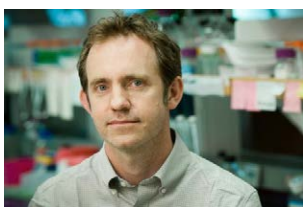


Publications of the Week

## De Novo Mutations in *YWHAG* Cause Early-Onset Epilepsy

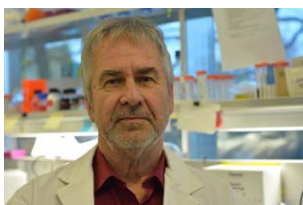
First Author: Ilaria Guella | Senior Author: Matthew Farrer (*pictured*)  
American Journal of Human Genetics | UBC and the Centre for Applied Neurogenetics



Massively parallel sequencing has revealed many *de novo* mutations in the etiology of developmental and epileptic encephalopathies (EEs), highlighting their genetic heterogeneity. Additional candidate genes have been prioritized *in silico* by their co-expression in the brain. The authors evaluated rare coding variability in 20 candidates nominated with the use of a reference gene set of 51 established EE-associated genes. [Profile](#) | [Abstract](#)

## Bypassing Drug-Resistance Mechanisms of Prostate Cancer with Small-Molecules That Target Androgen Receptor Chromatin Interactions

First Author: Kush Dalal | Senior Author: Paul Rennie (*pictured*)  
Molecular Cancer Therapeutics | Vancouver Prostate Centre and UBC



Human androgen receptor (AR) is a hormone-activated transcription factor that is an important drug-target in the treatment of prostate cancer. The authors confirmed the novel mechanism of anti-androgen action of a series of AR-DNA binding domain inhibitors, establishing proof-of-principle for targeting DNA-binding domains of nuclear receptors in endocrine cancers. [Profile](#) | [Abstract](#)

## Near-Atomic Resolution Cryoelectron Microscopy Structure of the 30-Fold Homooligomeric SpoIIAG Channel Essential to Spore Formation in *Bacillus subtilis*

First Author: Natalie Zeytuni (*pictured*) | Senior Author: Natalie Strynadka  
PNAS | Centre for Blood Research and UBC



Bacterial sporulation allows starving cells to differentiate into metabolically dormant spores that can survive extreme conditions. Following asymmetric division, the mother cell engulfs the forespore through an essential channel, the so-called feeding tube apparatus. The authors present the near-atomic resolution structure of one of the proteins of the feeding tube apparatus, SpoIIAG, determined by single-particle cryoelectron microscopy. [Abstract](#)

## Awards

### MSFHR Funds 11 BC Innovators in First Innovation to Commercialization Awards

Michael Smith Foundation for Health Research



The Michael Smith Foundation for Health Research (MSFHR) has announced 11 award recipients in the first Innovation to Commercialization (I2C) competition, including Dr. Michele Roberge of UBC (*pictured*). The I2C Program is designed to help researchers advance discoveries or inventions towards commercialization by supporting commercialization activities that strengthen the value of their intellectual property, facilitate collaboration and attract future investment. [Read More](#)

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## Local News

### New DNA-Based Projects to Boost Fruit Plant Trade

Canadian Food Inspection Agency



The import and export of fruit plants must go through the Canadian Food Inspection Agency (CFIA) to test for potentially devastating plant viruses. Currently, this testing and quarantine process takes an average of three years to complete, significantly hampering the speed of trade. The CFIA will lead two projects worth \$500,000 that use new DNA-based technologies to reduce the quarantine testing time, helping to boost trade and economic competitiveness in the Canadian fruit tree industry.

[Read More](#)

### More Than an Antibiotic: Unveiling Alternative Therapeutic Potential of Gentamicin

The Centre for Blood Research



Approximately 10% of rare genetic diseases are caused by nonsense mutations, in which a stop codon is introduced and the synthesis of the full-length protein is terminated prematurely. Dr. Alireza Baradaran-Heravi and colleagues from the Centre for Blood Research revealed that a minor component of the antibiotic gentamicin has the potent ability to suppress nonsense mutations to promote formation of the full-length protein. [Read More](#)

### Working Together with Indigenous Peoples to Enhance Equity and Access in Precision Health

Genome BC

Genomic tests may not be equally effective for all ethnic groups, including BC's Indigenous Peoples. This is because genomic test results are compared to anonymous reference databases of thousands of genomic variants seen in healthy people. But the frequency of these variants is not the same in all ethnicities, and Indigenous Peoples are under-represented in current databases. [Read More](#)



## Cannabis Traits Unlocked for Better Regulation

Genome BC



A major issue for the cannabis industry is access to well-defined cannabis varieties, with supporting scientific information on their select traits. Anandia Labs, in collaboration with renowned genomics expert Dr. Joerg Bohlmann, a Professor in UBC's Michael Smith Laboratories, will develop new ways to identify and reference the genes that produce the select types of cannabis. [Read More](#)

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### Interesting Articles

## Investing in Research Is the Best Way to Create an Innovative Economy

The Globe and Mail



How do we make Canada a robust environment for fundamental research that would seed an innovative knowledge-based economy? Dr. Carol Herbert, adjunct professor of the School of Population and Public Health at the University of British Columbia, and Dr. Paul Armstrong, professor of Medicine at the University of Alberta, attempt to answer this complex question. [Read More](#)

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### Upcoming Events in Vancouver

- |                         |   |
|-------------------------|---|
| September 7<br>3:00 PM  | <b>The Beautiful Brain: A Celebration of Art and Neuroscience</b><br>Robert H. Lee Alumni Centre  |
| September 21<br>5:00 PM | <b>Beaty Nocturnal: Life In Colour Opening</b><br>Beaty Biodiversity Museum                       |
| September 22<br>7:00 PM | <b>UBC Postdoctoral Association Postdoc Appreciation Dinner</b><br>Royal Seoul House              |
| September 23<br>8:30 AM | <b>17<sup>th</sup> Annual Pacific Northwest Prostate Cancer Conference</b><br>Paetzold Auditorium |
| September 28<br>6:00 PM | <b>Building Biotech</b><br>Coast Coal Harbour Hotel   |

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### Science Jobs in Vancouver

## Product Marketing Manager, Neural

STEMCELL Technologies

## Research Technologist

STEMCELL Technologies

## Research Associate II, Assay Development

Zymeworks

## Clinical Research Coordinator, Surgical Research

Providence Health Care Research Institute

## Production Technician

GenomeMe

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