

Publications of the Week

### A Microfluidic Platform Integrating Functional Vascularized Organoids-on-Chip

First Author: Clément Quintard | Senior Author: Josef Penninger (pictured) and Xavier Gidrol  
Nature Communications | UBC



The development of vascular networks in microfluidic chips is crucial for the long-term culture of three-dimensional cell aggregates such as spheroids, organoids, tumoroids, or tissue explants. Here, researchers developed a platform to establish and monitor the formation of endothelial networks around mesenchymal and pancreatic islet spheroids, as well as blood vessel organoids generated from pluripotent stem cells, cultured for up to 30 days on-chip. [Abstract](#)

### Prediction of Plasma ctDNA Fraction and Prognostic Implications of Liquid Biopsy in Advanced Prostate Cancer

First Authors: Nicolette Fonseca, Corinne Maurice-Dror, Cameron Herberts | Senior Authors: Matti Annala, Kim Chi, Alexander Wyatt (pictured)  
Nature Communications | UBC and BC Cancer



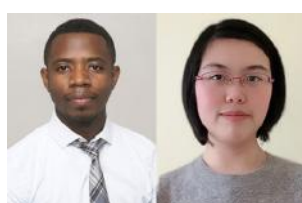
No consensus strategies exist for prognosticating metastatic castration-resistant prostate cancer (mCRPC). Circulating tumour DNA fraction (ctDNA%) is increasingly reported by commercial and laboratory tests but its utility for risk stratification is unclear. These results affirm ctDNA% as an actionable tool for patient risk stratification and provide a practical framework for optimized biomarker testing. [Abstract](#)

[View All Publications](#)

Awards

### Meet the NMN 2023 Graduate & Undergraduate Award Winners

The NanoMedicines Innovation Network (NMN)



The NanoMedicines Innovation Network is pleased to announce the fourteen recipients of its 2023 Masters- and Doctoral-level Graduate Awards, and the four recipients of its 2024 Undergraduate Studentships. Two of the fourteen winners are Irafasha Credo Casmil (pictured, left) and Sunny Peiwei Chen (right) from Dr. Anna Blakney's Lab at UBC. [Read More](#)

### Meet SFU's 2024 Outstanding Alumni Award Recipients

SFU News



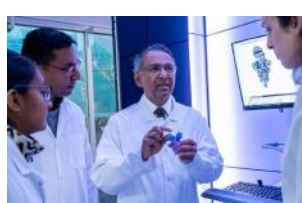
SFU is shining a spotlight on the remarkable achievements of our grads with the 2024 Outstanding Alumni Awards, celebrating members of our community who are serving society, advancing knowledge, and making many other positive impacts on the world. One awardee is Dr. Poh Tan (pictured) who is an entrepreneur, stem cell scientist, and one of BC's most renowned STEM educators. [Read More](#)

[View All Featured Awards](#) | [View All Monthly Award Summaries](#)

Local News

### Drug Discovery at an Atomic Scale

UBC Faculty of Medicine



In the heart of Dr. Sriram Subramaniam's (pictured) UBC lab, high-powered microscopes as tall as a city bus are allowing researchers to see the very atoms that make up the proteins in our cells — as well as the diseases that affect them. These cryo-electron microscopes represent a new frontier in drug discovery and development. [Read More](#)

### Research That Makes You Want to Smile: Novel Role for Granzyme B in Periodontal Inflammation

The Centre for Blood Research



Have you ever wondered how our immune system is intertwined with our oral health? More specifically, how proteins secreted by cytotoxic T-cells and natural killer cells can affect the progression of advanced gum disease, also known as periodontitis? Dr. Hugh Kim (pictured) and his lab have discovered a new role for serine protease Granzyme B in signaling within the connective tissue cells of our periodontium, such as fibroblasts. [Read More](#)

### New Insights into Bloodstream Infections in Children Hospitalized for Influenza

Action on Sepsis Research Cluster



Bloodstream infections occur when a microorganism enters a host's bloodstream and triggers an immune response. Both the flu and these secondary infections can lead to sepsis, which occurs when a child's immune system loses its ability to regulate itself, leading to organ failure and even death. Understanding the factors associated with bloodstream infections in children hospitalized with the flu is crucial for improving patient care and outcomes for these children. [Read More](#)

### Derm-Biome Pharmaceuticals Prepares to Begin Ind-Enabling Studies for DB-007-4, a Potential Best-in-Class Treatment for Inflammatory Skin Diseases

Derm-Biome Pharmaceuticals Inc.



Derm-Biome Pharmaceuticals Inc, a Vancouver-based biopharmaceutical company developing novel topical therapies for inflammatory skin diseases and skin cancer, has announced that it will soon begin a GLP toxicology study for DB-007-4, a potential best-in-class, first line topical treatment for inflammatory skin diseases such as acne, atopic dermatitis, and rosacea. [Read More](#)

### Clinical Trial Results Could Redefine Cervical Cancer Treatment

UBC Faculty of Medicine



Results from an international clinical trial involving UBC faculty of medicine researchers are poised to set a new standard of care for people with low-risk early-stage cervical cancer. "This trial will change the history of cervical cancer treatment worldwide, by allowing more individuals with cervical cancer to have less invasive surgery, without jeopardizing their survival outcomes," said Dr. Janice Kwon (pictured), who led the study's economic analysis. [Read More](#)

### UBC's Three Minute Thesis Competition Gears Up

UBC Graduate and Postdoctoral Studies



The Three Minute Thesis is an academic competition that assists current graduate students with fostering effective presentation and communication skills. Participants have just three minutes to explain the breadth and significance of their research project to a non-specialist audience. Semi-finals and finals begin on the week of March 11. [Read More](#)

[View All Local News](#) | [Submit an Article](#)

### Upcoming Events in Vancouver

March 12 12:00 PM	<b>Propels: Company Creation 101</b> Robert H. Lee Alumni Centre
March 14 9:00 AM	<b>SBME Seminar: Publishing in Science: An Inside Look</b> UBC
March 19 12:00 pm	<b>Propels: From Lab to Industry: Navigating the Transition</b> Online
March 21 8:00 am	<b>BIG Research Day</b> Life Sciences Institute
March 21 6:00 pm	<b>Science World After Dark</b> Science World

[View All Events](#) | [Submit an Event](#)

### Science Jobs in Vancouver

- Research Associate in Stem Cell Mammalian Synthetic Biology and Organoid Engineering**  
UBC
- Research Associate, Next-Generation RNA Therapeutics**  
UBC
- Laboratory Assistant, Microbiology**  
Provincial Health Services Authority
- Molecular Biology Co-op**  
Cytiva
- Post Doctoral Fellow, Synthetic Organic Chemistry**  
adMare Bioinnovations

[View 45 Other Science Jobs](#) | [Submit a Job](#)



Submit your articles and events by reaching out to us at [info@scienceinvancouver.com](mailto:info@scienceinvancouver.com).

BROUGHT TO YOU BY



**STEMCELL Technologies**

Products | Services

**STEMCELL Science News**

Free Weekly Updates on Your Field

**The Stem Cell Podcast**

Interviews and Updates on Stem Cell Science

