	TUE	WED	THU	FRI	SAT
8:00		Breakfast	Breakfast	Breakfast	Breakfast
9:00		Lec/Lab 1: PBMC handling	Lec/Lab 3: AIM assay	Lec/Lab 5: Flow cytometry	Breakfast
10:00		Lec/Lab 1: PBMC handling	Lec/Lab 3: AIM assay	Lec/Lab 5: Flow cytometry	Lec 6: Flow cytometry data analysis
11:00		Lec/Lab 1: PBMC handling	Lec/Lab 3: AIM assay	Lec/Lab 5: Flow cytometry	Lec 6: Flow cytometry data analysis
12:00		Lunch	Lec/Lab 3: AIM assay	Lec/Lab 5: Flow cytometry	Lec 6: Flow cytometry data analysis
1:00		Lec/Lab 2: CRISPR-Cas9 gene editing	Lunch	Lunch	Lunch/Goodbye
2:00		Lec/Lab 2: CRISPR-Cas9 gene editing	Lec/Lab 4: CITE-seq	Lec/Lab 5: Flow cytometry continued	
3:00		Lec/Lab 2: CRISPR-Cas9 gene editing	Lec/Lab 4: CITE-seq	Lec/Lab 5: Flow cytometry continued	
4:00	Check-in/ Registration	Lec/Lab 2: CRISPR-Cas9 gene editing	Lec/Lab 4: CITE-seq	Lec/Lab 5: Flow cytometry continued	
5:00	Check-in/ Registration	Lec/Lab 2: CRISPR-Cas9 gene editing	Lec/Lab 4: CITE-seq	Lec/Lab 5: Flow cytometry continued	
6:00	Welcome dinner	Dinner	Dinner and attendee presentations	Free time	
7:00	Welcome dinner	Dinner	Dinner and attendee presentations	Free time	
8:00	Welcome dinner	Dinner	Dinner and attendee presentations	Free time	

Overview

Lecture/Lab 1: PBMC Handling
- Optimized methodology for freezing, thawing, and handling PBMCs
- Focus on the importance of following SOPs to generate comparable results.

Lecture/Lab 2:
- CRISPR-Cas9 gene editing using the Neon Transfection System and strategies to optimize transfection conditions for your cell type.

Lecture/Lab 3: AIM assay
- Stimulate cells in an activation-induced marker (AIM) assay.
- Learn about the proper controls and experiment set-up to reduce cross-contamination between samples.

Lecture/Lab 4: CITE-seq
- Learn how to troubleshoot common CITE-seq challenges including panel design, antibody concentration and testing, protein integration and protein normalization.
- Practice analysis of CITE-seq data using R.

Lecture/Lab 5:
- Focus on flow cytometry standardization for longitudinal and/or multi-centre studies through application settings, the use of keywords, development of detailed SOPs for harmonized sample preparation and more.

Lecture 6:
- Analyze results from AIM assays to evaluate the experimental variation and discuss methods of standardizing experiments to reduce variability across different users and machines.