level science students discovered the Clayoquot Biosphere in May. In July, the second wave of students explored the wild, west coast of Vancouver Island with Biology Professors **Dr. Allan Arndt**, **Dr. Greg Schmaltz**, **Dr. Steve Thomas**, **Dr. Carlos Leon Guevara** and Geography Professor **Dr. Jonathan Hughes**. The field schools offer a great opportunity for teaching, research and experiential learning not only for students but faculty as well.



**Dr. Lucy Lee** has received a 5 year NSERC grant (\$160000) to support her work on development of fish cell lines for use in ecotoxicology and fish health. Her work supports ongoing student researchers **Veronica Kobes** and **Tessa Webb**.

**Dr. James Bedard** continues his collaborative work on the Genomic Education Partnership working with students **Eryn Braley**, **Joel Goshulak**, **Zac Sentell** and **Mark Stephens** on gene annotation in Drosophila species.

### Chemistry:

Professor **Dr. Cory Beshara** replaced **Dr. David Fenske** as the Department Head of Chemistry in August.

Chemistry Lab Technician, **Aileen Ablog** (pictured right) recently published her new book "Ketogenic Pressure Cooker: 100 Quick and Easy Recipes for Delicious Nutrient-Packed Low Carb Meals".



### Math & Stats:

Math Professor, **Dr. Ian Affleck** received the prestigious UFV Teaching Award of Excellence for 2016-2017. **Margret Bollerup** joined the Math and Stats Department as the new Department Assistant replacing **Pat Cruickshanks** who retired the end of May after many years of service at UFV. The department also welcomed new Assistant Professor **Dr. Longlong Huang** August 1<sup>st</sup>.

**Cynthia Loten** and the Math Mania Team are ramping up for another year. Their first event this year is being held on October 4, 2017 at Gordon Greenwood Elementary School in Langley, BC.

Visiting scholar **Dr. Li Ting** from Ningxia University is working with new statistics faculty member **Dr. Shaun Sun** on probabilistic portfolio selection models, among other projects.

### Physics & Engineering:

**Dr. Derek Harnett** has received a \$75000, 5-year NSERC grant to support his work on quantum chromodynamics. This past summer his research group supported student **Steven Esau** on a project investigating the use of advanced numerical integration software to compute quantum chromodynamics Laplace sum-rules. Steven will be presenting a poster and possibly a talk at the Canadian Undergraduate Physics Conference in October.

**Dr. Lin Long** and the Department of Physics welcomed Dr. Kikai Liu from the Centre for Autonomous Systems from the University of Technology Sydney, Australia. He presented on current applications of robotics.

**Dr. Tim Cooper** and **Dr. Lin Long** attended a Robotic and Automation in Singapore this past summer, towards professional development in support of UFV's Mechatronics program.

**Dr. Cooper** was invited to speak at School District 33's Professional Development Day where he gave a talk on climate change. That opened other opportunities and he has since been able to give talks to four high school classes.