

BCREGMED 9TH ANNUAL SYMPOSIUM

MAY

MONDAY

11TH

9AM-5:30PM

2026

THE GREAT HALL @ THE NEST
UNIVERSITY OF BRITISH COLUMBIA
VANCOUVER, BC



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AGENDA

BC Regenerative Medicine Spring Symposium
The University of British Columbia
May 11th, 2026

8:30am-9:00am Registration and Poster Mounting			
9:00am-9:20am Welcome and Introductions			
Fabio Rossi (BCREGMED) Cate Murray (SCN)			
9:20am-10:35am Session 1			
Moderator: Kelly McNagny	9:20-9:40	Chris Moraes	<i>Microscale tissue engineering: mechanical feedback loops in organ-on-a-chip model development</i>
	9:40-10:00	Maksymilian Prondzynski	<i>Suspension-derived organoid models of human development</i>
	10:00-10:20	Sarah Crome	<i>Engineered Innate Lymphoid Cells for Cell Therapy</i>
10:35am-11:05am Rapid Fire Session			
Moderator: Alia Arslanova	Grace I-Chih Kuo Sandeep Saxena Mona Siu Sehee Yun	Saif Dababneh Farnoosh Kalantarnia Aaron Bernstein Ethan Katz Bruce Lin	
11:05am-11:20am Break			
11:20am-12:30pm Session 2			
Moderator: Sarah Hedtrich	11:20-11:40	Babak Shadgan	<i>Toward Functional Biomarkers in Spinal Cord Regeneration: Real-Time Epidural Monitoring of Neural Conduction</i>
	11:40-12:00	Thomas Claydon	<i>High-content automated patch clamp electrophysiological characterization of 2D and 3D hiPSC-derived cardiomyocytes and neurons</i>
	12:00-12:20	Katherine Stewart	<i>Cannibalism in the skin: Stem cells tightly regulate apoptotic corpse clearance to maintain tissue homeostasis</i>
12:35pm-2:00pm Lunch - Networking & Poster Judging Session			
2:00pm-2:30pm Session 4: Keynote			
Moderator: Fabio Guy Sauvageau - <i>Epigenetic Control of Hematopoietic Stem Cell Expansion and Rejuvenation</i>			
2:40pm-4:20pm Session 3			
Moderator: Fabio Rossi	2:40-3:00	Ross Jones	<i>Engineering Fate and Function of iPSC-derived T cells</i>
	3:00-3:20	Lesley Ann Hill	<i>Mechanisms regulating mesenchymal stromal cell quiescence and their impact on liver regeneration, fibrosis and resolution</i>
	3:20-3:40	Olena Zhulyyn	<i>Rapid remodeling of the translome underlies tissue development and regeneration.</i>
	3:40-4:00	Colin Hammond	<i>Tools for Human Hematopoietic Research</i>
4:20pm-5:00pm Complimentary beer/wine/appetizers Closing Remarks & Prizes			

An abstract biological illustration featuring a complex network of blue, branching, vein-like structures. Interspersed among these are numerous orange, spherical, textured objects of varying sizes, some resembling cells or spores. The background is a gradient of light blue and white, with a subtle pattern of larger, faint blue circles. The overall aesthetic is scientific and futuristic.

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LAND ACKNOWLEDGEMENT

EVERY YEAR WE GATHER ON THE TRADITIONAL, ANCESTRAL AND UNCEDED TERRITORY OF THE COAST SALISH PEOPLES-SK̓W̓W̓7MESH (SQUAMISH), STÓ:LŌ AND SƏ́ÍLWƏTƏʔ/SELILWITULH (TSLEIL-WAUTUTH) AND X̓MƏΘK̓ƏÝƏM (MUSQUEAM) NATIONS

AS WE EXPLORE THE SHARED SKY, WE ACKNOWLEDGE OUR RESPONSIBILITIES TO HONOUR THOSE WHO WERE HERE BEFORE US AND THEIR CONTINUING RELATIONSHIP WITH THESE LANDS.

WE STRIVE FOR RESPECTFUL RELATIONSHIPS AND PARTNERSHIPS WITH ALL THE PEOPLES OF THESE LANDS AS WE MOVE FORWARD TOGETHER TOWARDS RECONCILIATION AND DECOLONIZATION



ABOUT BCREGMED

BCREGMED is a multi-disciplinary research network comprised of world-class scientists, clinicians, and industry partners. Born as a global research excellence cluster in 2017, we have since catalyzed unique collaborations and established BC as a leader in regenerative medicine. Our mission is 1) to build on our success as a knowledge translation initiative and accelerate regenerative medicine projects towards translational outcomes 2) create new and support existing infrastructure across the province in order to maximize the potential of bioengineering and synthetic biology research in BC 3) create new jobs and economic opportunity.

