Volume 4.13, April 13, 2020

Publications of the Week

Distinct Inactivated Bacterial-Based Immune Modulators Vary in Their Therapeutic Efficacies for Treating Disease Based on the Organ Site of Pathology

First Author: Shirin Kalyan | Senior Author: Hal Gunn *(pictured)*
Scientific Reports | Qu Biologics, Inc., and UBC

The authors have observed that innate immune effector cells appear to be differentially recruited to specific pathological sites when mobilized by distinct inactivated bacterial-based stimuli administered subcutaneously. The studies presented suggest that the immune system, upon detecting the first signs of a potential infection by a specific pathogen, tends to direct its resources to the compartment from which that pathogen is most likely originating. Abstract

Antisense Oligonucleotides for Neurodegeneration

First Author: Blair Leavitt *(pictured)* | Senior Author: Sarah Tabrizi
Science | UBC and BC Children's Hospital

Antisense oligonucleotides (ASOs) have the potential to reduce, restore, or modify RNA and protein expression. Thus, they can target disease pathogenesis by altering the expression of mutant proteins. Developments in ASO chemistry and advances in central nervous system delivery methods have enabled ASOs to enter clinical trials to treat Huntington's disease. Abstract

View All Publications

Awards

UBC School of Biomedical Engineering Student Receives J. Fred Muir Memorial Scholarship in Engineering

UBC School of Biomedical Engineering

Gabrielle Booth *(pictured)*, a third year student in the UBC School of Biomedical Engineering Biomechanics and Biomaterials research stream, has been awarded the J. Fred Muir Memorial Scholarship in Engineering. Booth is currently working on a proof of concept prototype for a biofidelic neck model with Dr. Peter Cripton at the Orthopaedic and Injury Biomechanics Group. Read More

View All Featured Awards | View Monthly Award Summaries

Local News

Podcast Episode 6 "Diabetes: From Beta Cells to Bicycles"

BC Diabetes Research Network

The sixth episode of the BC Diabetes Research Network's podcast, "Diabetes: From Beta Cells to Bicycles", features Dr. Rachel Murphy *(pictured)* from UBC Faculty of Medicine's School of Population and Public Health. In the episode, she discusses how proper diet and nutrition can benefit overall health and help reduce the risk of type 2 diabetes. Read More

Canada Begins Clinical Trial of Experimental COVID-19 Treatment Using Plasma from Recovered Individuals

The Globe and Mail

A team of blood transfusion experts from across Canada is planning the world's largest clinical trial of a potential treatment for COVID-19. The study, which will involve 1,000 patients from across the country, will include at least 40 Canadian hospitals, and is being overseen by doctors from the University of Montreal, University of Ottawa, University of Toronto, McMaster and UBC, among other schools. Read More

How Speedy Government Funding is Facilitating Unprecedented Research

Vancouver Economic Commission

In the short time since the government released hundreds of millions in funds dedicated to tackling COVID-19, research and development has progressed in leaps and bounds across public, academic and private sectors. We are experiencing firsthand the corresponding speed of innovation made possible by adequately resourced minds and institutions. This article highlights some of the scientific breakthroughs being made in Vancouver-based institutions. Read More

Is the Key to Unlocking Asthma Treatment Hidden in Our Microbes?

Michael Smith Laboratories

Asthma afflicts over 300 million people worldwide. In a recent review paper, Rozlyn Boutin *(pictured)* and colleagues in the Finlay lab at the Michael Smith Laboratories suggest that the microbes in our bodies can play a critical role in regulating asthma. They point to the critical role of the microbiota in organs other than the gut, such as the lungs, and particularly other microorganisms beyond bacteria, specifically fungi, in regulating asthma pathology. Read More

Curiox Biosystems and STEMCELL Technologies Announce Method to Safely Prepare COVID-19 Blood Samples for Vaccine Research

STEMCELL Technologies

Curiox Biosystems, in conjunction with STEMCELL Technologies, has announced a new system that will help researchers develop vaccines to SARS-CoV-2, the virus that causes COVID-19. A new configuration of the Laminar Wash™ HT1000 System will allow scientists to completely process blood samples from COVID-19 positive patients in a safe environment. Read More

