CRISPR and Beyond: Perturbations at Scale to Understand Genomes

22-25 September 2020

Virtual Conference Agenda

Tuesday, 22 September		
13:00	**13:05**	**Welcome**
		Scientific Programme Committee: *John Doench, Broad Institute, USA* *Leopald Parts, Wellcome Sanger Institute, UK* *Lea Starita, University of Washington, USA* *Jolanda van Leeuwen, University of Lausanne, Switzerland*
13:05	**14:40**	**Session 1: Link to Disease**
		Introduction to the session *Chair: Leopald Parts, Wellcome Sanger Institute, UK*
13:10	13:30	Genome-wide characterisation of BRCA I functioning in DNA damage repair *Sylvie Noordermeer, Leiden University Medical Centre, Netherlands*
13:30	13:50	Using Stem Cells to Explore the Genetics Underlying Neuropsychiatric Disease *Kristen Breddand, Icaln School of Medicine at Mount Sinau, USA*
13:50	14:00	Short talk
14:00	14:10	Short talk
14:10	14:40	Q&A *Chair: Leopald Parts, Wellcome Sanger Institute, UK* *Moderator: Lea Starita, University of Washington, USA*
14:40	14:50	Break
14:50	**16:25**	**Session 2: Coding Variation**
		Introduction to the session *Chair: John Doench, Broad Institute, USA*
14:55	15:15	High throughput humna genetics in yeast *Maitreya Dunham, University of Washington, USA*
15:15	15:35	Title tbc *Lea Starita, University of Washington, USA*
15:35	15:45	Short talk
15:45	15:55	Short talk
15:55	16:25	Q&A *Chair: John Doench, Broad Institute, USA* *Moderator: Leopald Parts, Wellcome Sanger Institute, UK*
16:25	16:45	Break
16:45	17:00	Poster lightning talks
17:00	18:00	Poster session

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Wednesday, 23 September

13:00	14:35	Session 3: Genetics Screens
		Introduction to the session *Chair: Sylvie Noordermeer, Leuden University, Netherlands*
13:05	13:25	CRISPR screening for cancer drug discovery *Mathew garnett, Wellcome Sanger Institute, UK*
13:25	13:45	Optimisation and meta-analysis of genome-scale signals *Kenneith Baille, University of Edinburgh, UK*
13:45	13:55	Short talk
13:55	14:05	Short talk
14:05	14:35	Q&A *Chair: Jolanda van Leeuwen, University of Lausaane, Switzerland* *Moderator: Sylvie Noordermeer, Leuden University, Netherlands*
14:35	14:55	Break

14:55	16:20	Session 4: Rewriting DNA
		Introduction to the session *Chair: Tom Ellis, Imperial College London, UK*
14:50	15:10	Gene editing and high-throughput functional genomics *Wensheng Wei, Peking University, China*
15:10	15:30	Recording cellular and molecular events in DNA *Nozomu Yachie, University of British Columbia, Canada*
15:30	15:40	Short talk
15:40	15:50	Short talk
15:50	16:20	Q&A *Chair: Lea Staria, University of Washington, USA* *Moderator: Tom Ellis, Imperial College London, UK*
16:20	16:40	Break
16:40	16:55	Poster lightning talks
16:55	17:55	Poster session

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Thursday, 24 September

13:00	14:35	Session 5: Policy
		Introduction to the session *Chair: Jolanda van Leeuwen, University of Lausanne, Switzerland*
13:05	13:25	Engagement of DNA repair pathways in the repaur of CRISPR-Cas-induced breaks *Joanna Louzou, Research Centre for Molecualr Medicine, Austria*
13:25	13:35	Short talk
13:35	13:45	Short talk
13:45	13:55	Short talk
13:55	14:05	Short talk
14:05	14:35	Q&A *Chair: Jolanda van Leeuwen, University of Lausanne, Switzerland* *Moderator: John Doench, Broad Institute, USA*
14:35	14:55	Break

14:55	16:30	Session 6: Single Cell + Perturbation
		Introduction to the session *Chair: Shondra Pruett-Miller, St Jude Children's Research Hospital, USA*
15:00	15:20	Biochemistry at single-cell resolution: a new appraoch to understand functional heterogeneity *Jay Hesselberth, University of Colorado School of Medicine, USA*
15:20	15:40	Title tbc *Sarah Teichman, Wellcome Sanger Institute, UK*
15:40	15:50	Short talk
15:50	16:00	Short talk
16:00	16:30	Q&A *Chair: Jolanda van Leeuwen, University of Lausanne, Switzerland* *Moderator: Shondra Pruett-Miller, St Jude Children's Research Hospital, USA*
16:30	16:50	Break
16:50	17:05	Poster lightning talks
17:05	18:05	Poster session

Friday, 25 September

13:00	14:35	Session 7: Technology
		Introduction to the session *Chair: Mathew Garnett, Wellcome Sanger Institute, UK*
13:05	13:25	Tricks of the Trade: Functionalizing Genome Editing for a Broad Range of Cellular Targets *Shondra Pruett-Miller, St Jude Children's Research Hospital, USA*

13:25	13:45	Exploring the flexibility of a eukaryotic genome using synthetic yeast *Tom Ellis, Imperial College London, UK*
13:45	13:55	Short talk
13:55	14:05	Short talk
14:05	14:35	Q&A *Chair: Jolanda van Leeuwen, University of Lausanne, Switzerland* *Moderator: John Doench, Broad Institute, USA*
14:35	14:55	Break

14:55		**Session 8: Non-coding Variation**
		Introduction to the session *Chair: Leopald Parts, Wellcome Sanger Institute, UK*
15:00	15:20	CRISPR, cancer and long noncoding RNAs *Rory Johnson, University College Dublin, Ireland*
15:20	15:30	Short talk
15:30	15:40	Short talk
15:40	16:10	Q&A *Chair: Jolanda van Leeuwen, University of Lausanne, Switzerland* *Moderator: Shondra Pruett-Miller, St Jude Children's Research Hospital, USA*

16:10	**16:20**	**Closing remarks**
		Scientific Programme Committee: *John Doench, Broad Institute, USA* *Leopald Parts, Wellcome Sanger Institute, UK* *Lea Starita, University of Washington, USA* *Jolanda van Leeuwen, University of Lausanne, Switzerland*