For more information on BCRegMed and how to get involved, please visit <http://www.bcregmed.ca>.

BCREGMED



THE UNIVERSITY
OF BRITISH COLUMBIA

SPEAKERS



CHRIS MORAES

UNIVERSITY OF BRITISH COLUMBIA

Chris Moraes is an Associate Professor at UBC's School of Biomedical Engineering and Vancouver Coastal Health Research Institute. Trained in nanoengineering and mechanical/biomedical engineering at the University of Toronto, he held NSERC/Howard Alper Banting postdoctoral fellowships at Michigan and a Canada Research Chair at McGill. His work integrates microfabricated cell culture systems, biomaterials, imaging, and computational modelling to study biomechanical forces in disease and development. He has also earned McGill research and teaching prizes and led student-support/outreach initiatives.

MAKSYMILIAN PRONDZYNSKI

SIMON FRASER UNIVERSITY

Dr. Maksymilian Prondzynski is an Assistant Professor at SFU, Investigator at BCCHRI and Adjunct Professor at the School of Biomedical Engineering at UBC. He completed his postdoctoral training in the laboratory of Dr. William T. Pu in the Department of Cardiology at Boston Children's Hospital and served as an Instructor in pediatrics at Harvard Medical School. His research program leverages stem cells and 3D suspension culture systems to advance the modeling and study of human organ development and disease such as cardiac and neural organoids.



SARAH CROME

TERRY FOX LABORATORY

Dr. Crome joined BC Cancer in 2025 after senior appointments at University Health Network and the University of Toronto, where she held a Tier 2 Canada Research Chair in Tissue-Specific Immune Tolerance. Her work spans human immune regulation, tissue-resident immune programs, transplantation, inflammatory disease, and cancer, including the first comprehensive single-cell atlas of healthy human kidney. She has advanced regulatory ILC2-based cell therapy platforms for graft-versus-host disease and islet transplantation, and identified a regulatory NK cell-like ILC population in ovarian cancer. Her contributions have earned major honours from IUIS, the Cancer Research Society, and the Canadian Society for Immunology.



SPEAKERS



BABAK SHADGAN

UNIVERSITY OF BRITISH COLUMBIA

Babak Shadgan, MD, MSc, PhD, is an MSFHR Scholar, SPIE Fellow, and Assistant Professor of Orthopedics, with a cross-appointment in the School of Biomedical Engineering at the University of British Columbia. He is a Principal Investigator at ICORD, where he directs the Implantable Biosensing Laboratory. His translational research focuses on implantable and transcutaneous biosensors that provide real-time functional biomarkers of organ function and integrity, enabling objective assessment and monitoring of regenerative, neurorestorative, and cell-based therapies, particularly in spinal cord injury.

THOMAS CLAYDON

SIMON FRASER UNIVERSITY

Tom Claydon is a cellular physiologist who specializes in the structure, function, and dysfunction of membrane-associated ion channels. His research examines the biophysics and physiology of potassium and sodium channels, spanning diverse channel subtypes and considering the impacts of genetic influences on ion channel function, as well as the influence of various physiological and pathophysiological cellular triggers or pharmacological agents, and their translation to cardiac and neuronal diseases. He is expert in conventional, fluorescence-associated, high-throughput, and plate-based electrophysiological assessment of ion channel function and has provided significant contributions in the area of ion channel gating mechanisms, disease-associated disturbances of ion channel gating, and novel channel activator compounds for reducing altered cellular excitability.



KATHERINE STEWART

UNIVERSITY OF TORONTO

Dr. Stewart completed her BSc. (Honours, Biochemistry) at Queen's University and her PhD (Biochemistry) at McGill University, working under the supervision of Dr. Maxime Bouchard. She completed postdoctoral training with Dr. Elaine Fuchs at Rockefeller University, before establishing her independent research program at the Lunenfeld Tanenbaum Research Institute at Sinai Health Systems, cross-appointed with the Department of Molecular Genetics at the University of Toronto.



KEYNOTE



GUY SAUVAGEAU UNIVERSITY OF MONTREAL

Guy Sauvageau is Principal Investigator of the Laboratory for Stem Cell Epigenetics at the Institute for Research in Immunology and Cancer (IRIC), Université de Montréal. He is also a practicing hematologist at Maisonneuve-Rosemont Hospital within the Hematopoietic Stem Cell Transplantation Program, and co-founder and Chief Scientific Officer of ExCellThera and RejuvenRx, two Canadian biotechnology companies focusing on stem cell expansion and rejuvenation.

