

Publications of the Week

**Membrane Contact Site Detection (MCS-DETECT) Reveals Dual Control of Rough Mitochondria-ER Contacts**

First Authors: Ben Cardoen, Kurt Vandevoorde, Guang Gao, and Milene Ortiz-Silva | Senior Authors: Ghassan Hamarneh and Ivan Nabi *(pictured)*  
Journal of Cell Biology | SFU and UBC



Identification and morphological analysis of mitochondria-ER contacts (MERCs) by fluorescent microscopy is limited by subpixel resolution interorganelle distances. Here, the membrane contact site (MCS) detection algorithm, MCS-DETECT, reconstructs subpixel resolution MERCs from 3D super-resolution image volumes to reveal new details. [Abstract](#)

**Surface Photosterilization of Implantable Silicone Biomaterials: Structural and Functional Characterization**

First Author: Sahand Ghaffari | Senior Author: Dirk Lange *(pictured)*  
Colloids and Surfaces B: Biointerfaces | SFU and UBC



Hospital-acquired infections remain one of the major challenges faced by the global healthcare system and contribute to increased rates of patient morbidity and mortality. Here, researchers propose a simple and cost-effective method to sterilize silicone-based implant surfaces and prevent initial bacterial colonization, using polydimethylsiloxane and an embedded ruthenium photosensitizer. [Abstract](#)

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Awards

**2023 Alumni UBC Achievement Awards Honour Members of Faculty of Medicine Community**

UBC Faculty of Medicine



Four members of the Faculty of Medicine community — Drs. Laura Yvonne Bulk *(pictured, third from left)*, Chit Chan Gunn *(third from right)*, Steven Narod *(second from right)*, and Linda Warren *(right)* — were recently recognized at the annual alumni UBC Achievement Awards. They are among eight inspiring individuals who were honoured for extraordinary efforts to advance UBC's commitment to healthy lives, a healthy planet, and healthy societies. [Read More](#)

**Catalyzing Pathways from Evidence to Impact**

Michael Smith Health Research BC



The Convening & Collaborating and Reach funding programs are enabling health researchers to foster collaboration, disseminate and implement evidence, and increase the impact of their research — ultimately improving the health of people and communities in BC. Among the list of award recipients is Dr. Abdul-Fatawu Abdulai *(pictured)* from UBC. [Read More](#)

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Local News

**The Genome Sciences Centre Joins the Earth BioGenome Secretariat**

BC Cancer Research Institute



The Genome Sciences Centre, a leading institution in genomic research and innovation, is proud to announce its recent affiliation as part of the Earth BioGenome Secretariat. This marks a significant milestone in the Centre's commitment to advancing the frontiers of genomics and biodiversity conservation. The Earth BioGenome Project is an ambitious initiative to sequence the DNA of all life on Earth. [Read More](#)

**Apply to MedTech Innovator 2024**

Life Sciences BC



MedTech Innovator is the largest and highest performing accelerator of medical technology in the world and the medtech industry's premiere showcase and competition for innovative medical device, digital health, and diagnostic companies. The accelerator is remote-friendly, having operated as a virtual program since 2015. [Read More](#)

**New Study Provides Critical Insights into Effective Practices for Taking More Accurate Spot Check Pulse Oximetry Measurements**

UBC Action on Sepsis Research Cluster



Pulse oximeters are devices for measuring the amount of oxygen in someone's blood, called blood oxygen saturation. When combined with other clinical signs, health workers use this information to identify patients who require urgent medical attention, including those with sepsis. This can lead to faster treatment for these patients and improve their likelihood of survival. The study was led by Dr. Mark Ansermino *(pictured)*. [Read More](#)

**Funding Paves the Way for Innovative Wastewater Surveillance Program in British Columbia**

Genome BC



A new initiative, dubbed SAFEGUARD, aims to transform monitoring for viruses and other pathogens in BC, offering early and enhanced surveillance to better prepare the province and Canada for future public health challenges. Public health organizations are turning to wastewater surveillance as an unbiased approach to help understand the impact of disease on a whole community. [Read More](#)

**Trainee Profile: Chantelle Cocquyt**

Djavad Mowafaghian Centre for Brain Health



Chantelle Cocquyt *(pictured)* is a PhD student in Psychology under the supervision of Dr. Daniela Palombo in the Memory and Imagination Lab. Chantelle's lab researches emotional memory processes using both behavioural and cognitive neuroscience approaches. Specifically, Chantelle uses functional magnetic resonance imaging for her research on the neural correlates of emotional memory. [Read More](#)

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Interesting Articles

**NSERC Announces Improvements to Alliance Grants Program**

Natural Sciences and Engineering Research Council of Canada (NSERC)



NSERC is pleased to announce the launch of several improvements to its Alliance grants program. This update is in response to feedback received and builds on our experience with the program over the last four years. Alliance grants were launched in 2019 to encourage university researchers to collaborate with partner organizations from the private, public or not-for-profit sectors. [Read More](#)

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 **Upcoming Events in Vancouver**

December 31 9:00 PM	<b>NYE 2023 at Science World</b> Science World
January 12 6:00 PM	<b>Networking Night</b> AMS Student Nest
January 17 12:00 PM	<b>Centre for Blood Research Seminar Series</b> Online
January 25 12:30 PM	<b>Science &amp; Environment Co-op Info Session</b> SFU
January 26 8:30 AM	<b>Life Sciences BC's 5<sup>th</sup> Annual Career Connect Day 2024</b> Vancouver Marriott Pinnacle Downtown Hotel

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 **STEMCELL Jobs in Vancouver**

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[STEMCELL Technologies](#)
- Manager, Quality Control, Cell Core**  
[STEMCELL Technologies](#)
- Quality Control Analyst, Cell Separation**  
[STEMCELL Technologies](#)
- Senior Research Associate, Organoids**  
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 **Other Science Jobs in Vancouver**

- Clinical Trial Assistant**  
SaNOTize Research and Development
- Lab Technician**  
Lafarge
- Senior Research Associate I, In Vitro Pharmacology**  
Zymeworks
- Technical Writer, GMP Manufacturing**  
AbCellera
- Science/Biology Teacher**  
Bodwell High School

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