

Autumn School

Spatial Transcriptomics Data Analysis

Munich, November 12th & 14th

Key Information

Location: The autumn school will be hosted with the MDSI at the Campus Garching.

Format: The autumn school will be a hands-on format, with talks and lectures in the morning and hands-on mini-project work in the afternoon.

Content: We will cover the entire analysis pipeline, from data acquisition, raw data analysis to advanced multi-OMICS data integration techniques. We will invite internationally renowned keynote speakers as well as tool developers to guide you through the process with the latest tools and approaches.

Contact: For more information, please contact Markus List: markus.list@tum.de

Tentative Program

Day 1 Topics Covered:

- Data acquisition
- Data pre-processing
- Data standards and data pre-processing

Hands-On:

- From raw data to input data

Day 2 Topics Covered:

- Best practices of spatial transcriptomics analysis
- Cell type deconvolution & Segmantation
- Generating biological and clinical insights

Hands-On:

- Comparative insight analysis from different pipelines

Day 3 Topics Covered:

- Advanced analysis, data integration
- Multi-OMICS matrix factorization
- Spatial Transcriptomics in combination with single cell sequencing
- Cell fate analysis

Hands-On:

- Final project with different analyses

