



5<sup>th</sup> Annual Congress of Immuno-Oncology Society of India

# I-OSICON 2024

at National Centre for Cell Science (NCCS), Pune

12 13 14 January 2024

FRIDAY - SUNDAY

## NCCS

(An Autonomous Institute of  
Department of Biotechnology,  
Government of India)

Conference Theme: **"Harnessing the potential of Cells, Metabolism and Molecules in Cancer Immunotherapy"**

# Hands-on Single-Cell Multiomics Research workshop

11<sup>th</sup> January 2024 | 9:30 AM to 5:30 PM

**Venue:** National Centre for Cell Science (NCCS), Pune

## What are the learning objectives?

- Understanding the Single cell multiomics and Applications
- Sample and library preparations for Single Cell analysis
- Hands-on session with the Spectrum flow cytometer, including instrument setup, sample preparation, and data acquisition.
- Demonstration of Cartridge cell capture workflow using Rhapsody Express
- Single cell Multiomics data analysis using bridges and SEURAT pipeline

## Fees of Workshop:

- Rs. 1000 for IOSI Members
- Rs. 1500 for IOSI Non-members

[REGISTER NOW](#)

## Guidelines

1. Participants must submit upto maximum 350-word Statement of Purpose (why they want to attend this workshop and how it will be helpful to them).  
Please upload a .pdf file only.  
Field name: Upload Statement of Purpose
2. The last date for applying is 15<sup>th</sup> December 2023.
3. Participant can attend only one workshop organized during the pre-IOSI2024 congress at NCCS on 11<sup>th</sup> January 2024.
4. The Selection Committee will review the application, and the selected candidate will be informed by 20<sup>th</sup> December 2023 by email.
5. Selected candidates must pay the workshop Fee within three days to secure participation.
6. Participants need to arrange their travel and accommodation in Pune.



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## Agenda

9:00 AM-9:30 AM	Registration
9:30 AM-10:30 AM	Session 1: Talk on Latest trend in Single Cell Multiomics and Applications
Speaker	<b>Dr. Romsha Kumar (BD)</b>
10:30 PM-11:00 AM	Question and Answer Session
Speaker	<b>Dr. Romsha Kumar (BD)</b>
11:00 PM-11:30 AM	Tea Break
11:30 AM-1:00 PM	Session 2: Sample Preparation tips and Library preparation protocol discussion
	<ol style="list-style-type: none"><li>1. Cell viability and counting</li><li>2. Library QC</li><li>3. Types of libraries and Sequencing depth</li></ol>
Speaker	<b>Dr. Romsha Kumar (BD)</b>
1:00PM-2:00PM	Lunch Break
2:00PM-4:00PM	Session 3: Cartridge cell capture workflow demonstration using Rhapsody Express
	<ol style="list-style-type: none"><li>1. Demo cartridge loading to Rhapsody Express instrument</li><li>2. QC analysis by Qubit concentration and Tape station</li><li>3. Play Rhapsody Express cell capture workflow video</li></ol>
Speaker	<b>Dr. Romsha Kumar (BD)</b>
4:00PM-4:30PM	Tea break
4:30 PM- 5:30 PM	Session 4: Single cell Multiomics data analysis using Seven bridges and SEURAT pipeline
	<ol style="list-style-type: none"><li>1. Metric Summary</li><li>2. RSEC &amp; DBEC output</li><li>3. QC plot</li><li>4. Clustering (Umap)</li><li>5. PCA</li><li>6. DEGs</li><li>7. Heat Map</li></ol>
Speaker	<b>Dr. Romsha Kumar (BD)</b>
5:30 PM	Vote of thanks