

Publications of the Week

Fusion-Dependent Formation of Lipid Nanoparticles Containing Macromolecular Payloads

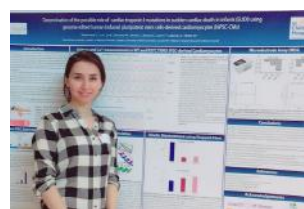
First Author: Jayesh Kulkarni (pictured, left) | Senior Author: Pieter Cullis (centre)
Nanoscale | UBC



The authors used cryogenic transmission electron microscopy and fluorescence techniques to demonstrate that lipid nanoparticles (LNPs) are formed through the fusion of precursor, pH-sensitive liposomes into large electron-dense core structures as the pH is neutralized. They showed that the fusion-dependent mechanism of formation also applied to LNP containing macromolecular payloads including mRNA, DNA vectors, and gold nanoparticles. [Profile](#) | [Abstract](#)

Ibrutinib Displays Atrial-Specific Toxicity in Human Stem Cell-Derived Cardiomyocytes

First Author: Sanam Shafaattalab (pictured) | Senior Authors: Liam Brunham, Glen Tibbits and Zachary Laksman
Stem Cell Reports | BC Children's Hospital Research Institute, UBC and SFU

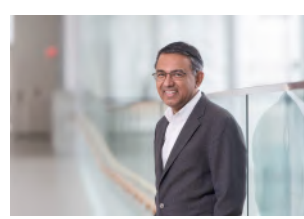


The authors employed cell-specific differentiation protocols and optical mapping to investigate the effects of Ibrutinib (IB) and other tyrosine kinase inhibitors on the voltage and calcium transients of atrial and ventricular human pluripotent stem cell-derived cardiomyocytes (hPSC-CMs). IB demonstrated direct cell-specific effects on atrial hPSC-CMs that would be predicted to predispose to atrial fibrillation. [Abstract](#)

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Awards

April 2019 Award Winners



Dr. Sriram Subramaniam (pictured) from the UBC Centre for Brain Health has been appointed as the Gobind Khorana Canada Excellence Research Chair in Precision Cancer Drug Design. Find out which other Vancouver researchers won grants, awards, fellowships and scholarships this April in our monthly awards summary! [Read More](#)

Dr. Connie Eaves Awarded the 2019 Canada Gairdner Wightman Award

Terry Fox Laboratory



Congratulations to Dr. Connie J. Eaves (pictured), Professor of Medical Genetics at UBC and Distinguished Scientist at the Terry Fox Laboratory, on winning the 2019 Canadian Gairdner Wightman Award for her pioneering research and leadership in leukemia and breast cancer. The recognition honours scientists who make transformative contributions to research that impact human health. [Read More](#)

Dave Ng and Linda Horianopoulos Awarded with 2019 Killam Teaching Awards

Michael Smith Laboratories



Congratulations to Dave Ng, Director of the Advanced Molecular Biology Laboratory, for winning the Killam Teaching Prize, and Linda Horianopoulos (pictured), graduate student in the Kronstad Lab, for winning the Killam Graduate Teaching Assistant Award! Nominated by students, colleagues and alumni, the Killam Teaching Prize is a prestigious internal award presented to those who are recognized for their excellence in teaching. [Read More](#)

AbCellera Announced as a Finalist for the 2019 Technology Impact Awards

BC Tech Association



The BC Tech Association has announced the finalists for the 2019 Technology Impact Awards (TIA). AbCellera is one of four companies that have been nominated for the Company of the Year – Scale Success award. This award acknowledges a scaleup success tech company that is an emerging leader and role model in the BC technology industry. The winners will be announced on Thursday, June 27. [Read More](#)

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Local News

Chemical-Eating Bacteria: A Tiny Solution for the Oilsands' Big Problem

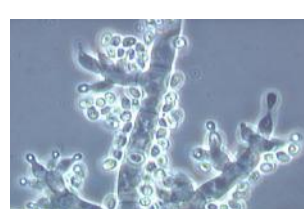
The Province



UBC engineers led by Dr. Vikram Yadav (pictured) are using directed evolution and genomic tools to encourage naturally occurring bacteria to eat the toxins in oilsands tailings ponds. Field trials on a "consortium" of bacteria that thrive on naphthenic acids are set to begin this summer in northeastern Alberta with a major oilsands bitumen producer. [Read More](#)

Kwantlen Polytechnic University Study Receives Funding to Unlock the Power of Fungi

Kwantlen Polytechnic University (KPU)



To help commercialize a new *Trichoderma*-based biopesticide product, the KPU Institute for Sustainable Horticulture (ISH) has received \$193,260 from the Canadian Agricultural Partnership. *Trichoderma* are fungi naturally found in the soil all around us. The right strain of *Trichoderma* can help protect crops and other plants from other fungi or diseases without the use of chemical pesticides, which are harmful to the environment. [Read More](#)

One-on-One with Dr. David Granville

Vancouver Coastal Health Research Institute



Dr. David Granville (pictured) was appointed to the position of Associate Director of the Vancouver Coastal Health (VCH) Research Institute in March. Dr. Granville brings with him a wealth of experience in research excellence, innovation and commercialization. In this new role, he oversees innovation and research activities within the VCH research community. Get to know more about him in this one-on-one interview. [Read More](#)

What Do We Know About Microbes and Aging? An Interview with Dr. Brett Finlay

Michael Smith Laboratories



In *The Whole-Body Microbiome*, the father-daughter team of microbiology Dr. Brett Finlay (pictured) and aging specialist Dr. Jessica Finlay offers a different—and truly revolutionary—solution to the quest for the fountain of youth. Simi Sara, an award-winning journalist, interviews Dr. Brett Finlay about the role microbes play in health and disease. [Read More](#)

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Interesting Articles

Navigating the Regulatory Complexity of Regenerative Medicine in Canada

Centre for Commercialization of Regenerative Medicine (CCRM)



Canada holds a significant place in the regenerative medicine industry. However, this is still an emerging field, with new technologies and approaches that are not always supported by the regulations currently governing health care. This article highlights how industry, physicians and Canada's regulators have worked to overcome the challenges posed by being at the forefront of innovation. [Read More](#)

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Upcoming Events in Vancouver

- May 7 5:00 PM **Health XChange 2019**
Federico's Supper Club
- May 8 9:00 AM **Public Speaking and Presentation Mastery**
Thea Koerner House
- May 8 5:30 PM **Pathology Arts Gala 2019**
UBC Medical Student & Alumni Centre
- May 11 7:00 PM **Science Slam**
Fox Cabaret
- May 14 2:00 PM **2019 BCREGMED Trainee Workshop**
Forest Sciences Centre, UBC

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STEMCELL Jobs in Vancouver

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STEMCELL Technologies
- Scientist, Matrix Biology**
STEMCELL Technologies
- Scientist, Human Immunology**
STEMCELL Technologies
- Program Manager, Scientific Communications - Histochemistry**
STEMCELL Technologies
- Scientific Marketing Specialist**
STEMCELL Technologies

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Other Science Jobs in Vancouver

- Microbiologist**
NovoBind Livestock Therapeutics Inc.
- Associate Scientist, Immuno-Oncology**
The Centre for Drug Research & Development
- Associate Scientist, Analytical**
Zymeworks
- Postdoctoral Fellow, Infectious Disease Bioinformatics**
SFU
- Postdoctoral Fellow**
BC Cancer

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