

Volume 2.29: July 30, 2018

#### Publications of the Week

## Differential Coexpression in Human Tissues and the Confounding Effect of Mean Expression Levels

First Author: Marjan Farahbod | Senior Author: Paul Pavlidis *(pictured)* Bioinformatics | Michael Smith Laboratories and UBC



Differential coexpression—the alteration of gene coexpression patterns observed in different biological conditions—has been proposed to be a mechanism for revealing rewiring of transcription regulatory networks. The authors constructed high-quality coexpression networks for five human tissues and identified coexpression links (gene pairs) that were specific to each tissue. **Profile** 

Abstract

### Pharmacogenomics of Vincristine-Induced Peripheral Neuropathy Implicates Pharmacokinetic and Inherited Neuropathy Genes

First Author: Galen Wright (*pictured*) | Senior Author: Colin Ross Clinical Pharmacology & Therapeutics | BC Children's Hospital Research Institute and UBC



Vincristine is an effective chemotherapeutic drug for various cancers, including acute lymphoblastic leukemia (ALL). Unfortunately, clinical utility is restricted by dose-limiting vincristine-induced peripheral neuropathies (VIPN). The authors sought to determine the association of VIPN with a recently-identified risk variant, CEP72 rs924607, and drug absorption, distribution, metabolism, and excretion gene variants in pediatric ALL. **Profile | Abstract** 

# The Efficacy of the Quadrivalent Human Papillomavirus Vaccine in Girls and Women Living with HIV

First Author: Elisabeth McClymont *(pictured)* | Senior Author: Deborah Money Clinical Infectious Diseases | UBC



HPV vaccination is safe and efficacious in women without HIV. While good immunogenicity has been observed in women living with HIV (WLWH), efficacy data in this population are needed. The authors enrolled 420 females aged ≥9 years living with HIV, and administered 3 doses of qHPV vaccine. The authors compared rates to published rates in vaccinated and unvaccinated women without HIV as well as unvaccinated WLWH. Abstract

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Awards

### Announcing UBC's 2017-2018 Banting Postdoctoral Fellows

UBC Postdoctoral Fellows Office



Nine postdoctoral fellows from UBC have received 2017-2018 Banting Postdoctoral Fellowships, out of seventy fellowships awarded nationally. These prestigious fellowships provide each researcher with \$70,000 each year for two years, to support research that will positively contribute to Canada's economic, social, and research-based growth. **Read More** 

#### **CIHR Funding for Brain Health, Neuroplasticity Research**

Djavad Mowafaghian Centre for Brain Health



A new Canadian Institutes of Health Research (CIHR) Foundation Grant for Dr. Shernaz Bamji *(pictured)* offers an opportunity to look more closely at how disruptions in palmitoylating enzymes lead to synaptic malfunction and ultimately brain disorders, setting the stage for refined approaches that can be leveraged to develop new therapeutics for restoring brain function and cognition. **Read More** 

# The Government of Canada Invests in Dr. Thibault Mayor's Research on the Role of Misfolded Proteins and Neurodegenerative Diseases

Michael Smith Laboratories



Dr. Thibault Mayor *(pictured)* has received a five-year CIHR project grant in the amount of just over \$730K. This grant will help support his research in better understanding how misfolded proteins are eliminated from the cell. Dr. Mayor studies how misfolded proteins are handled in the cell in order to gain fundamental knowledge of both neurodegenerative diseases and other genetic diseases. **Read More** 

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### Local News

### MSFHR-Funded Research Identifies Enzyme Potentially Responsible for Skin Blistering

Michael Smith Foundation for Health Research



The Michael Smith Foundation for Health Research (MSFHR) Scholar and Innovation to Commercialization (I2C) award recipient Dr. David Granville and his team have identified an enzyme potentially responsible for autoimmune skin blistering, and are developing an inhibitor to prevent and treat the condition. **Read More** 

## Could a Deadly Mushroom Help Battle Cancer?

Medium



University of British Columbia scientists are working to unleash the cancer fighting potential of *Amanita phalloides*—a particularly nasty poison shroom. This tricky fungus has fascinated Dr. David Perrin for 17 years. The UBC chemist hopes that the mushroom known as the 'death cap' could help save lives as a cancer-fighting drug. **Read More** 

## A Protein That Helps Prevent Diabetes Could Be a Target for Future Treatments

BC Children's Hospital Research Institute



Thilo Speckmann *(pictured)*, a UBC doctoral student, discusses how a particular protein called NPAS4 reduces the likelihood of diabetes developing. This research could one day lead to the development of a new therapy that raises levels of this protein or helps it work more effectively to stop the progression of type 2 diabetes, a life-long health condition that is becoming more common in children and young people in Canada. **Read More** 

# New UBC Professorship to Look at Pot's Potential in Easing the Opioid Crisis

The Tyee



UBC is creating Canada's first professorship of cannabis science to investigate the role that marijuana-based research could play in mitigating the opioid crisis and

other addictive disorders. The two-year position is being created in partnership with the BC Centre on Substance Use, the province's Ministry of Mental Health and Addictions, and Ontario-based medical cannabis company Canopy Growth Corp. **Read More** 

