

CAN-ASC Workshop Schedule – February 16-19, 2027

Monday, February 15		
Time	Location	Description
4:00-7:00PM	Gage Suites Hotel	Check-in at UBC
7:00-9:00PM		Welcome Dinner

Tuesday, February 16		
Time	Location	Description
8:00-9:00AM		Travel to BCCHR
9:00-10:00AM	BCCHR (Room 2108)	<u>Lecture 1</u> : Importance of standardization for human immunology research <i>Speaker: Dr. Sabine Ivison</i>
10:00-12:00PM	BCCHR (Tissue Culture Rooms)	<u>Lab 1</u> : Thawing PBMCs for optimal recovery. Introduction to immune organoid culture. Set up an activation-induced marker (AIM) assay
12:00-1:00PM	BCCHR (Room 2108)	Lunch <u>Lecture 2</u> : Introduction to CRISPR/Cas9 gene editing <i>Speaker: Dr. Nozomu Yachie</i>
1:00-5:00PM	BCCHR (Tissue Culture Rooms and Room 2108)	<u>Lecture 2/Lab 2</u> : Designing guides for gene editing CRISPR/Cas9-mediated genetic editing of T cells
Evening		Free time

Wednesday, February 17		
Time	Location	Description
8:00-9:00AM		Travel to BCCHR
9:00-10:00AM	BCCHR (Room 3113)	<u>Lecture 3</u> : Activation-induced marker (AIM) assays and their use in clinical research <i>Speaker: Torin Halvorson</i>
10:00-1:00PM	BCCHR (Tissue Culture Rooms)	<u>Lab 3</u> : <u>AIM assay</u> : Stimulate PBMCs/organoids with various peptides
1:00-2:00PM	BCCHR (Room 3113)	Lunch <u>Lecture 4</u> : Organoid-based Models for Immunologic Response Simulation <i>Speaker: Dr. Phillip Domeier</i>
2:00-5:00PM	BCCHR (Room 3113)	<u>Lecture 5/Lab 4</u> : Bioinformatic Interpretation of Omics + Workshop

		Transcriptomics/RNA-seq data analysis and machine learning models for hypothesis generation <i>Speakers: Dr. Bhavjinder Dhillon + Dr. Jeffrey Bone</i>
6:00-8:30PM		Group Dinner

Thursday, February 18		
Time	Location	Description
8:00-9:00AM		Travel to BCCHR
9:00-10:00AM	BCCHR (Room 2108)	<u>Lecture 6:</u> Best practices for standardization of flow cytometry research <i>Speaker: Dr. Alice Wiedeman</i>
10:00-12:00PM	BCCHR (Flow bench)	<u>Lab 5: Flow cytometry</u> Prepare cell/organoid samples from AIM assay and CRISPR/Cas9 gene editing experiments. Learn how to set up flow cytometry experiments for longitudinal/cross-centre studies
12:00-1:00PM	BCCHR (Room 3113)	Lunch <u>Lecture 7:</u> Overview of Microbiome and Immune Response to Vaccines <i>Speakers: Dr. Genelle Lunken + Dr. Shrushti Shah</i>
1:00-4:00PM	BCCHR (Flow bench)	<u>Lab 5:</u> Acquire AIM assay and gene-edited samples on flow cytometers
4:00-5:00PM	BCCHR (Room 2108)	<u>Lecture 8:</u> Sex and Gender in Immunology Research <i>Speaker: Dr. Annie Duchesne</i>

Friday, February 19		
Time	Location	Description
9:00-12:00PM	TBD	<u>Lecture 10/Lab 6:</u> Analysis of flow cytometry data: Analyze results from AIM assays to evaluate experimental variation. Discuss methods to reduce variability. CAN-ASC staff will use FlowJo for analysis but course participants can use analysis software of their choice.
12:00-1:00PM		Departure