

Publications of the Week

## TNF $\alpha$ and IFN $\gamma$ Cooperate for Efficient Pro- to Anti-Inflammatory Transition of Macrophages During Muscle Regeneration

First Author: Farshad Babaeijandaghi | Senior Author: Fabio Rossi (*pictured*)  
PNAS | Vancouver General Hospital, Aspect Biosystems, and UBC



The release of cytokines from various immune cells is known to be essential for successful muscle regeneration. One such cytokine is interferon (IFN) $\gamma$ , which is most commonly thought to promote inflammation. The authors show that IFN $\gamma$  is primarily produced by a type of white blood cells called natural killer cells following muscle damage. [Abstract](#)

## Basal Gp78-Dependent Mitophagy Promotes Mitochondrial Health and Limits Mitochondrial ROS

First Authors: Parsa Alan, Kurt Vandevoorde, Bharat Joshi, and Ben Cardoen | Senior Author: Ivan Nabi (*pictured*)  
Cellular and Molecular Life Sciences | UBC and SFU



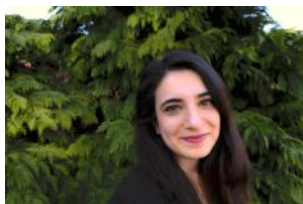
Maintaining a finely tuned, healthy mitochondrial population is essential for cellular homeostasis and survival. The authors report that CRISPR/Cas9 knockout of Gp78 in HT-1080 fibrosarcoma cells increased mitochondrial volume, elevated reactive oxygen species production, and rendered cells resistant to carbonyl cyanide *m*-chlorophenyl hydrazone-induced mitophagy. [Abstract](#)

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Awards

## October 2022 Award Winners

Science in Vancouver



Melody Salehzadeh (*pictured*) is a doctoral student in Zoology at UBC. She received a Friedman Award for Scholars in Health to travel to the University of Edinburgh to perform mass spectrometry imaging of glucocorticoids in the thymus. See which other Vancouver researchers received grants, awards, and scholarships in October. [Read More](#)

## SBME Professors Carl de Boer and Dena Shahriari Win 2022 MSHR BC Scholar Awards

UBC School of Biomedical Engineering (SBME)

The Michael Smith Health Research (MSHR) Scholar Program is designed to support early career researchers as they establish independent research careers,



form their own research teams, and develop research programs that advance cutting-edge health solutions. Drs. Carl de Boer (*pictured, left*) and Dena Shahriari (*right*) are two of those award recipients. [Read More](#)

## Annie Ciernia Named a 2021 Brain Canada Future Leader in Canadian Brain Research

Djavad Mowafaghian Centre for Brain Health



Dr. Annie Ciernia (*pictured*) is among 20 neuroscientists in Canada who have been awarded \$100,000 each in research funding, as part of Brain Canada's 2021 Future Leaders in Canadian Brain Research Program. Her project, in collaboration with Dr. Carolina Tropini from UBC's Department of Microbiology and Immunology, will examine how disruption of gut-brain communication during development can lead to mental health problems in pediatric inflammatory bowel disease.

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## Dr. Christopher Overall Receives 2022 Helmut Holzer Award

Life Sciences Institute



Dr. Christopher Overall (*pictured*) was awarded the 2022 Helmut Holzer Award, an honour recognizing outstanding contributions to advancement of the field of proteolysis. The Award, sponsored by the International Union of Biochemistry and Molecular Biology, was presented at the opening plenary lecture of the 2022 Federation of European Biochemical Societies conference, "Proteolysis at the Interface between Health and Disease," in Bled, Slovenia. [Read More](#)

## Meet the CBR Graduate Award Program Cohort 2022-23!

The Centre for Blood Research (CBR)



Meet the incoming CBR Graduate Award Program Cohort for 2022-23! Over the next year, these students will take part in exciting professional development activities alongside their research. Elwyn Rowe (*pictured*) is a PhD Candidate working with Dr. Dana Devine to better understand how blood donor characteristics can influence the quality of transfusion products. [Read More](#)

## Dr. Pieter Cullis Becomes a Laureate at the Gairdner 2022 Awards Gala

Life Sciences Institute (LSI)



Former LSI Director Dr. Pieter Cullis (*pictured*) was celebrated along with six other new laureates at the Gairdner Award Gala the night of October 27. Drs. Cullis, Katalin Karikó, and Drew Weissman were three among the five recipients of International Awards, traditionally given to outstanding biomedical scientists who have made original contributions to medicine resulting in an increased understanding of human biology and disease. [Read More](#)

