

Lectures day

Using of single cells in clinical practice

September 2, 2020, Pilsen, Czech Republic



Modrá posluchárna UniMeC, alej Svobody 76, 323 00 Plzeň

Morning session – Introduction 9:00 – 13:00

1. Introduction to single-cell analysis and its role in today's research (Pavel Ostašov; Charles University) – 30min
2. Connecting computer scientists and biologists in the design and implementation of single cell experiments (Lucie Houdová; University of West Bohemia - NTIS) – 30min
3. Single-cell transcriptomics data analysis: an introduction by examples (Iros Barozzi; Imperial College London) – 30min

Coffee break (10:30 – 11:00)

4. scRNA -seq experimental design: Dos and Don'ts (Valentina Caputo; Imperial College London) – 30min
5. Searching for rare events – real life struggle from academia and industry (Pavel Pitule; Biomedical Center, Pilsen) – 30min

Lunch break: 12:00 – 13:00

Afternoon session – Examples of application – 13:00 – 16:30

6. Lecture (title will be specified, field: solid cancer genomics) (Roberto Mantovani; University of Milano) – 30min
7. Transcriptional subclone diversity, microenvironmental interactions and treatment responses in refractory multiple myeloma (Stephan Tirier; German Cancer Research center - Heidelberg, Germany) – 30min
8. Integrative analysis of chromatin accessibility and gene expression to understand the gene regulatory mechanisms underlying treatment response in multiple myeloma (Alexandra Poos; University Hospital Heidelberg) – 30min

Coffee break (14:30 – 15:00)

9. Lecture (title will be specified, field: neurodegenerative diseases) (Lucas Schirmer; Heilderberg University) – 30min
10. What can single cell analysis provide to non-alcoholic fatty liver disease research? (Lucie Vištejnová; Biomedical Center, Pilsen) – 30min
11. Lecture (title will be specified, field: solid cancer genomics) (Diletta Dolfini; University of Milan) – 30min