

# Department of Biology Newsletter

Friday, November 10, 2017

UNIVERSITY OF VICTORIA

Lucianne Marshall Biology Graduate Student representative at INNOVATION.ca

## Ocean Networks Canada and Foundation Canada for Innovation

Ocean Networks Canada's CEO Kate Moran hosted a visit from the new President and VP of the Canadian Foundation for Innovation (CFI), Dr. Roseann O'Reilly Runte and Pierre Normand along with the VP of research at UVic, Dr. David Castle. Biology Student Lucianne Marshall (MSc candidate in the Varela lab) was invited to participate in the meeting, as she is working alongside Ocean Networks Canada, to discuss some of her on-going work with automated cable observatories in the Arctic in parallel with Ocean Networks Canada's presentation of their current and future ocean research.



Photo (courtesy of Oceans Networks Canada)  
left-right: David Castle, Vice President Research, University of Victoria;  
Pierre Normand, Vice-President, External Relations and Communications, CFI; Kate Moran, President and CEO Ocean Networks Canada; Roseann O'Reilly Runte, CEO and President, CFI; and UVic Biology post graduate student Lucianne Marshall

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## Upcoming Seminars. Everyone Welcome! 2017-2018 Series

### Forest Biology



**Dr. Jen Walker**  
Victoria, BC

"Functional Drivers of Ectomycorrhizal Fungal Community Structure"

Wed, November 22, 2017  
at 2:30 pm in CUN 146

### Forest Biology



**Dr. Lacey Samuels**  
Department of Botany, UBC

"TBA"

Wed, November 29, 2017  
at 2:30 pm in CUN 146

### Biology

**Dr. Lisa Reynolds**  
Department of Biochemistry and Microbiology, UVic

"Modulation of host immunity by intestinal helminths and the bacterial microbiota"

Friday, December 1, 2017  
at 3:30 pm in MSB 150

### Biology

**Dr. Cara Haney**  
Department of Microbiology and Immunology, UBC

"Plant-associated microbiota evade host immunity to promote plant growth and disease resistance"

Friday, December 8, 2017  
at 3:30 pm in MSB 150

## Calendar

### Important Dates:

**Monday–Wednesday Nov 13-15**

**Tuesday and Wednesday Nov 14&15**

**Wednesday, November 15**

**Thursday, November 30**

**Friday, December 1**

Reading Break (Except Faculty of Law)

Fall Convocation

Faculty of Graduate Studies deadline to apply to graduate Spring Convocation (students completing in the Fall term only)

Last day of classes in the first term for Faculty of Law

Senate meets. Last day of classes in first term except

Faculty of Law and Faculty of Human and Social

Development.

National Day of Remembrance and Action on Violence

Against Women. Classes and exams cancelled from 11:30 am—12:30 pm



## Biology Announcements

### Biology Publications

Sethuramanujam S, Yao X, deRosenroll G, Briggman KL, Field GD, Awatramani GB.

“Silent” NMDA Synapses Enhance Motion Sensitivity in a Mature Retinal Circuit

Journal: Neuron

Date of Publication: October 26, 2017

DOI: <http://dx.doi.org/10.1016/j.neuron.2017.09.058>

[http://www.cell.com/neuron/fulltext/S0896-6273\(17\)30927-3](http://www.cell.com/neuron/fulltext/S0896-6273(17)30927-3)

### Biology TA Postings

The TA postings for the Winter session 2018 are available on the Biology website:

[Job Opportunities for Lab Instructors](#)

The closing date for the applications is Sunday, November 19, 2017.

## CO-OP Online Career Fair

Online Career Fair for International Students

November 16, 2017 9:00 am to 4:00 pm



Chat online with employers recruiting for diverse skills sets. Learn about full-time, part-time and co-op opportunities. Participate online—attend the fair at school, the library or even at home!

Register early at [UVic Co-op Career Online Fair](#)



If you have stories or announcements that would like to share for the Biology newsletter, please email Chantal Laliberté at [biology@uvic.ca](mailto:biology@uvic.ca) or Laura Alcaraz-Sehn at [bioclerk@uvic.ca](mailto:bioclerk@uvic.ca).

# Biology Graduate Student Symposium

## The 29th Annual Biology Graduate Symposium

The annual Biology Graduate Symposium will be held on November 14 and 15, 2017 in the David Strong Building. This event provides an opportunity for UVic faculty, students, researchers from other organizations and interested members of the public to learn about the wide variety of research projects being conducted by Biology graduate students.

