

Hybrid Conference Programme

Start (BST)	Finish (BST)	Presenter details
Monday 10 June 2024		
12:00	12:45	Registration, lunch and networking
12:30	12:45	<i>Briefing for Keynote 1 & Session 1 speakers, microphone runners, chair, moderator & committee - Auditorium</i>
12:45	13:00	Welcome
12:45	12:50	Wellcome Connecting Science: <i>Nagehan Ramazanoglu Bahadir, Wellcome Connecting Science, UK</i>
12:50	13:00	Scientific Programme Committee: Leeat Keren, Weizmann Institute of Science, Israel Cole Trapnell, University of Washington, USA Roser Vento-Tomo, Wellcome Sanger Institute, UK Itai Yanai, New York University, USA
13:00	14:00	Keynote 1
		<i>Chair: Cole Trapnell, University of Washington, USA</i> <i>Moderator: Valentina Lorenzi, Wellcome Sanger Institute, UK</i>
13:00	14:00	Title TBC Marianne Bronner, California Institute of Technology, USA
14:00	14:05	Comfort break
14:05	15:35	Session 1: How do cells cooperate and compete in tissues and organs?
		<i>Chair: Samantha Morris, Washington University in St. Louis, USA</i> <i>Moderator: Philipp Weiler, Technical University of Munich, Germany</i>
14:05	14:35	Addressing noise and bias in spatial transcriptomics data Nir Yosef, Weizmann Institute of Science, Israel
14:35	15:05	Multiscale approaches for understanding single cell spatial omics data Shila Ghazanfar, The University of Sydney, Australia
15:05	15:20	A cross-tissue transcriptome atlas of human diseases <i>Jong-Eun Park, KAIST, South Korea</i>
15:20	15:35	Dissecting the spatiotemporal diversity of adult neural stem cells <i>Anika Neuschulz, Max-Deibüch-Center for Molecular Medicine, Germany</i>
15:35	16:20	Refreshment break and networking
16:05	16:20	<i>Briefing for Session 2 speakers, chair & moderator - Auditorium</i>
16:20	17:50	Session 2: How does a cell's past predict its future?
		<i>Chair: Roser Vento-Tomo, Wellcome Sanger Institute, UK</i> <i>Moderator: Jong-Eun Park, KAIST, South Korea</i>
16:20	16:50	New genomic technologies to deconstruct and control cell identity Samantha Morris, Washington University in St. Louis, USA
16:50	17:20	Somatic epimutations enable single-cell lineage tracing in native hematopoiesis across the murine and human lifespan Alejo Rodriguez-Fraticelli, IRB, Spain
17:20	17:35	Deep learning-powered deciphering of gene regulatory dynamics in cortical development <i>Darina Abaffiyová, VIB-KU Leuven, Belgium</i>
17:35	17:50	Integrating deep learning with omics data to discover small-molecule modulators of complex phenotypes <i>Doris Fu, Cellarity, USA</i>
17:50	18:30	Poster pitch talks for odd number posters
		<i>Chair: Roser Vento-Tomo, Wellcome Sanger Institute, UK</i>
18:30	19:30	Poster session 1 - odd number posters with drinks reception
19:30	21:30	Dinner
19:30		Bar open (card payments only)

