

Publications of the Week

Sustained Expression of *unc-4* Homeobox Gene and *unc-37/Groucho* in Postmitotic Neurons Specifies the Spatial Organization of the Cholinergic Synapses in *C. elegans*

First Author: Mizuki Kurashina (pictured) | Senior Author: Kota Mizumoto  
eLife | Life Sciences Institute, Djavad Mowafaghian Centre for Brain Health, and UBC



Neuronal cell fate determinants establish the identities of neurons by controlling gene expression to regulate neuronal morphology and synaptic connectivity. The authors identify a novel role for UNC-4 homeobox protein and its corepressor UNC-37/Groucho in tiled synaptic patterning of the cholinergic motor neurons in *C. elegans*. [Profile](#) | [Abstract](#)

Spatially Patterned Excitatory Neuron Subtypes and Projections of the Claustrum

First Author: Sarah Erwin (pictured, front, second from left) | Senior Author: Mark Cembrowski (back, right)  
eLife | Life Sciences Institute, Djavad Mowafaghian Centre for Brain Health, and UBC



The claustrum is a functionally and structurally complex brain region, whose very spatial extent remains debated. Using single-cell RNA-sequencing, the authors found that the claustrum comprises two excitatory neuron subtypes that are differentiable from the surrounding cortex. This subtype-specific heterogeneity likely shapes the functional complexity of the claustrum. [Profile](#) | [Abstract](#)

Rescue of Aberrant Huntingtin Palmitoylation Ameliorates Mutant Huntingtin-Induced Toxicity

First Author: Fanny Lemarié (pictured, left) | Senior Author: Michael Hayden (right)  
Neurobiology of Disease | Centre for Molecular Medicine and Therapeutics, BC Children's Hospital, and UBC



Huntington disease (HD) is a neurodegenerative disorder caused by a CAG expansion in the *HTT* gene that codes for an elongated polyglutamine tract in the huntingtin (HTT) protein. The authors investigated palmitoylation dysregulation in rodent and human HD model systems, measuring the impact of mutant HTT-lowering therapy on brain palmitoylation, and evaluating if HTT palmitoylation can be pharmacologically modulated. [Profile](#) | [Abstract](#)

[View All Publications](#)

Awards

Enabling the Next Generation of Health Research Talent: MSFHR Funds 86 Scholars and Research Trainees

Michael Smith Foundation for Health Research (MSFHR)



The Michael Smith Foundation for Health Research is providing much needed and timely funding for 86 researchers who are advancing science, addressing health priorities, and improving the health of British Columbians. Awardees include Dr. Laura Evgin (pictured), who is using viruses and vaccines to improve chimeric antigen receptor T cell therapy. [Read More](#)

Two DMCBH Researchers Awarded Future Leaders in Canadian Brain Research Grant

David Mowafaghian Centre for Brain Health (DMCBH)



Congratulations to DMCBH members Drs. Shannon Kolind (pictured, left) and Tamara Vanderwal (right), who have both been awarded grants in Brain Canada's 2020 Future Leaders in Canadian Brain Research Program. The program awards 20 grants to up-and-coming researchers to fund game-changing ideas and push innovation forward. [Read More](#)

Founder and CEO of AbCellera Receives 2021 Bloom Burton Award

Bloom Burton & Company



From the outset of the COVID-19 pandemic, AbCellera, led by its founder and CEO Dr. Carl Hansen (pictured), moved from initial screening of blood samples to human clinical trials of its antibody treatment for COVID-19 in 90 days — a process that normally takes years. Dr. Hansen is a finalist for the Bloom Burton Award, which honours an individual who made the greatest contribution to Canada's innovative healthcare industry in the previous year. [Read More](#)

Dr. Jen Nguyen Wins a National Science Foundation Postdoctoral Research Fellowship

Life Sciences Institute



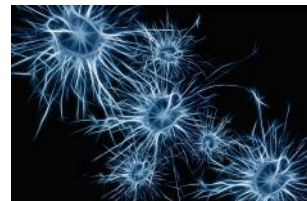
Dr. Jen Nguyen (pictured), a postdoctoral fellow (Microbiology & Biomedical Engineering) in the Tropini Lab, has received a prestigious National Science Foundation (NSF) fellowship in biology. Her proposal, "Bacterial spatial organization as a microscale mechanism of ecosystem resilience," received approval within the NSF's integrative Research Investigating the Rules of Life Governing Interactions Between Genomes, Environment and Phenotypes theme. [Read More](#)

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

Local News

Xenon Pharmaceuticals Announces Collaboration with Neurocrine Biosciences, Achieves \$10 Million Regulatory Milestone

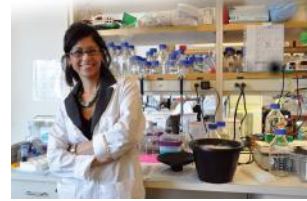
Xenon Pharmaceuticals



Xenon Pharmaceuticals, a neurology-focused biopharmaceutical company, has announced that its collaboration to develop treatments for epilepsy with Neurocrine Biosciences achieved a regulatory milestone with the approval of a clinical trial application in Europe, triggering an aggregate payment of \$10 million to Xenon. Neurocrine Biosciences is initiating a Phase 2 clinical trial for NBI-921352 for the treatment of focal-onset seizures in adults later this year. [Read More](#)

