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Publications of the Week

ApoA-I Deficiency Increases Cortical Amyloid Deposition, Cerebral Amyloid Angiopathy, Cortical and Hippocampal Astrogliosis, and Amyloid-Associated Astrocyte Reactivity in APP/PS1 Mice

First Author: Emily Button (*pictured, fourth from left*) | Senior Author: Cheryl Wellington (*third from left*) Alzheimer's Research & Therapy | Djavad Mowafaghian Centre for Brain Health, Providence Health Care Research Institute and UBC



Plasma high-density lipoproteins (HDL) have several vasoprotective functions and are associated with reduced Alzheimer's disease risk in some epidemiological studies. The authors expanded upon the known effects of plasma HDL in mouse models and *in vitro* 3D artery models to investigate the interaction of amyloid, astrocytes, and HDL on the cerebrovasculature in APP/PS1 mice. Profile | Abstract

Characterization of Transcriptomic Signature of Primary Prostate Cancer Analogous to Prostatic Small Cell Neuroendocrine Carcinoma

First Author: Mohammed Alshalalfa (*pictured*) | Senior Author: Tarek Bismar International Journal of Cancer | GenomeDx Biosciences Inc., Vancouver Prostate Centre and UBC



Prostatic small cell neuroendocrine carcinoma (SC/NE) is well studied in metastatic castration-resistant prostate cancer (PCa), however, it is not well characterized in the primary setting. The authors used gene expression profiling of SC/NE PCa to develop a 212 gene signature to identify treatment-naïve primary prostatic tumours that are molecularly analogous to SC/NE. Abstract

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Awards

Early Career Medical Researchers Awarded Funding from New Frontiers in Research Fund

UBC Faculty of Medicine



Five early career researchers in the UBC Faculty of Medicine have received more than \$1.2 M from the federal New Frontiers in Research Fund. The funding is for early career researchers to conduct exploratory research that crosses disciplinary boundaries. Dr. Mark Cembrowski *(pictured)* will be studying the generation and application of novel molecular biosensors in fear memory. **Read More**

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Local News

Big Energy Savings for Tiny Machines

SFU News



Inside all of us are trillions of tiny molecular nanomachines that perform a variety of tasks necessary to keep us alive. Ground-breaking research led by SFU physics Professor David Sivak (*pictured*) has demonstrated for the first time a strategy for manipulating these machines to maximize efficiency and conserve energy. The breakthrough could have ramifications across a number of fields, including creating more efficient computer chips and solar cells for energy generation. **Read More**

CancerMine: Training Computers to Deliver Cancer-Gene Associations from Literature

Springer Nature



Precision oncology needs to know which genes are important in cancer. Applying machine learning to published literature was able to give investigators at Canada's Michael Smith Genome Sciences Centre this information. The scientists hope it will prove useful to the cancer bioinformatics community, and is an example of a method to build a knowledge base that could be applied to many other fields in biology. **Read More**

Trailblazers 2019: SFU Vice President Joy Johnson Helped Level Playing Field for Women in Medical Research

Georgia Straight



Once upon a time in Canada, almost all medical research did not consider differences in sex and gender. That gender-blind approach largely came to an end during Joy Johnson's *(pictured)* term as Scientific Director for the Canadian Institutes of Health Research's Institute of Gender and Health from 2008 to 2014. She is now SFU's Vice President, Research and International. **Read More**

Quantifying the Value of Genomics Driven Health Care for Children with Rare Diseases

Genome BC



Over 80% of rare diseases are thought to have a genetic origin. Over the next two years, a \$500,000 project, funded through Genome BC's Genesolve program and Illumina Inc., will draw upon health care data from BC as well as the 100,000 Genomes Project in the UK to generate evidence for the appropriate and sustainable adoption of whole exome and whole genome sequencing to diagnose and guide treatment for children with rare diseases. **Read More**

New Approaches to Study the Genetics of Autism Spectrum Disorder May Lead to New Therapies

Canadian Association for Neuroscience *via* Medical Xpress



Neuroscientists from UBC are using novel experimental approaches to understand autism spectrum disorder (ASD), from studying multiple variations in a single gene to the investigation of networks of interacting genes to find new treatments for the disorder. This article summarizes the results of unique approaches to understand ASD presented by four Canadian researchers at the 14th Canadian Neuroscience Meeting. **Read More**

Walking the Tightrope

Centre for Blood Research



Sreeparna Vappala, a PhD student at the Centre for Blood Research, has summarized a recent review article by Dr. Edward Pryzdial *(pictured)* that provides a high-level perspective of the latest advances in clotting system biochemistry and

its relation to various bleeding disorders. She discusses a tightrope walking strategy that blood uses to maintain the balance of hemostasis. **Read More**

UBC Endorses Canada's Dimensions: Equity, Diversity and Inclusion Charter

UBC News



UBC has reaffirmed its strong commitment to enhancing equity, diversity and inclusion in research by endorsing the Government of Canada's Dimensions charter. *Dimensions: Equity, Diversity and Inclusion Canada* is a pilot program that aims to address systemic barriers, particularly those experienced by members of underrepresented or disadvantaged groups. **Read More**

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Interesting Articles

Minister Bains Announces Investment to Accelerate Medical Breakthroughs that Will Enable Truly Personalized Health Care

Government of Canada



The Honourable Navdeep Bains *(pictured)*, Minister of Innovation, Science and Economic Development, has announced an investment of up to \$49 M in the Digital Health and Discovery Platform, a network of partners that seeks to establish a cutting-edge Canada-wide health data platform. Researchers and doctors will work to accelerate the development of new and personalized treatments to help to find cures for diseases that affect Canadians. **Read More**

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觉 Upcoming Events in Vancouver

June 10	ImmunoBC
9:00 AM	Vancouver General Hospital Paetzold Auditorium
June 11 - 13 10:00 AM	Graduate Writing Retreat Irving K Barber Learning Centre
June 12 2:00 PM	Michael Smith Laboratories: Early Career Invited Lecture Award Winners Symposia Michael Smith Laboratories
June 13	Career Night
5:30 PM	UBC Life Sciences Centre
June 14	Science & Values Café
1:00 PM	Djavad Mowafaghian Centre for Brain Health

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IDENTIFY and STEMCELL Jobs in Vancouver

Program Manager, Scientific Communications - Histochemistry STEMCELL Technologies

Program Manager, Primary Cells STEMCELL Technologies

Product and Scientific Support Specialist, Cell Culture STEMCELL Technologies

Scientist, Human Immunology STEMCELL Technologies

Research Associate, Business Operations Products STEMCELL Technologies

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(iii) Other Science Jobs in Vancouver

Research Manager UBC School of Biomedical Engineering

Research Scientist, In Vitro Biology Xenon

Senior/Principal Scientist, Pharmacology Zymeworks

Postdoctoral Fellow BC Cancer

Lecturer and Lab Coordinator in Biology UBC Department of Botany/Zoology

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