## Around the World, Worm Researchers Working Together for the Collective Good

Djavad Mowafaghian Centre for Brain Health



The importance of collaboration in science cannot be overstated, but for Dr. Catherine Rankin *(pictured)*, who has been working with *C. elegans* for nearly 30 years, the spirit of working together for the collective good is more than a nice idea: it's the cornerstone of the community's progress in understanding diseases from polycystic kidney disease to Alzheimer's disease to cancer. **Read More** 

# Genetic Marker for Drug Risk in Multiple Sclerosis Offers Path toward Precision Medicine

Djavad Mowafaghian Centre for Brain Health



Dr. Kaarina Kowalec *(pictured)* and a team of researchers has uncovered a specific gene variant associated with an adverse drug reaction resulting in liver injury in a people with multiple sclerosis (MS). It is the first time researchers have been able to establish a validated genetic marker for a drug-induced harm in people with MS. **Read More** 

### A day in the Lab: Biobanking Resources

Vancouver Coastal Health Research Institute (VCHRI)



One of the many services offered at VCHRI is the collection of biospecimens for research purposes—known as the biobanking resources. Biospecimens are tissues, blood and bodily fluids donated by patients. Once stored, they constitute a database of diseases or conditions that are available for research. Researchers can access specific tissue samples, which provide a valuable trove of information toward the development of new treatments. **Read More** 

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#### Interesting Articles

## Artificial Intelligence Is Reshaping the Health and Life Sciences Industry

Biotechnology Focus



Machine learning is augmenting human ability and drastically changing possibilities. It is restructuring businesses and rewiring brains for transformative thinking. Whether it be to develop vaccines for deadly diseases or combat climate change, Canada is at the forefront of this monumental shift. Across the country, there have been several companies lending a hand in this newer and multi-faceted industry that will reshape history. **Read More** 

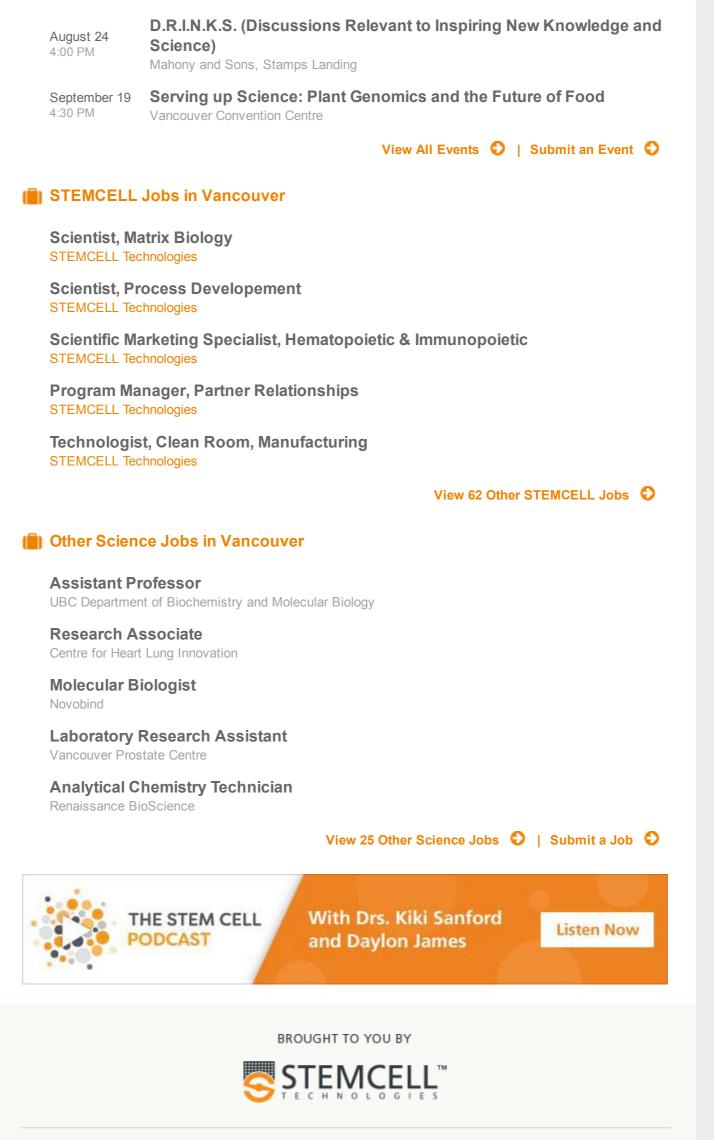
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## 🔁 Upcoming Events in Vancouver

July 31	Cafe Scientifique Vancouver
7:30 PM	Yagger's Downtown
August 5	Albatross Are Way Cool because

1:00 PM Beaty Biodiversity Museum

August 16Centre for Blood Research Research Day 201812:00 PMLife Sciences Institute



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