Students will present research from diverse fields including Marine Biology, Forest Biology, Ecology & Evolution, Neuroscience and Cell & Molecular Biology. Free admission. Refreshments provided.

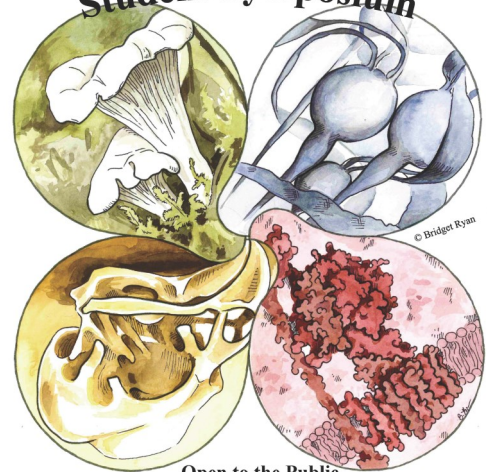
### List of presentations

Tuesday November 14, 2017				
Time	Chair	Name	Supervisor	Title
8:45-9:00 Coffee				
9:00	Dr. B. Hawkins	Opening Remarks		
9:05		Graeme Keais	Dr. S. Perlman	Maintenance of an ancient selfish X chromosome in a mushroom-feeding <i>Drosophila</i> species
9:20		Caitlin Curtis	Dr. S. Perlman	The molecular basis of an extraordinary sex-ratio distortion in booklice
9:35		David Minkley	Dr. B. Koop	Expansion of repeated DNA has differentially shaped the genomes of salmonids
9:50		Nova Hanson	Dr. L. Page	Development and evolution of a derived feeding system in <i>Amphisp. columbiana</i>
10:05-10:25 Coffee				
10:25		Gerry Gourlay	Dr. P. Constabel & Dr. B. Hawkins	Can condensed tannins act as <i>in vivo</i> antioxidants and protect poplar against oxidative stress
10:40		Kennedy Bortong	Dr. B. Hawkins & Dr. P. Constabel	Seasonal variation and wounding response in foliar Oregon in red alder ( <i>Alnus rubra</i> Bong.)
10:55		Jessica Wyatt	Dr. J. Ehling	Assessing severity of Swiss Needle Cast in a British Columbia Douglas-fir breeding population
11:10		Marie Vance	Dr. P. von Aderkas & Dr. B. Hawkins	Assessing range-wide genetic structure in subalpine larch ( <i>Larix lyallii</i> )
11:25		Yurika Carrington	Dr. J. Ehling & Dr. P. Constabel	The functions of quinone dehydrogenase genes in plants
11:40-12:40 Lunch				
12:40		Kieran Cox	Dr. F. Juanes	Intertidal resource use over millennia alters marine biodiversity
12:55		Morgan Black	Dr. F. Juanes	The effects of First Nation's clam gardens on fish and mobile invertebrate communities
13:10		Plata Marques	Dr. R. El-Sabaawi	Effects of urbanization on guppy life history traits
13:25		Therese Frauendorf	Dr. R. El-Sabaawi	Climate change and exotic species affect tropical stream nitrogen dynamics
13:40		Danielle Clair	Dr. J. Baum	Symbiotic diversity and coral resilience during an extreme ocean warming event
13:55-14:15 Coffee				
14:15		Jacob Weil	Dr. F. Juanes	Fine-scale variability in the energy density of prey for juvenile Chinook salmon
14:30		Monique Raap	Dr. B. Koop & Dr. H. Gurney-Smith	Impacts of habitat alteration and microplastic contamination on shellfish physiology
14:45		Malcolm Cowan	Dr. W. Hintz	Summer mortality of Pacific oysters in Baynes Sound
15:00		Lia Chailour	Dr. J. Baum	Evaluating the use of estuarine habitats by fish communities in the Fraser River estuary
15:15		Jennifer Magel	Dr. J. Baum	Impacts of mass coral bleaching events on coral reef structural complexity
15:30-15:45 Coffee				
15:45		Haewon Shin	Dr. S. Perlman	Interactions between microbiota composition and parasite infections in wild flies
16:00		Eric Rondela	Dr. B. Koop	Genomic diversity in rainbow trout
16:15		Cameron Freshwater	Dr. F. Juanes & Dr. M. Trudel	Individual variation and population-specific strategies shape migration phenologies
16:30		Will Dupud	Dr. F. Juanes	Northern anchovy in the Salish Sea
16:45		Garth Gerventon	Dr. J. Dower & Dr. S. Dudas	Microplastics in BC bivalves

