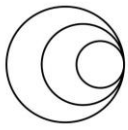


Virtual Conference Agenda

Start (BST)	Finish (BST)	Presenter details
Wednesday, 1 September 2021		
13:00	13:10	Welcome <i>Scientific programme committee:</i> John Doench, Broad Institute, USA Leopold Parts, Wellcome Sanger Institute, UK Lea Starita, University of Washington, USA Jolanda van Leeuwen, University of Lausanne, Switzerland
13:10	14:40	Session 1: Disease models Introduction to the session <i>Chair: Lea Starita, University of Washington, USA</i>
13:10	13:30	Fishing for function: Using CRISPR in zebrafish to identify genes important in human brain evolution Megan Dennis, University of California, Davis, USA
13:30	13:50	A CRISPR-based screen for Hedgehog signaling: insights into ciliary function and ciliopathies Sascha Hoogendoorn, University of Geneva, Switzerland
13:50	14:00	Dissecting the NLRP3 inflammasome in monogenetic autoinflammatory diseases <i>Lotte Spel, University of Lausanne, Switzerland</i>
14:00	14:10	MIC-Drop: A platform for large-scale in vivo CRISPR screens <i>Saba Parvez, University of Utah, USA</i>
14:10	14:40	Q&A <i>Chair: Lea Starita, University of Washington, USA</i> <i>Moderator: Jolanda van Leeuwen, University of Lausanne, Switzerland</i>
14:40	15:10	Break and spatial networking - meet the speakers
15:10	16:00	Poster session I (Disease models and coding variation)
15:10	15:17	Poster session I lightning talks
15:17	16:00	Poster session I
16:00	16:10	Break



Wednesday, 1 September 2021 continued

16:10 17:40 Session 2: Coding variation

Introduction to the session

Chair: John Doench, Broad Institute, USA

16:10 16:30 Interpreting the evolution of SARS-CoV-2

[*Jesse Bloom, Fred Hutchinson Cancer Research, USA*](#)

16:30 16:50 Mining type 2 diabetes GWAS for Gold: Drilling down on mechanisms for islet cell dysfunction in diabetes

[*Anna Gloyn, Stanford University, USA*](#)

16:50 17:00 Saturation variant interpretation using CRISPR prime editing

Steven Erwood, The Hospital for Sick Children, Canada

17:00 17:10 The genetic landscape for amyloid beta fibril nucleation accurately discriminates familial Alzheimer's disease mutations

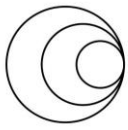
Mireia Seuma, Institute for Bioengineering of Catalonia, Spain

17:10 17:40 Q&A

Chair: John Doench, Broad Institute, USA

Moderator: Jolanda van Leeuwen, University of Lausanne, Switzerland

17:40 18:10 Spatial networking - meet the speakers



Thursday, 2 September 2021

13:00 14:30 Session 3: Genetic interactions

Introduction to the session

Chair: Leopold Parts, Wellcome Sanger Institute, UK

13:00 13:20 Interrogation of cancer gene dependencies reveals novel paralog interactions of autosomal and sex chromosome encoded genes

[Barbara Mair, Boehringer-Ingelheim, Austria](#)

13:20 13:40 Systematic analysis of genetic suppression interactions

[Jolanda van Leeuwen, University of Lausanne, Switzerland](#)

13:40 13:50 Improved on and off-target target predictions for CRISPR-Cas9 with tracrRNA variants

Peter DeWeirdt, Broad Institute, USA

13:50 14:00 Direct in vivo genome-scale screen for essential genes in neurons

Maria Kuhn, ETHZ, Switzerland

14:00 14:30 Q&A

Chair: Leopold Parts, Wellcome Sanger Institute, UK

Moderator: John Doench, Broad Institute, USA

14:30 15:00 Break and spatial networking - meet the speakers

15:00 15:50 Poster session II (Genetic interactions and single cells)