Dr. Sauvageau's research focuses on the genetic and epigenetic mechanisms that sustain self-renewal in both normal hematopoietic stem cells and leukemic cells. His team has identified several master regulators of stem cell fate and achieved a major breakthrough with the discovery of UM171, a first-in-class small molecule that enables robust ex vivo expansion of umbilical cord blood stem cells. This innovation has successfully advanced from bench to bedside and is now in clinical use, following recent European Medicines Agency approval for patients lacking a suitable donor.

He also directs the Leucegene Project, a large-scale translational initiative aimed at deciphering the molecular and transcriptional landscape of acute myeloid leukemia (AML) and translating these discoveries into novel diagnostics and targeted therapies. This program has led to the identification of previously unrecognized mutations and transcriptional subtypes, the development of new therapeutic strategies, predictive biomarkers of drug response, and molecular tools that are contributing to more personalized treatment approaches in AML.

SPEAKERS



ROSS JONES

UNIVERSITY OF BRITISH COLUMBIA

Dr. Ross D. Jones is a Research Associate at UBC in Peter Zandstra's Stem Cell Bioengineering Lab, where he combines developmental niche engineering and synthetic biology to generate allogeneic therapeutic immune cells from induced pluripotent stem cells. His work aims to produce high-yield, feeder-free TCR-/CAR-T cells with defined CD8+ and CD4+ phenotypes. He earned his PhD at MIT, studying context dependence in mammalian gene expression and engineering genetic circuits for robust intracellular control across contexts.

LESLEY ANN HILL

UNIVERSITY OF BRITISH COLUMBIA

Dr. Lesley Hill is a research associate in the department of Cellular and Physiological Sciences at the University of British Columbia, working under the supervision of Dr. Michael Underhill. Her current research focuses on investigating the fate and function of mesenchymal stromal cells in liver regeneration and fibrosis, the tumor microenvironment and sarcomagenesis.



OLENA ZHULYN

UNIVERSITY OF TORONTO

Dr. Olena Zhulyyn completed her PhD in the Department of Molecular Genetics at the University of Toronto, focusing on genetic dissection of Sonic hedgehog signaling in embryonic limb development. During her postdoc, she explored the role of translational regulation in mouse embryonic development and established Stanford's first axolotl colony with the goal of understanding how regulated protein synthesis contributes to the extreme regenerative ability of this species. She joined the Hospital for Sick Children as a Scientist in 2023.

COLIN HAMMOND

STEMCELL TECHNOLOGIES

Dr. Colin Hammond works as a Scientist at STEMCELL Technologies, optimizing and developing assay workflows. Colin completed his PhD in Experimental Medicine at the University of British Columbia with Dr. Connie Eaves. He has spent 10 years investigating the functional and molecular heterogeneity of human hematopoietic stem and progenitor cells, focusing on the processes of aging, differentiation, and leukemic transformation.





STUDENT ABSTRACTS

[HTTPS://TINYURL.COM/
58JW7WSC](https://tinyurl.com/58JW7WSC)

RAPID FIRE TALKS

Grace I-Chih Kuo - Poster # 21

PSC-derived ILC2s exhibit potent anti-tumor activity against pancreatic cancer cells

Sandeep Saxena - Poster # 32

The nail bed orchestrates a multicellular response to promote mammalian fingertip (digit tip) regeneration versus fibrosis

Mona Siu - Poster #37

Unveiling novel genes and gene regulatory networks for T-cell specification using CRISPR screens in human pluripotent stem cell-derived hematopoietic progenitors

Sehee Yun - Poster # 43

Systematic Identification of Novel Hippo Pathway Modulators in Liver Fibrosis via Bi-directional Genome-wide Screening

Saif Dababneh - Poster #8

Modelling Complex and Clinically Silent Lethal Heart Rhythm Disorders using Human iPSC-based Cardiac Tissue

Farnoosh Kalantarnia - Poster #16

Aaron Bernstein - Poster #3

Immune checkpoint-directed glycoengineering protects the allograft vascular endothelium

Ethan Katz - Poster #17

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Bruce Lin - Poster #23

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Alia Arslanova
 Simon Fraser University Poster #2
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Aaron Bernstein
 Simon Fraser University Poster #3
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 Simon Fraser University Poster #4
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BC REGENERATIVE MEDICINE

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THANK YOU TO OUR COMMUNITY

THANK YOU TO THE BCREGMED COMMUNITY FOR NEARLY A DECADE OF SUPPORT, COLLABORATION, AND SHARED COMMITMENT TO REGENERATIVE MEDICINE RESEARCH. AS THE PROGRAM IS EXPECTED TO SUNSET NEXT YEAR, THIS ANNUAL SYMPOSIUM MAY BE OUR FINAL GATHERING IN THIS FORMAT. WE ARE GRATEFUL FOR THE COLLEAGUES, TRAINEES, PARTNERS, AND SUPPORTERS WHO HAVE HELPED SHAPE THE NETWORK'S IMPACT.

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