Wednesday November 15, 2017				
Time	Chair	Name	Supervisor	Title
8:45-9:00 Coffee				
9:00		Michael Minkley	Dr. P. Walter & Dr. R. Nashmi	Systemic biomarkers of disease burden in neurodegenerative disorders
9:15		Rhea Ashmead	Dr. F. Choy	Purification of human recombinant Naglu and uptake studies with MPS IIIB fibroblasts
9:30		Laure Hanson	Dr. G. Awatramani	Silent synapses in the mature DS ganglion cells in the mouse retina
9:45		Anastasia Litke	Dr. R. Chow	Investigating the pathogenicity of VSX2 P247R and its role in corneal dystrophies
10:00-10:25 Coffee				
10:25		Amanda McLaughlin	Dr. J. Taylor	Fine scale correlations in coupled retinal ganglion cells
10:40		Fernando Ferhoshmand	Dr. K. Delaney	Long term cortical plasticity in male Rett mice model
10:55		Chloe Christensen	Dr. F. Choy	Gene-editing of <i>NAGLU</i> mutations in mucopolysaccharidosis IIIB patient-derived iPSCs
11:10		Bridget Ryan	Dr. R. Chow	MicroRNA regulation of Pax6 expression
11:25-13:00 Lunch				
POSTER SESSION (see below)				
13:00		Kyle Beer	Dr. T. Lacourse	Peatland carbon accumulation over the last 10,000 yr on central Vancouver Island
13:15		Matthew Adeleye	Dr. T. Lacourse	Changes in forest composition on central Vancouver Island over the last 14,000 years
13:30		Rande Kanne	Dr. G. Allen	The phylogenetic relationships and phylogeographic patterns of Garry oak
13:45		Jillian McAllister	Dr. P. Gregory	Seasonal movements and hibernation ecology of common gartersnakes
14:00-14:25 Coffee				
14:25		Amy Teffer	Dr. F. Juanes & Dr. S. Hinch	Relationships among stressors and infections affect salmon survival and migration success
14:40		Geoffrey Osgood	Dr. J. Baum & M. McCord	Shark community composition and abundance in a South African warm-temperate bay
14:55		Mauricio Carrasquilla	Dr. F. Juanes	Yelloweye and Quillback association with benthic habitat
15:10		Rhonda Reidy	Dr. F. Juanes & Dr. L. Cowen	Investigating the foraging ecology of humpback whales in British Columbia
15:25		Dr. D. Varela	Closing Remarks	

Wednesday November 15, 2017				
Time	Name	Supervisor	Poster session	Title
11:30-12:15				
1	Juan Aldana	Dr. B. Hawkins & Dr. J. Russell		Histological, chemical and gene expression aspects of the resistance to CLB in <i>Thuja</i> spp.
2	Geoff deRosier	Dr. G. Awatramani		Context-dependent scaling by NMDARs in direction-selective ganglion cells
3	Katie Harms	Dr. L. Page		Developmental modularity of the foregut in a gastropod mollusc: <i>Evalea tenuisculpta</i>
4	Dawei Ma	Dr. P. Constabel		Characterization of (-)-condensed tannin and flavonoid MYB transcription factors in poplar
5	Luci Marshall	Dr. D. Varela		Investigating the meltdown in the coastal Arctic: phytoplankton and environmental dynamics
6	Deb Wertman	Dr. S. Perlman & Dr. K. Bleiker		Photosensitivity in developing mountain pine beetle ( <i>Dendroctonus ponderosae</i> )

## The University of Victoria 29th Annual Biology Graduate Student Symposium



Open to the Public  
Free admission

November 14<sup>th</sup> & 15<sup>th</sup>, 2017 • 9:00 am – 5:00 pm  
David Strong Building • Room C103

## Announcements

**United Way Greater Victoria Events**  
Show your support for United Way at these UVic events:

Book Sale—ongoing daily  
Bookstore Foyer

Holiday Artisan Market—November 21, 10:00 am to 4:00 pm  
University Centre

Holiday Artisan Market—November 21, 10:00 am to 4:00 pm  
University Centre

[See all United Way events](#)

**Café Scientifique**

The Café Scientifique series is an informal series of talks given in a relaxed setting such as a café. These talks are designed to engage the public in learning about recent research in science. The talks, which are given by experts in the field, provide an opportunity to stimulate discussion around some of the most exciting topics in modern science.

