Hybrid Conference Programme

Start	Finish	Presenter details
Monday 9 September 2024		
12:00	**13:00**	**Registration, lunch and networking**
12:45	*13:00*	*Briefing for Keynote & Session 1 speakers, microphone runners, chair, moderator & committee - Auditorium*
13:00	**13:05**	**Welcome**
		Scientific Programme Lead:
		Jane Murphy, Wellcome Connecting Science, UK
13:05	**13:15**	**Welcome**
		Scientific Programme Committee:
		Madeline Lancaster, MRC Laboratory of Molecular Biology, UK
		Prisca Liberali, Friedrich Miescher Institute, Switzerland
		Jason Spence, University of Michigan, USA
		Ludovic Vallier, Berlin Institute of Health, Germany
13:15	**14:15**	**Keynote 1**
		Session Chair: Prisca Liberali, Friedrich Miescher Institute, Switzerland
		Moderator: Ludovic Vallier, Berlin Institute of Health, Germany
		Understanding human organ development with single cell and organoid technologies
		Barbara Treutlein, ETH Zürich, Switzerland
14:15	14:20	Comfort break
14:20	**15:20**	**Session 1: Tissue scale imaging**
		Session Chair: Ludovic Vallier, Berlin Institute of Health, Germany
		Moderator: Madeline Lancaster, MRC Laboratory of Molecular Biology, UK
14:20	14:50	Illuminating mechanisms of mammalian development using adaptive light-sheet microscopy
		Kate McDole, MRC Laboratory of Molecular Biology, UK
14:50	15:05	Role of Mechanical Stiffness in Alveolar Differentiation
		Ziming Shao, University Collge London, UK
15:05	15:20	Molecular heterogeneity underpins functional plasticity in intestinal stem cells
		Silvia Barbiero, Friedrich Miescher Institute, Switzerland.
15:20	16:00	Refreshment break and networking
15:45	*16:00*	*Briefing for Session 2 speakers, microphone runners, chair & moderator - Auditorium*
16:00	**18:30**	**Session 2: Engineering complexity**
		Session Chair: Madeline Lancaster, MRC Laboratory of Molecular Biology, UK
		Moderator: Prisca Liberali, Friedrich Miescher Institute, Switzerland
16:00	16:30	Interrogating stem cell niches in the developing human gut to enhance organoid complexity
		Jason Spence, University of Michigan, USA
16:30	17:00	Engineering Microenvironments for Organoid Architecture: The Power of Simple Tools in Recapitulating System Complexity
		Masaya Hagiwara, Riken BDR, Japan
17:00	17:30	Engineering adaptable tissue-specific human endothelium for organogenesis and tumorigenesis
		Shahin Rafii, Cornell University, USA
17:30	17:45	Prenatal Modeling Of Congenital Diaphragmatic Hernia Using Amniotic And Tracheal Fluids-Derived Lung Organoids
		Mattia Francesco Maria Gerli, University Collge London, UK
17:45	18:00	Developing a vascularised brain organoid to model haemorrhagic stroke
		Siobhan Crilly, University Of Galway, Ireland
18:00	**18:30**	**Poster pitch talks for odd number posters**
18:30	**19:30**	**Poster session 1 - odd number posters with drinks reception**
19:30	21:00	Dinner
19:30		Bar open (card payments only)