15:00 15:07 Poster session II lightning talks

15:07 15:50 Poster session II

15:50 16:00 Break

16:00 17:30 Session 4: Single cell

Introduction to the session

Chair: John Doench, Broad Institute, USA

16:00 16:20 Highly multimodal measurements of single cells

[Peter Smibert, NYU Genome/ImmunoAI, USA](#)

16:20 16:40 CRISPR-based functional genomics in iPSC-based models of brain disease

[Martin Kampmann, UCSF, USA](#)

16:40 16:50 MyoCRISPR and FulcrumSeek: High Throughput Transcriptional and Morphological profiling coupled with CRISPR drives Target Discovery for Neuromuscular Disease

Elizabeth Townsend, Fulcrum Therapeutics, USA

16:50 17:00 Single-cell CRISPR screens in primary human T cells

Anke Loregger, Aelian Biotechnology, Austria

17:00 17:30 Q&A

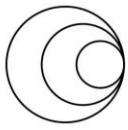
Chair: John Doench, Broad Institute, USA

Moderator: Lea Starita, University of Washington, USA

17:30 18:00 Spatial networking - meet the speakers

Friday, 3 September 2021

13:00		14:30		Session 5: Emerging technologies and models
Introduction to the session <i>Chair: Jolanda van Leeuwen, University of Lausanne, Switzerland</i>				
13:00	13:20	A toolkit for CRISPR-based functional genomics in fungal pathogens Rebecca Shapiro, University of Guelph, Canada		
13:20	13:40	Delivering insights into organ homeostasis and regeneration through in vivo genome-wide screens Kristin Knouse, Massachusetts Institute of Technology, USA		
13:40	13:50	Determinants of efficiency for writing small sequences into the genome using prime editing <i>Jonas Koepfel and Juliane Weller, Wellcome Sanger Institute, UK</i>		
13:50	14:00	Large-scale pooled CRISPR screening in fly and mosquito cell lines <i>Raghuvir Viswanatha, Harvard Medical School, USA</i>		
14:00	14:30	Q&A <i>Chair: Jolanda van Leeuwen, University of Lausanne, Switzerland</i> <i>Moderator: Leopold Parts, Wellcome Sanger Institute, UK</i>		
14:30	15:00	Break and spatial networking- meet the speakers		
15:00		15:50		Poster session III (Emerging technologies, models and regulatory variation)
15:00	15:10	Poster session III lightning talks		
15:10	15:50	Poster session III		
15:50	16:00	Break		
16:00		17:30		Session 6: Regulatory variation
Introduction to the session <i>Chair: Lea Starita, University of Washington, USA</i>				
16:00	16:20	Immune disease variants regulate gene expression dynamic during T cell activation Gosia Trynka, Wellcome Sanger Institute, UK		
16:20	16:40	Dissecting gene regulatory logic with targeted Perturb-seq Lars Velton, Centre for Genomic Regulation (CRG) Barcelona, Spain		
16:40	16:50	Systematic discovery and perturbation of regulatory genes in human T cells reveals the architecture of immune networks <i>Jacob Freimer, Gladstone, USA</i>		
16:50	17:00	Rational design and engineering of the ribosome by CRISPR/Cas9 to modulate co-translational protein folding <i>Minkoo Ahn, UCL, UK</i>		
17:00	17:30	Q&A <i>Chair: Lea Starita, University of Washington, USA</i> <i>Moderator: Leopold Parts, Wellcome Sanger Institute, UK</i>		
17:30	18:00	Break and spatial networking - meet the speakers		



Friday, 3 September 2021 continued

18:00 18:10 Closing remarks

Scientific Programme Committee:

[John Doench, Broad Institute, USA](#)

[Leopold Parts, Wellcome Sanger Institute, UK](#)

[Lea Starita, University of Washington, USA](#)

[Jolanda van Leeuwen, University of Lausanne, Switzerland](#)