## MATRIX-N Cluster Welcomes Six Junior Scholars for 2022/23



The newly established UBC MATRIX-N (Multidisciplinary Alliance for Translational Research and Innovation in Neuropsychiatry) research excellence cluster recently launched its Junior Scholars program. The Junior Scholars will support MATRIX-N activities and help advance translational research and innovation in neuropsychiatry at UBC and beyond. Karina Thiessen's (*pictured*) research focuses on risk factors and treatment of substance use and mental health disorders. [Read More](#)

## Anne-Sophie Sack and Jacob Wardman Awarded 2021 William and Dorothy Gilbert Scholarships

Michael Smith Laboratories



Two outstanding graduate students, Anne-Sophie Sack (*pictured, left*) and Jacob Wardman (*right*), have been selected as the 2021 William and Dorothy Gilbert scholarship recipients. Anne-Sophie is studying how some calcium channels may be affected by brain injury, leading to neurological problems. Jacob is studying the role of carbohydrates in signalling and cellular activities. [Read More](#)

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### Local News

## AbCellera's First Program with Regeneron in Multi-Target Collaboration Advances in Preclinical Development

AbCellera



AbCellera announced that Regeneron has elected to exercise its right to advance a therapeutic antibody candidate, discovered in partnership with AbCellera as part of a multi-target collaboration between the companies, into further preclinical development. The partnership, which commenced in March 2020 and allows for four discovery programs selected by Regeneron, leverages AbCellera's antibody discovery engine and Regeneron's VelocImmune<sup>®</sup> mice to identify novel therapeutic antibodies. [Read More](#)

## The Road to Quick COVID Vaccines Began 50 Years Ago

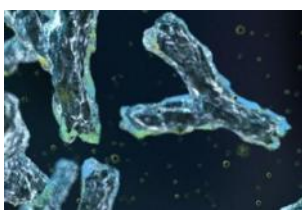
Research2Reality



Part of the reason why researchers were able to successfully create COVID-19 mRNA vaccines so quickly was that the groundwork had begun decades before, and this included a major Canadian contribution. "For the last 50 years — and I'm exaggerating there, 50 years — I've been trying to understand what lipids and membranes do," says Dr. Pieter Cullis, Professor of Biochemistry and Molecular Biology at UBC. [Read More](#)

## Jazz Drops \$50M for Exclusive Rights to Zymeworks' Bispecific HER2 Hopeful

BioSpace



Jazz Pharmaceuticals and Zymeworks entered into a \$50 million licensing agreement over zanidatamab, Zymeworks' bispecific antibody targeting HER2. The deal will give Jazz exclusive commercialization and development rights over zanidatamab in the US, Europe, Japan and all other territories that aren't yet covered by existing licenses. [Read More](#)

## Vancouver Is Ready to Foster the Next Generation of Biotech Companies

Vancouver Tech Journal



On October 25 at the Pan Pacific Hotel, biotech scientists, mentors, and ventures from across Canada, the US, and the UK came together to discuss the Future of Regenerative Medicine. The event was hosted by Creative Destruction Lab (CDL) Vancouver — a not-for-profit organization that delivers programming for pre-seed and seed-stage science- and technology-based companies — to launch CDL's Advanced Therapies stream. [Read More](#)

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### Upcoming Events in Vancouver

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|-------------------------|---|
| November 17<br>9:00 AM  | <b>Vancouver Diabetes Research Day 2022</b><br>BC Children's Hospital Research Institute  |
| November 22<br>7:45 AM  | <b>Earl W. Davie Symposium 2022</b><br>UBC Robson Square  |
| November 23<br>11:00 AM | <b>Position Your Health Technology for Success: How Early Health Technology Assessment Can Quantify the Potential Value and Uptake of Your Novel Technology</b><br>Online |
| November 24<br>7:30 AM  | <b>BC Cancer Summit</b><br>Sheraton Vancouver Wall Centre & Online  |
| November 30<br>2:00 PM  | <b>Discovery to Commercialization: Education and Networking Social</b><br>St. Regis Hotel   |

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### STEMCELL Jobs in Vancouver

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[STEMCELL Technologies](#)

**Category Manager, Indirect**  
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**Scientist, Recombinant Proteins**  
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**Scientist, Immunology and Immunotherapies**  
[STEMCELL Technologies](#)

**Senior Scientific Support Representative**

 **Other Science Jobs in Vancouver**

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Imagia Canexia Health

**Project Coordinator**

AbCellera

**Associate Scientist, *In Vitro* Biology**

Zymeworks

**Research Assistant/Technician 2**

UBC

**Research Associate, Cell Culture**

Aspect Biosystems

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