How Genetic Clues Help Us Manage Pandemics

Genome BC

Labs and public health organizations across the world are sequencing samples of SARS-CoV-2 to create an enormous family tree of how all of the strains we have seen so far are related. This tree can be seen at *Nextstrain.org*, which contains sequence information for 59 BC strains of SARS-CoV-2, sequenced through a rapid genomic analysis initiative led by researchers at the BC Centre for Disease Control and UBC, and funded by Genome BC. Read More

BCDRN Trainee Spotlight: Cara Ellis

BC Diabetes Research Network

The BC Diabetes Research Network (BCDRN) has profiled Dr. Cara Ellis *(pictured)*, a postdoctoral fellow in Dr. Tim Kieffer's lab in the UBC Department of Cellular and Physiological Sciences. Cara is a multitalented scientist and a role model for young women interested in STEM. Cara shared her story of how she came to pursue her postdoctoral fellowship at UBC, and her advice for young students considering diabetes research. Read More

STEMCELL Technologies Is an Essential Industry Partner for COVID-19 Research and Vaccine Development

STEMCELL Technologies

Products made by Vancouver's STEMCELL Technologies are now being used in over 30 COVID-19 studies worldwide. These studies are focusing on areas ranging from diagnostics and treatments to vaccine development and future prevention. Led by CEO Dr. Allen Eaves *(pictured)*, STEMCELL is playing a crucial role in COVID-19 research by providing cutting-edge laboratory tools and reagents, as well as through close collaborations with scientists. Read More

UBC School a Blueprint for the Future of Medicine

The Globe and Mail

An ever-deepening understanding of biological systems means that medical researchers are on the cusp of unprecedented opportunity – but only if they achieve a paradigm shift in the way research is conducted. Established in 2017, the UBC School of Biomedical Engineering was founded to meet that challenge, attracting scientists and engineers to an interdisciplinary environment designed to transform health care. Read More

ImaginAb and ARTMS Announce Strategic Partnership for Innovative Manufacture of ^{89}Zr CD8 ImmunoPET Agent

ImaginAb

ImaginAb Inc., a leading clinical stage immuno-oncology imaging company, and Vancouver-based ARTMS Products Inc., the global leader in the development of novel technologies which enable the production of the world's most-used diagnostic imaging isotopes, have entered a multi-year non-exclusive partnership to explore a novel radiochemistry manufacture of ImaginAb's lead asset ^{89}Zr CD8 ImmunoPET. Read More

New Clinical Trial for Treatment of COVID-19 Positive Patients to Start at Vancouver Infectious Diseases Centre in Partnership with Montreal Heart Institute

Montreal Heart Institute

The Montreal Heart Institute Research Center has announced a strategic partnership with Dr. Brian Conway *(pictured)* and Dr. David Truong at the Vancouver Infectious Diseases Centre for its COVID-19 clinical study to evaluate whether colchicine will have an effect on preventing the phenomenon of major inflammatory storm present in adults suffering from severe complications related to COVID-19. Read More

View All Local News | Submit an Article

Interesting Articles

Genome Canada Launches Additional Rapid Response Funding for COVID-19 Research

Genome Canada

Genome Canada has launched another rapid response funding opportunity to invest in research with real potential to address near-term challenges related to the COVID-19 pandemic. Delivered together with Canada's six regional Genome Centres, the fund aims to support genomics-informed solutions to COVID-19 at local, provincial and national levels through collaborations between academia and the industry, not-for-profit and public sectors. Read More

View All Interesting Articles | Submit an Article

Upcoming Events in Vancouver

April 15 12:00 PM	**Webinar: The Modern Mentor** Online
April 16 10:00 AM	**Webinar: Research Update from the BC-HTC and Community Implications** Online
April 16 1:00 PM	**Larger Than Life Science | Race for a Cure** Online
April 20 9:00 AM	**Webinar: Hematopoietic Cell Therapy Products – Determining Potency and Stability** Online
April 21 10:00 AM	**North American Vascular Biology Organization (NAVBO) Online Mini-Symposia** Online

View All Events | Submit an Event

Science Jobs in Vancouver

Quality Control Manager, Microbiology and Environmental Monitoring
STEMCELL Technologies

Grant Manager
Aspect Biosystems

Senior Scientist, Clinical Pharmacology
Xenon

Canada Research Chair (Tier 2) in Public Health 'Omics for Heart and Lung Innovation
SFU Faculty of Health Sciences

Research Associate II, Protein Engineering Lab
Zymeworks

View 30 Other Science Jobs | Submit a Job

Submit your articles and events by reaching out to us at info@scienceinvancouver.com.