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Dr. Rachel Boschen, Department of Biology—November 21  
 “All that glitters is not gold: deep-sea mining and untold biological wealth”

Dr. Olav Krigolson, School of Exercise Science, Physical and Health Education—  
November 28

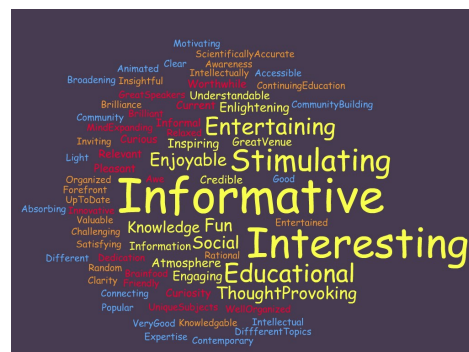
## “How we learn: Insights from Neuroscience Research”

Location: Hermann's Jazz Club, 753 View Street

Start time: 6:30 pm

Doors open at 4:30 pm. A UVic representative will be available at 5:45 pm.

For more information visit [Centre for Biomedical Research](#)



## UVic Women in Science

## Women in Science Symposium

November 30, 2017

10:00 am to 4:00 pm

Medical Sciences Building

As one of the many steps towards implementing our initiative, the 2017 UVic WiS STEM research symposium will provide an opportunity for women from different STEM fields to hone their presentations skills, connect with one another through their passion for science, and engage with the greater Victoria community to highlight the contributions of women to STEM fields here at UVic. It will feature a few key note presentations, as well as poster presentations from mainly graduate and undergraduate students at UVic.



For more information about the symposium, contact Lauren McMillan at: [lmcmilla@uvic.ca](mailto:lmcmilla@uvic.ca) or [communication.uvic.wis@gmail.com](mailto:communication.uvic.wis@gmail.com)

Visit: [UVic Women in Science](#)



## Victoria Forum

### Ideas for a better world

Canada @150. Promoting Diversity and Inclusion. November 17– 19, 2017

The University of Victoria and Global Affairs Canada are hosting the inaugural Victoria forum on November 17-19, bringing together Canadian and international participants to discuss diversity and inclusion in the 21st century.

In these divisive times, with the emergence of populist agendas worldwide, in the face of declining trust in our key institutions, there is a need to change the channel and focus on the benefits of diversity and inclusion. The Victoria forum is about crafting inclusive spaces and developing innovative solutions to address current environmental, economic, and social challenges, and chart a way towards a more inclusive world.

Over 400 participants and more than 3 dynamic speakers from Canada and around the world and engage in the dialogue in over 25 unique sessions. Cultural exhibitions, youth program, outreach events and social program.

For more information click on [Victoria Forum](#)



## Volunteer Opportunities

### Marine Monitoring Project

Gather Scientific Data in Baja California Sur. Volunteer with Raen Adventures and gather much-needed data in the Loreto area of the Sea of Cortez, Baja California Sur! Volunteers will work closely with our Mexico-based conservation partner GEA (Grupos Ecologistas Antares) with submarine and open water transects, plankton analysis, and behavioural observations of local cetaceans including blue whales, sperm whales, orcas and more. Optional visit to Magdalena Bay, where gray whales and human beings have forged a unique bond, and whales seek out human visitors for a good scratch! Additional species of interest include marine turtles, shorebirds, and sharks.

This program aims to cover a variety of open-water and island sites, weather permitting, using a small vessel (panga) enabling our team to move between open sea and shallow, coastal areas. Participants may be involved in defining transect sets using charts, maps, GPS and satellite imagery. Novel findings will be added to an ongoing species survey catalog.

Cost is \$950/person for the full 9-day session; includes food, camping accommodations, and research and safety equipment.

February 11-19, 2018

Interested? Contact: [sabrina@ravenadventures.com](mailto:sabrina@ravenadventures.com)

Find us at: [Raven Adventures/ Marine monitoring project](#)



### Mangrove Monitoring Project

Kayak through Mangrove Forests in Baja California Sur. This program joins an off-the beaten-track camping experience with fieldwork skill-building. Camp on an uninhabited island and kayak through Baja's mangrove forest. Learn and apply fieldwork techniques, conduct coastal surveys, and collect specimens for the local museum. Identify a wide array of shorebirds, unearth snakes, and observe dolphins just off shore. Depending on yearly migration patterns, an optional visit to Magdalena Bay is possible. Here, gray whales and human beings have forged a unique bond, and whales stopped over on their migration route seek out human visitors for a good scratch!

Cost is \$950/ person for the full 9-day session; includes food, camping accommodations, and research and safety equipment.

December 29, 2017 to January 6, 2018

Interested? Please contact: [sabrina@ravenadventures.com](mailto:sabrina@ravenadventures.com)

Find us at: [Raven Adventures/ Mangrove monitoring project](#)

#### **Editors:**

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