Recent Publication Proposes a Potential New Therapeutic Approach to Treatment-Resistant Prostate Cancer

Vancouver Prostate Centre



Dr. Amina Zoubeidi (pictured) led an international team to investigate a phenomenon in prostate cancer in which tumours can escape epithelial lineage confinement and transition to a high-plasticity state as an adaptive response to potent androgen receptor (AR) antagonism. Their study demonstrates that targeting both AR and EZH2 in patients with AR-positive, neuroendocrine-like tumours has the potential to reprogram aggressive tumours to a targetable state. [Read More](#)

Eyam Vaccines and Immunotherapeutics Announces Clinical Trials Agreement for Next-Generation COVID-19 Vaccine

EYAM



Eyam Vaccine and Immunotherapeutics (EYAM), a next-generation vaccine biotechnology company, has announced an agreement with Veristat, a global clinical research organization, to plan and coordinate clinical trials of their vaccine program against SARS-CoV-2. "EYAM's goal is to end the global COVID-19 pandemic by creating unique sterilizing vaccines that halt infection and transmission of the virus and are protective against new variants," says Dr. Wilf Jefferies, Lead Investigator and Chief Scientific Officer. [Read More](#)

A Canadian First in CAR T Cell Treatment for Adult Leukemia and Lymphoma

Vancouver Coastal Health Research Institute



A study co-led by Dr. Kevin Hay (pictured) from the Vancouver Coastal Health Research Institute and Dr. Natasha Kekre at the Ottawa Hospital is investigating the use of specialized chimeric antigen receptor T (CAR T) cells to treat acute lymphoblastic leukemia and non-Hodgkin lymphoma. "This is a completely Canadian-designed and led product: from the genetic engineering of the cells at BC Cancer using vector manufactured at the Ottawa Hospital all the way to the clinical administration at Vancouver General Hospital," says Dr. Hay. [Read More](#)

STEMCELL Technologies Launches Human Pluripotent Stem Cell Characterization and Banking Services in Partnership with WiCell

STEMCELL Technologies



STEMCELL Technologies has announced the launch of human pluripotent stem cell characterization and banking services in partnership with WiCell®. These services, offered through STEMCELL's Contract Assay Services division, will provide researchers with comprehensive cell quality assessments and enable them to generate cell banks using standardized practices. [Read More](#)

CBR-SBME Research Day 2021: A Spotlight on Summer Student Research

UBC Centre for Blood Research



The Centre for Blood Research (CBR) and School of Biomedical Engineering (SBME) communities gathered online for CBR-SBME Research Day on Wednesday, August 11<sup>th</sup>, which celebrates the progress and accomplishments of summer students at the conclusion of the CBR-SBME Summer Studentship Program. This program provides undergraduate students with the opportunity to gain valuable lab experience, along with career development workshops and social events. [Read More](#)

The Rare Disease Discovery Hub Helps Physicians Find Answers

BC Children's Hospital



The Rare Disease Discovery Hub is dedicated to improving care for children with rare diseases by finding the causes of difficult-to-diagnose complex conditions. By discovering the root cause, the Hub's multi-disciplinary, translational research program also seeks to understand how these diseases work. Dr. Stuart Turvey (pictured), a clinical immunologist, co-leads the Hub with clinical geneticist Dr. Anna Lehman. [Read More](#)

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

Upcoming Events in Vancouver

- September 14 1:00 PM BCDRN Meet the Researcher Series: From Single Cells to Population Based Interventions Online
- September 15 12:00 PM Investigating Drought Resistant Soy Bean Cultivars Online
- September 18-19 6:00 AM "I Move for Immigrant Women in Science" 2021 Online
- September 20 9:00 AM adMare's Global Leaders Series: Dr. George Church Online
- September 21 10:00 AM BC Cancer Research Day Online

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

STEMCELL Jobs in Vancouver

Senior Quality Control Analyst, Microbiology  
STEMCELL Technologies

Scientific Marketing Specialist, Europe and Export  
STEMCELL Technologies

Marketing Leads Coordinator  
STEMCELL Technologies

Process Development Scientist  
STEMCELL Technologies

Senior Process Development Associate, Technology Transfer  
STEMCELL Technologies

[View 76 Other STEMCELL Jobs](#)

Other Science Jobs in Vancouver

Staff Scientist/Leader, Integrated Mouse Modelling Services  
BC Cancer

Laboratory Data Management Systems Specialist  
AbCellera

Assistant or Associate Professor (Tenure Track), Molecular and Cellular Neuro Bioengineering  
UBC

Scientist, Predictive Pharmacokinetic Modelling  
Amgen

Research Scientist, Microbiology  
Vancouver Coastal Health

[View 48 Other Science Jobs](#) | [Submit a Job](#)

THE STEM CELL PODCAST  
200th Episode Contest  
Subscribe for a chance to win a Stem Cell Podcast bluetooth speaker.

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