Tuesday 11 June 2024

09:15	09:30	Briefing for Session 3 speakers, chair & moderator - Auditorium
09:30	11:00	Session 3: What are the cell autonomous and non-cell autonomous mechanisms of disease? Chair: <i>Leeat Keren, Weizmann Institute of Science, Israel</i> Moderator: <i>Philipp Weiler, Technical University of Munich, Germany</i>
09:30	10:00	An multi-omics epigenetic cell atlas of kidney Kun Zhang, Altos Labs, USA
10:00	10:30	Inter-organ communication during cancer metastasis Edroaldo Lummertz da Rocha, Federal University of Santa Catarina, Brazil
10:30	10:45	Shared molecular vulnerabilities of human cortical neurons in C9ORF72 Amyotrophic lateral sclerosis <i>Jimmy Lee, Wellcome Sanger Institute, UK</i>
10:45	11:00	Spatial distribution of IL1B+ TAMs in human pancreatic cancer <i>Federica La Terza, SR-Tiget, Italy</i>
11:00	11:45	Refreshment break and networking
11:30	11:45	Briefing for Session 4 speakers, chair & moderator - Auditorium
11:45	13:10	Session 4: What are the evolutionary principles of cellular ROBUSTNESS? Chair: <i>Itai Yanai, New York University, USA</i> Moderator: <i>Valentina Lorenzi, Wellcome Sanger Institute, UK</i>
11:45	12:15	Build a foundation model for single-cell omics and imaging Bo Wang, University of Toronto, Canada
12:15	12:45	Cells within cells: establishment of photosynthetic endosymbiosis in flatworms and corals Elizabeth Hambleton, University of Vienna, Austria
12:45	13:00	Cell-type-specific control of developmental rate across species <i>Jess Boum, European Molecular Biology Laboratory, Germany</i>
13:00	13:15	CellRank 2: Unified fate mapping in multiview single-cell data <i>Philipp Weiler, Technical University of Munich, Germany</i>
13:15	14:15	Lunch and networking
14:00	14:15	Briefing for Session 5 speakers, chair & moderator - Auditorium
14:15	15:45	Session 5: How are complex phenotypes regulated by the genome? Chair: <i>Shila Ghazanfar, The University of Sydney, Australia</i> Moderator: <i>Raz Ben-uri, The Weizmann Institute of Science, Israel</i>
14:15	14:45	Transfer learning to enable predictions in network biology Christina Theodoris, Gladstone Institutes, USA
14:45	15:15	How do cells integrate extrinsic signals and intrinsic state? A systems epigenetics approach Judith Zaugg, The European Molecular Biology Laboratory, Germany
15:15	15:30	Dissecting the spatiotemporal development of the human reproductive tract through the lens of single-cell and spatial <i>Valentina Lorenzi, Wellcome Sanger Institute, UK</i>
15:30	15:45	Joint profiling of cell morphology and gene expression during in vitro neurodevelopment <i>Adithi Sundaresh, University of Helsinki, Finland</i>
15:45	16:30	Refreshment break and networking
16:15	16:30	Briefing for chair & sponsored talk speaker - Auditorium
16:30	17:10	Poster pitch talks for even number posters Chair: <i>Leeat Keren, Weizmann Institute of Science, Israel</i>
17:10	17:35	Sponsored talk by Chan Zuckerberg Initiative Foundation
17:10	17:35	Talk title TBC <i>Jonah Cool, Chan Zuckerberg Initiative Foundation, USA</i>
17:35	18:35	Poster session 2 - even number posters with drinks reception
18:35		Bar open (card payments only)
18:35	20:30	Dinner

Wednesday 12 June 2024

09:15 09:30 Briefing for Session 6 speakers, chair & moderator - Auditorium

09:30 11:00 Session 6: How can we predict what cells will do next?

Chair: Cole Trapnell, University of Washington, USA

Moderator: Jong-Eun Park, KAIST, South Korea

09:30 10:00 Reconstructing cellular biographies

[Fei Chen, Broad Institute of MIT and Harvard, USA](#)

10:00 10:30 Reconstructing cellular biographies

[Alex Schier, Universität Basel, Switzerland](#)

10:30 10:45 Escalating High-dimensional Imaging Using Combinatorial Channel Multiplexing and Deep Learning

Raz Ben-uri, The Weizmann Institute of Science, Israel

10:45 11:00 Exploring the role of gene expression noise in cell fate regulation

Reyna Edith Rosales Alvarez, Würzburg Institute of Systems Immunology, Germany

11:00 11:45 Refreshment break and networking

11:30 11:45 Briefing for Keynote 2 speaker, chair, moderator & committee - Auditorium

11:45 12:45 Keynote 2

Chair: Roser Vento-Tomo, Wellcome Sanger Institute, UK

Moderator: Raz Ben-uri, The Weizmann Institute of Science, Israel

4D cell atlasing of human organs

Sarah Teichmann, University of Cambridge, UK

12:45 13:00 Closing remarks and prize presentation

Scientific Programme Committee:

[Leeat Keren, Weizmann Institute of Science, Israel](#)

[Cole Trapnell, University of Washington, USA](#)

[Roser Vento-Tomo, Wellcome Sanger Institute, UK](#)

[Itai Yanai, New York University, USA](#)

13:00 13:50 Lunch and departures

13:50 Coach departures for Stansted and Heathrow airports

14:00 Coach departures for Cambridge train station and city centre