

CNS 2022: New Horizons - Programme

09:00-09:10 Welcome and opening remarks, **Professor Paul Fletcher**

Theme 1 - Neurons, Circuits and Networks

Chaired by **Professor Michael Hastings**



- 09:10-09:30 Dr Petra Vértés, Psychiatry
Neurons, Networks & Circuits – an overview across Cambridge
- 09:30-09:45 Dr Riccardo Beltramo, Physiology, Development and Neuroscience
An ancestral primary visual cortex
- 09:45-10:00 Dr Marta Costa, Zoology
From Sensory input to Motor output with Drosophila connectomics
- 10:00-10:05 Additional Q&A

Theme 2 - Adaptive Brain Computations in association with Cambridge Phenotyping

Chaired by **Professor Zoe Kourtzi**



- 10:05-10:25 Professor Jeff Dalley, Psychology
Adaptive Brain Computations – an overview across Cambridge
- 10:25-10:40 Dr Elisa Galliano, Physiology, Development and Neuroscience
Neuronal plasticity: beyond the usual suspects
- 10:40-10:55 Dr Giacomo Bignardi, MRC Cognition and Brain Sciences Unit
How broadly does adversity impact development?
- 10:55-11:00 Additional Q&A
- 11:00-11:30 Refreshments

Theme 3 - Beyond the neurone: glia, vascular & immune cells in association with Bit.Bio

Chaired by **Professor Ewan St John Smith**



- 11:30-11:50 Professor Thóra Káradóttir, Veterinary Medicine
Beyond the Neurone – an overview across Cambridge
- 11:50-12:05 Dr Clémence Blouet, Wellcome-MRC Institute of Metabolic Science
Peel off your myelin sheet, new food is coming
- 12:05-12:20 Dr Svetlana Khoronenkova, Biochemistry
Genome instability drives microglial dysfunction in Ataxia Telangiectasia
- 12:20-13:00 Early Career Investigator Data Blitz, convened by TBC**

13:00-14:30 Lunch, Poster Session and Trade exhibition

Theme 4 - Lifelong Brain Development and brain ageing
Chaired by Professor Angela Roberts



- 14:30-14:50 Professor Rik Henson MRC Cognition and Brain Sciences Unit
Lifelong Brain Development – an overview across Cambridge
- 14:50-15:05 Dr Laura Pellegrini, MRC Laboratory of Molecular Biology
Modelling CNS pathology with choroid plexus and brain organoids
- 15:05-15:20 Dr Maura Malpetti, Clinical Neurosciences
Inflammation: risks, prodrome and prediction of dementia
- 15:20-15:25 Additional Q&A

Theme 5 - Social Behaviour and Communication
Chaired by Professor Tamsin Ford



- 15:25-15:45 Dr Kate Baker, MRC Cognition and Brains Sciences Unit
Social Behaviour and Communication – an overview across Cambridge
- 15:45-16:00 Dr Amy Orben, MRC Cognition and Brain Sciences Unit
New Directions in Understanding the Impact of Social Media on Mental Health
- 16:00-16:15 Dr Varun Warriar, Psychiatry
Using large-scale genetic and non-genetic datasets to advance evidence in neurodevelopmental conditions?
- 16:15-16:20 Additional Q&A

16.20-16:50 Refreshments

Theme 6 - Brains and Machines in association with DeepMind
Chaired by Dr Flavia Mancini



- 16:50-17:10 Professor George Malliaras, Engineering
Brains and Machines – an overview across Cambridge

- 17:10-17:25 Dr Sarah Morgan, Computer Science and Technology and Psychiatry
Predicting outcomes for psychotic disorders, using brain connectivity and transcribed speech data
- 17:25-17:40 Dr Alejandro Carnicer-Lombarte, Engineering
Interfacing with the nervous system using flexible bioelectronics
- 17:40-17:45 Additional Q&A
- 17:45-18:00 ***Closing remarks, next steps and awards***
- 18:15-19:30 Drinks reception and music on Grove and Chapel lawn,
- 19:30-21:30 Conference dinner, Dining hall, Fitzwilliam College