

Publications of the Week

Synthetic Gene Circuits for Cell State Detection and Protein Tuning in Human Pluripotent Stem Cells

First Author: Laura Prochazka | Senior Author: Peter Zandstra (pictured, back row, far left) | Molecular Systems Biology | Michael Smith Laboratories and UBC



During development, cell state transitions are coordinated through changes in the identity of molecular regulators in a cell type- and dose-specific manner. The authors report the generation of synthetic gene circuits that can detect a desired cell state using AND-like logic integration of endogenous miRNAs and, upon detection, produce fine-tuned levels of output proteins using a miRNA-mediated output fine-tuning technology. [Profile](#) | [Abstract](#)

Engineering Plant Microbiomes by Integrating Eco-Evolutionary Principles into Current Strategies

First Authors: Zayda Morales Moreira and Melissa Chen | Senior Author: Cara Haney (pictured) | Current Opinion in Plant Biology | UBC



Engineering plant microbiomes has the potential to improve plant health in a rapid and sustainable way. Rapidly changing climates and relatively long timelines for plant breeding make microbiome engineering an appealing approach to improving food security. The authors suggest the use of an integrated approach, combining mechanistic molecular and genetic knowledge, with ecological and evolutionary theory, to target knowledge gaps in plant microbiome engineering that may facilitate translatability of approaches into the field. [Abstract](#)

[View All Publications](#)

Awards

November 2022 Awards

Science in Vancouver



Alexander Garner (pictured), a PhD student supervised by Drs. Francis Lynn and Tim Kieffer at UBC's Faculty of Medicine, received a Canada Graduate Scholarship for his work investigating how pancreatic islet architecture impacts function. See which other Vancouver researchers received grants, awards, and scholarships in November. [Read More](#)

Five Outstanding Research Teams Share \$22.4 Million in Funding of Two New and Three Renewal Terry Fox New Frontiers Program Project Grants in 2022 Competition

Terry Fox Research Institute



Five Canadian cancer research teams will share \$22.4 million to expand their research into key areas of cancer treatment after winning the 2022 Terry Fox New Frontiers Program Project Grant competition. Three teams are based in BC and are led by Drs. Amina Zoubeidi (pictured), Christian Steidl, and Jessica McAlpine. The teams will focus on prostate, lymphatic, endometrial, skin, and breast cancers. [Read More](#)

2022 Poster Competition Winners Announced

NanoMedicines Innovation Network (NMIN)



The NMIN is proud to acknowledge the trainees who won top prizes at the Poster Competition of its 2022 Scientific Meeting. Dr. Daniel Berard received second place in the postdoctoral level for his poster titled "Single-Molecule Microscopy Platform for Quantifying Hybridization Kinetics and Enzyme Cleavage Efficiency" and Abishek Wadhwa (pictured) tied for third place in the PhD level for his poster titled "Single-Cell Immune Profiling Reveals Cancer Immunotherapeutic Potential of mRNA-Lipid Nanoparticles by Tumour-Associated Macrophage Depletion." [Read More](#)

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

Local News

Solving Problems With a Little Bit of Everything

Research2Reality



When biomedical engineers talk about their field, one of the first things they describe is often how it brings out so many diverse perspectives. In particular, the UBC School of Biomedical Engineering (SBME) is the first inter-faculty school at UBC, acting as a hub between experts from many fields. But amidst all of the fascinating collaborations, something entirely new is also emerging. "Biomedical engineering is a great catalyst for bringing together different disciplines and different perspectives," says SBME Director Dr. Peter Zandstra (pictured). [Read More](#)

Genome BC Becomes First in Canada to Adopt Protocols.io

Genome BC



One of the principles of science is replicability — for a discovery to be considered valid, other researchers must be able to redo the experiment and end up with the exact same results. In a move to improve research method storage and sharing, Genome BC has announced that they are partnering with [protocols.io](#) to provide premium access for funded researchers to [protocols.io](#), a secure platform for developing and sharing reproducible methods. [Read More](#)

[View All Articles](#) | [Submit an Article](#)

Upcoming Events in Vancouver

- December 6 8:00 AM **Translation in Action: From Neuropsychiatry Research to Health Solutions** Online
- December 6 9:00 AM **Postdoc Research Day 2022** Life Sciences Institute
- December 6 2:30 PM **Success Stories in Science: Life after Graduation | Dialogue with Lorena Braid** SFU Burnaby
- December 14 4:00 PM **D.R.I.N.K.S Vancouver** Mahoney and Sons
- January 20 8:30 AM **Life Sciences BC Career Connect Day** Marriott Pinnacle Hotel

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

STEMCELL Jobs in Vancouver

- Senior Program Manager, Quality Lifecycle Management** [STEMCELL Technologies](#)
- Process Development Associate, Media** [STEMCELL Technologies](#)
- Sales Development Representative** [STEMCELL Technologies](#)
- Marketing Optimization Specialist** [STEMCELL Technologies](#)
- Research Associate** [STEMCELL Technologies](#)

[View 96 Other STEMCELL Jobs](#)

Other Science Jobs in Vancouver

- Senior Director of Alliance Management** AbCellera
- Research Coordinator, Brain Behaviour Lab** UBC
- Scientist, Discovery Protein Science** Amgen
- Research Assistant, Process Development** Acuitas Therapeutics
- Quality Assurance Specialist** Aspect Biosystems

[View 39 Other Science Jobs](#) | [Submit a Job](#)

Culturing Knowledge in Stem Cell Research

[LISTEN NOW](#)

Submit your articles and events by reaching out to us at 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