Tuesday 10 September 2024

07:30	09:00	Breakfast
09:15	*09:30*	*Briefing for Session 3 speakers, microphone runners, chair & moderator - Auditorium*
09:30	**11:00**	**Session 3: Tissue morphogenesis**
		Session Chair: Jason Spence, University of Michigan, USA *Moderator: Prisca Liberali, Friedrich Miescher Institute, Switzerland*
09:30	10:00	Tube Morphogenesis in a Dish *Eyal Karzbrun, Weizmann Institute of Science Department of Molecular Genetics, Israel*
10:00	10:30	Creating to understand: leveraging stem-cell-based models to elucidate embryo design principles *Jesse Veenvliet, Max Planck Institute of Molecular Cell Biology and Genetics, Germany*
10:30	10:45	Method of reversing aberrant chromatin erosion to restore full developmental potential of pluripotent stem cells *Magdalena Sutcliffe, MRC Laboratory of Molecular Biology, UK*
10:45	11:00	Using patient-derived brain organoids to rescue the trafficking defect of NLGN4X Autism *Jeremie Courraud, University of Calgary, Canada*
11:00	11:45	Refreshment break and networking
11:30	*11:45*	*Briefing for Session 4 speakers, microphone runners, chair & moderator - Auditorium*
11:45	**13:15**	**Session 4: Computational modelling**
		Session Chair: Prisca Liberali, Friedrich Miescher Institute, Switzerland *Moderator: Jason Spence, University of Michigan, USA*
11:45	12:15	Title TBC *Ewa Paluch, University of Cambridge, UK*
12:15	12:45	Dynamical systems theory of self-organized collective cell fate patterning *David Brueckner, Institute of Science and Technology, Austria*
12:45	13:00	Powering up 3D patient-derived organoids: an integrated, multidisciplinary CRISPR organoid platform for target and drug discovery in oncology *Simon Vyse, AstraZeneca, UK*
13:00	13:15	Control of lumen geometry and topology by the interplay between pressure and cell proliferation rate in pancreatic organoids *Byung Ho Lee, Grapin-Botton Lab, Germany*
13:15	14:30	Lunch and networking
14:15	*14:30*	*Briefing for Session 5 speakers, microphone runners, chair & moderator - Auditorium*
14:30	**16:00**	**Session 5: Large scale profiling**
		Session Chair: Jason Spence, University of Michigan, USA *Moderator: Madeline Lancaster, MRC Laboratory of Molecular Biology, UK*
14:30	15:00	Emergence of Lipid Territories in Intestinal Morphogenesis *Giovanni D'angelo, EPFL, Switzerland*
15:00	15:30	Driving Forces: Metabolism in tumour development dynamics *Maria Rodriguez Colman, UMC Utrecht, Netherlands*
15:30	15:45	Streamlining the Production of Complex Hair-Bearing Skin Organoids: Scaling Up for Success *Maryna Panamarova, Sanger Institute, UK*
15:45	16:00	Advancing Establishment and Large-Scale Distribution of Organoids: A 3D Human Organoid Core *Amal Kambal, Baylor College of Medicine, USA*
16:00	**16:30**	**Poster pitch talks for even number posters**
16:30	**17:30**	**Poster session 2 - even number posters with drinks reception**
17:30	18:30	Free time
18:30	20:30	Dinner
		Bar open (card payments only)

Wednesday 11 September 2024

07:30	09:00	Breakfast
09:15	*09:30*	*Briefing for Session 6 speakers, microphone runners, chair & moderator - Auditorium*
09:30	**11:00**	**Session 6 Complex interfaces**
		Session Chair: Ludovic Vallier, Berlin Institute of Health, Germany *Moderator: Jason Spence, University of Michigan, USA*
09:30	10:00	Gene regulation of human cell systems *Roser Vento, Wellcome Sanger Institute, UK*
10:00	10:30	Building the next generation of neuromuscular models to study disease Mina Gouti, Max Delbrück Center, Germany
10:30	10:45	Modeling the gut microbiota-epithelial-neuronal signaling in a dish revealed the active role of intestinal epithelium in dysbiosis-related visceral hypersensitivity *Francesco Margiotta, University of Florence, Italy*
10:45	11:00	Programming macrophages in the cardiac niche in development, repair and regeneration *Selin Tüzüner, IDRM- DPAG University of Oxford, UK*
11:00	11:45	Refreshment break and networking
11:30	*11:45*	*Briefing for Keynote, microphone runners, chair, moderator & committee - Auditorium*
11:45	**12:45**	**Keynote 2**
		Session Chair: Madeline Lancaster, MRC Laboratory of Molecular Biology, UK *Moderator: Ludovic Vallier, Berlin Institute of Health, Germany*
11:45	12:45	Single-Cell and Spatial Omics of Oligodendroglia in Health and Disease *Goncalo Castelo-Branco, Karolinska Institute, Sweden*
12:45	**13:00**	**Closing remarks and prize presentation**
		Scientific Programme Committee: *Madeline Lancaster, MRC Laboratory of Molecular Biology, UK* *Prisca Liberali, Friedrich Miescher Institute, Switzerland* *Jason Spence, University of Michigan, USA* *Ludovic Vallier, Berlin Institute of Health, Germany*
13:00	13:50	Lunch and departures
13:40		Coach departures for Stansted and Heathrow airports
13:50		Coach departures for Cambridge train station and city centre