

Inserm Workshop 265

Les nouveaux enjeux du séquençage sur cellule unique : intégration multi-omique dans l'espace et le temps

Single-cell sequencing in space and time in the multi-omic era

1-3 décembre 2021 ■ December 1-3 2021 ■ Bordeaux, France

Mercredi 1 décembre 2021 ■ Wednesday December, 1st 2021

15:30 - 16:00	Reception of participants
16:00 - 16:15	Welcome and presentation by the organizers
SESSION I	Ultra-high throughput single-cell sequencing
16:15 - 17:00	Building human cell atlases Sten Linnarsson (Karolinska Institutet, Stockholm, Sweden)
17:00 - 17:30	Coffee break
17:30 - 18:15	Ultra-high throughput single-cell sequencing with combinatorial indexing Cole Trapnell (University of Washington, Seattle, USA)
18:15 - 19:00	Single-cell cancer multi-omics Orit Rozenblatt-Rosen (Broad Institute, Cambridge, USA)
19:30	Dinner

Jeudi 2 décembre 2021 ■ Thursday December, 2nd 2021

06:30 - 08:30	Breakfast
SESSION II	Single-cell multi-omics analyses
08:30 - 09:15	Multi-omics data integration Stein Aerts (VIB, Leuven, Belgium)
09:15 - 10:00	Single-cell ChIP-seq and epigenomics Céline Vallot (Institut Curie, Paris, France)
10:00 - 10:30	Coffee break
10:30 - 11:15	Long-read single-cell sequencing Rainer Waldmann (IPMC, Sophia Antipolis, France)
11:15 - 12:00	Deep learning approaches for single-cell data integration Nir Yosef (UC Berkeley, Berkeley, USA)
12:00 - 14:00	Lunch

SESSION III	Spatial transcriptomics
14:00 - 14:45	Spatial Transcriptomics Marlon Stoeckius (10x Genomics, Stockholm, Sweden)
14:45 - 15:30	Sequencing physically interacting cells Ido Amit (Weizmann Institute of Science, Rehovot, Israel)
15:30 - 16:00	Coffee Break
16:00 - 16:45	Spatial transcriptomics Joakim Lundeberg (SciLifeLab, Stockholm, Sweden)
16:45 - 17:30	Spatial integration of single-cell multi-omics Jean Fan (Johns Hopkins University, Baltimore, USA)
17:30 - 18:15	Round Table 1 : New frontiers in spatial transcriptomics Session III speakers, moderator : Pascal Barbry
19:30 - 20:15	Cocktail
20:15	Dinner

Vendredi 3 décembre 2021 ■ **Friday December, 3rd 2021**

06:30 - 08:30	Breakfast
SESSION VI	Time-resolved transcriptomics
08:30 - 09:15	RNA velocity in single cells Gioele La Manno (EPFL, Lausanne, Switzerland)
09:15 - 10:00	Lineage tracing Alexander Van Oudenaarden (Onco Institute, Utrecht, The Netherlands)
10:00 - 10:30	Coffee Break
10:30 - 11:15	Lineage tracing Samantha Morris (Washington University, Saint-Louis, USA)
11:15 - 12:00	Round Table 2 : New frontiers in time-resolved single cell omics Session IV speakers, moderator : Pierre Milpied
12:00 - 14:00	Lunch
14:00	Departure