2024 Workshop Program

A Panoramics Enlighten-me Chapter Event
Part of the Canadian Bioinformatics Workshop Series

Introductory Spatial 'Omics Analysis
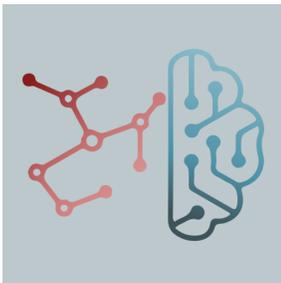
Funding for this workshop is provided by the Brain Single Cell Initiative. The Brain Single Cell Initiative has been made possible by the Canada Brain Research Fund (CBRF), an innovative arrangement between the Government of Canada (through Health Canada) and Brain Canada Foundation, and University Health Network.

Date and Location

July 9-10, 2024 - Toronto, Ontario AND Online

Priority will be given to brain researchers located in Canada. Please note that virtual participants will be supported by dedicated virtual TAs but may not have the same learning experience as in-person participants.

Course Description

This workshop will introduce the participant to single molecular spatial transcriptome and image analysis in a supportive environment with practical, hands-on sessions. The focus will be on analysis of Xenium brain datasets, but learnings will be applicable to other research programs and spatial single molecular transcriptomics. By the end, participants will be able to:

- Understand lab practices to plan optimal single molecular spatial experiments
- Design gene panels in line with panel design best practices
- Perform data clean-up and pre-processing
- Understand and implement different non-spatial and spatial methods of analysis
- Apply a basic non-segmentation/segmentation method to their analysis
- Plan spatial experiments from start through analysis

About This Collaboration

The **Brain Single Cell Initiative** is making single-cell and spatial genomics technology, along with scientific and bioinformatics support, available to brain researchers through the Princess Margaret Genomics Centre.

Panoramics – A Vision is a pan-Canadian working cluster for spatial and single cell multi-omics analyses.

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