

14 - 16 April 2021

Virtual Conference Agenda

Start Finish Presenter details (GMT)

Wednesday 14 April 2021

13:00	13:05	Welcome
		Scientific Programme Committee: Alison Goate Kristen Brennand, Icahn School of Medicine at Mount Sinai, USA Alison Goate, Icahn School of Medicine at Mount Sinai, USA Michael Owen, Cardiff University, UK Mina Ryten, UCL, UK
13:05	13:55	Keynote Presentation
		Chair: Alison Goate
13:05	13:35	The nature of schizophrenia Michael Owen, Cardiff University, UK
13:35	13:55	O&A Chair: Alison Goate Moderator: Mina Ryten
13:55	14:05	Break

14:05	15:35	Session 1: Systems Biology
		Introduction to the session
		Chair: Alison Goate
14:05	14:25	CRISPR-based functional genomics for brain diseases
		Martin Kampmann, University of California, San Francisco, USA
14:25	14:45	The role of neuroinflammation in Parkinson's disease
		Caleb Webber, University of Oxford, UK
14:45	14:55	Genetic Identification of Cell Types Underlying Brain Complex Traits Yields Novel Insights Into the Etiology of
		Parkinson's Disease
		Nathan Skene, Imperial College London, UK
14:55	15:05	Genetic regulation and transcriptomic response to amyotrophic lateral sclerosis in the human spinal
		cord
		Jack Humphrey, Mount Sinai, USA
15:05	15:35	Q&A
		Chair Alison Goate
		Moderator: Mina Ryten
15:35	15:55	Break
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15:55	17:25	Session 2: Modelling disease
		Introduction to the session Chair: Kristen Brennand
15:55	16:15	A Collaborative Study of Tauopathy in 3D from the Tau Consortium Stem Cell Group Sally Temple, Neural Stem Cell Institute, USA
16:15	16:35	Understanding the contribution of cortical interneuron dysfunction in schizophrenia Beatriz Rico, Kings College London, UK
16:35	16:45	Molecular and functional signatures associated with 16p11.2 Reciprocal Genomic Disorder: insights into neurodevelopmental disorders Derek Tai, Massachusetts General Hospital, USA
16:45	16:55	The effects of the 15q11.2 BP1-BP2 copy number variant on white matter microstructure Ana Silva, Cardiff University, UK
16:55	17:25	Q&A Chair: Kristen Brennand Moderator: Michael Owen
17:25	17:35	Break

17:35	18:50	Poster Session I
17:35	17:50	Poster lightning talks
17:50	18:50	Poster session



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Thursday 15 April 2021

13:00	14:30	Session 3: Tools (single cells, proteomics, metabolomics, spacial transcriptomics)
		Introduction to the session Chair: Kristen Brennand
13:00	13:20	Genomic methods to map odor modulatory connections in a primitive stress circuit Naresh Hanchete, Fred Hutchinson Cancer Research Centre, USA
13:20	13:40	In vivo Perturb-seq: Study gene function at scale in developing tissues Xin Jin, Harvard University, USA
13:40	13:50	Cell type and cortex-specific RNA editing in single human neurons informs neuropsychiatric disorders Melanie Bahlo, Walter and Eliza Hall Institute, Australia
13:50	14:00	Dysregulation of splicing in human brain from individuals with Lewy body disease informs disease mechanisms Regina Reynolds, University College London, UK
14:00	14:30	Q&A Chair: Kristen Brennand Moderator: Alison Goate
14:30	14:50	Break

14:50	16:20	Session 4: Population Studies
		Introduction to the session Chair: Michael Owen
14:50	15:10	Mendelian randomization integrating GWAS and EQTL data reveals genetic determinants of complex and clinical traits Eleonora Porcu, University of Lausanne, Switzerland
15:10	15:30	Genetic risk loci and polygenic architecture of ADHD Ditte Demontis, Aarhus University, Denmark
15:30	15:40	Meta-analysis of genome-wide DNA methylation identifies shared associations across neurodegenerative disorders Marta Nabais, University of Queensland, Australia
15:40	15:50	Investigating causality of environmental and lifestyle risk factors associated with parkinson's disease: a mendelian randomization study Carmen Domínguez, Brigham and Woman's Hospital, USA
15:50	16:20	Q&A Chair: Michael Owen Moderator: Mina Ryten
16:20	16:30	Break

16:30	17:45	Poster Session 2
16:30	16:45	Poster lightning talks
16:45	17:45	Poster session



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13:00	14:40	Session 5: Genetic Architecture
		Introduction to the session Chair: Michael Owen
13:00	13:20	Functional genomics approaches to dissect neurodegenerative diseases Peter Heutink, German Centre for Neurodegenerative Diseases, Germany
13:20	13:40	How might the genetic contribution to major depressive disorder inform diagnosis, course and treatment? Cathryn Lewis, Kings College London, UK
13:40	13:50	Schizophrenia, autism spectrum disorders, and developmental disorders share specific disruptive coding mutations Elliott Rees, Cardiff University, UK
13:50	14:00	Exploring the phenome-wide consequences of Anorexia Nervosa associated genes Jessica Johnson, Ichan School of Medicine Mount Sinai, USA
14:00	14:10	Human-lineage-specific genomic elements are present at high density within genes implicated in neurodegenerative diseases and are enriched for heritability of intelligence Zhongbo Chen, UCL Institute of Neurology, UK
14:10	14:40	Q&A Chair: Michael Owen Moderator: Kristen Brennand
14:40	15:00	Break

15:00	16:20	Session 6: Delivery of genomic results
		Introduction to the session Chair: Mina Ryten
15:00	15:20	Your DNA Your Say: global public attitudes towards genomic data sharing Anna Middleton, Wellcome Genome Campus, UK
15:20	15:40	The promise of personalised medicine in Estonia: returning of genetic results to the Estonian Biobank participants Kelli Lehto, University of Tartu, Estonia
15:40	15:50	What's next in autism genomics? Sharing research progress, potential and opportunities for public involvement Lorna Lopez, Trinity College Dublin, Ireland
15:50	16:20	Q&A Chair: Mina Ryten Moderator: Alison Goate
16:20	16:40	Break

16:40	18:00	Session 7: Using genomics to drive therapeutics
		Introduction to the session Chair: Mina Ryten
16:40	17:00	Stress granules as therapeutic targets in neurodegeneration Stefan Aigner, UC San Diego School of Medicine, USA
17:00	17:20	Applying human genetics across the pharmaceutical research and development pipeline Janna Hutz, Eisai Center for Genetics Guided Dementia Discovery, USA
17:20	17:30	The bidirectional causal effects of brain morphology across the life course and risk of Alzheimer's disease: A cross-cohort comparison and Mendelian randomization meta-analysis Roxanna Korologou Linden, University of Bristol, UK
17:30	18:00	Q&A Chair: Mina Ryten Moderator: Kristen Brennand



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18:00	18:05	Closing remarks
		Scientific Programme Committee:
		Kristen Brennand, Icahn School of Medicine at Mount Sinai, USA
		Alison Goate, Icahn School of Medicine at Mount Sinai, USA
		Michael Owen, Cardiff University, UK
		Mina Ryten, UCL, UK