



Module PMRF-ISSS065/III/2025

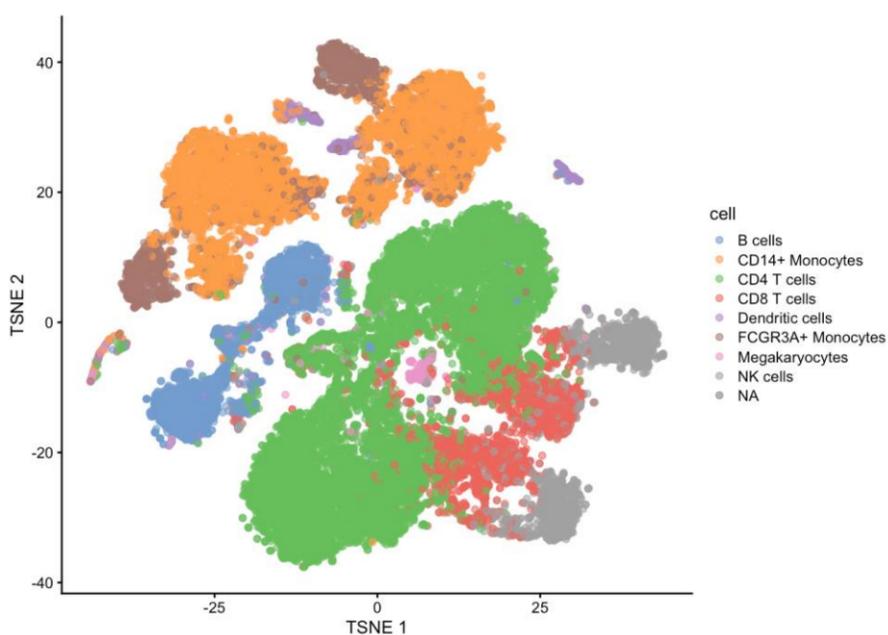
Introduction to Single-Cell RNA Sequencing Data Analysis

Name of the PMRF student

Ranjitha Guttapadu

Required background of the students taught

Knowledge of basic concepts of Biology, Computer Science, and Mathematics.



Details of the content of the module

This is an introductory course that offers a glimpse into Single-cell RNA sequencing. The course will include the following topics:

1. Overview of Bulk RNA-Sequencing workflow and platforms
2. Overview of Single-cell RNA-Sequencing workflow and platforms
3. Basic tutorials on R programming
4. Introduction to Seurat
5. Hands-on tutorials on Seurat (including Guided clustering, Cell-type Annotation, Differential expression Analysis), CellChat, MiloR, and Monocle

Schedule of the module

Course start date: 1.08.2025

Course end date: 5.09.2025

Schedule: Wednesdays & Fridays, 6:00 p.m. – 8:00 p.m.

Recorded lectures will be shared, and live hands-on sessions will be conducted

Meeting link : Will be shared later

[Link](#)

Contact email ID: issf.forum@gmail.com

Registration link:

<https://forms.gle/YPWSRz3uJxFAToWM9>