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Publications of the Week

A Model of Differential Mammary Growth Initiation by Stat3 and Asymmetric Integrin-α6 Inheritance

First Author: Edward Morris | Senior Author: Shoukat Dedhar *(pictured)*
Cell Reports | BC Cancer, BC Children's Hospital and UBC

Multiple cancer-related genes both promote and paradoxically suppress growth initiation, depending on the cell context. The authors have discovered an explanation for how this occurs for one such protein, Stat3, based on asymmetric cell division. They show that Stat3, by Stathmin/PLK-1, regulates mitotic spindle orientation, and used it to create and test a model for differential growth initiation.

Profile | Abstract

Premature Termination Codon Readthrough Upregulates Progranulin Expression and Improves Lysosomal Function in Preclinical Models of *GRN* Deficiency

First Author: Jonathan Frew | Senior Author: Haakon Nygaard *(pictured)*
Molecular Neurodegeneration | UBC

Progranulin (PGRN) haploinsufficiency due to autosomal dominant mutations in the progranulin gene (*GRN*) is an important cause of frontotemporal lobar degeneration. The authors studied whether the aminoglycoside G418 could increase PGRN expression in HEK293 and human induced pluripotent stem cell-derived neurons bearing the heterozygous S116X, R418X, and R493X pathogenic *GRN* nonsense mutations. Abstract

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Awards

More UBC Researchers Receive Federal Funding to Study COVID-19

UBC News

Five research teams at UBC are collectively receiving $2.3 million in federal funding for research to help tackle the COVID-19 outbreak. The teams, led by UBC researchers Drs. Horacio Bach, Artem Cherkasov, Eric Jan, Jeffrey Joy *(pictured)* and James Russell, are working on developing and implementing measures to rapidly detect, neutralize, manage, and reduce the transmission of COVID-19.

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Local News

Coronavirus Testing Kits to Be Developed Using SFU-Invented RNA Imaging Technology

SFU News

SFU researchers will use their pioneering imaging technology—called Mango, for its bright colour— to develop coronavirus testing kits. Dr. Lena Dolgosheina, a post-doctoral fellow, and Dr. Peter Unrau *(pictured)*, a Professor of Molecular Biology and Biochemistry, developed Mango to sensitively detect RNA molecules, helping to improve viral screening for viruses such as the coronavirus while enabling basic discoveries into the functioning of cells. Read More

BC Researchers Are Exploring the Use of Genomics to Improve Drug Treatments for People with Depression

Genome BC

For people with mental health conditions, finding a medication that works without causing severe side effects is often a matter of trial-and-error. In a new $1.5 million project, supported by funding from Genome BC, Genome Canada and the Michael Smith Foundation for Health Research, UBC researchers Dr. Stirling Bryan and Dr. Jehannine Austin are investigating if pharmacogenomic testing should be routinely used in BC for people with depression. Read More

Western Canada Bolsters Canada's Strength in Regenerative Medicine

Signals Blog

Canada's strength in regenerative medicine (RM) and cell and gene therapies is a result of efforts that take place from sea to shining sea. Western Canada's growing RM community significantly increases Canada's competitiveness on the global playing field through its leading-edge research, advanced commercialization abilities, and excellent education and training programs. Read More

Genome BC Launches Rapid Response Funding for COVID-19 Projects

Genome BC

Genome BC has launched a rapid response funding program to invest in promising research and innovation projects with the real potential to address urgent challenges related to the COVID-19 pandemic. This rapid response will enable researchers and innovators to launch projects quickly and deliver solutions to challenges posed by COVID-19. Read More

Virology Lab First in Canada to Have New High Throughput COVID-19 Testing Capability

St. Paul's Foundation

The virology laboratory at St. Paul's Hospital has started using a new high throughput, fully automated COVID-19 testing method – a first in Canada. Dr. Marc Romney and St. Paul's Hospital received approval from Health Canada to start testing for COVID-19 using the Roche cobas® 6800 system. This system is traditionally used for HIV, hepatitis B and CMV viral load testing. Read More

Canadian Biotechnology Company STEMCELL Technologies Provides Critical Support to Sequence the COVID-19 Virus, Accelerating Vaccine Development

STEMCELL Technologies

Canada's largest biotechnology company, STEMCELL Technologies, has been making significant contributions to the fight against COVID-19. Human tissue culture systems developed by STEMCELL were used by researchers at China's Centre for Disease Control to grow lung airway cells that could successfully propagate the novel coronavirus SARS-CoV-2. Read More

SFU Student's Honours Project Leads to BC-CfE Job

SFU Faculty of Health Sciences

As a curious, keen problem solver who works to better understand HIV molecular virology, Hanwei Sudderuddin's *(pictured)* experiences with the Faculty of Health Sciences at SFU have prepared him for his current work with the BC Centre for Excellence in HIV/AIDS (BC-CfE). He is helping set-up a new molecular virology laboratory in Vancouver's Downtown Eastside. Read More

Derm-Biome Pharmaceuticals, Inc. Reports Positive Results from a Preclinical Study in Atopic Dermatitis

Derm-Biome Pharmaceuticals, Inc.

Derm-Biome Pharmaceuticals, Inc, a private Vancouver based start-up biopharmaceutical company focused on skin health and healthy ageing, has announced that one of its topical drugs produced significant, and dose dependent inhibitory effects in a well established mouse model of atopic dermatitis (AD). AD (eczema) is a chronic inflammatory skin disease often linked to depression and a decreased quality of life. Read More

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Interesting Articles

Canada's Plan to Mobilize Science to Fight COVID-19

Justin Trudeau, Prime Minister of Canada

The Government of Canada is supporting the country's researchers as they do critical work to protect the health and safety of all Canadians, and people around the world, during the COVID-19 outbreak. The Prime Minister, Justin Trudeau, has announced support to quickly mobilize Canadian researchers and life sciences companies to support large-scale efforts towards countermeasures to combat COVID-19, including potential vaccines and treatments. Read More

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Upcoming Events in Vancouver

March 31 9:00 AM	**Webinar: Rapid Communication of COVID-19 Research** Online
April 7 6:00 PM	**Hack the Performance Review WEBINAR, with Collaborator: Success Bully** Online
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 21 10:00 AM	**North American Vascular Biology Organization (NAVBO) Online Mini-Symposia** Online

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Science Jobs in Vancouver

Biomaterials Scientist, Tissue Therapeutics
Aspect Biosystems

Research Associate/Senior Research Associate, *In Vivo* Pharmacology
Chinook Therapeutics

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

Research Associate, Bioinformatics Lab
UBC Centre for Molecular Medicine and Therapeutics

Senior Scientist, Molecular Biology & Expression Group
AbCellera

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