MRC Laboratory of Molecular Biology

UNIVERSITY OF CAMBRIDGE
Department of Clinical Neurosciences

Laboratory of Molecular Biology and University of Cambridge Symposium

BRAIN CONNECTOMICS THROUGHOUT THE LIFE OUTCOME

Tuesday 25th January 2022

10.00am – 5.00 pm.

MRC Laboratory of Molecular Biology
Francis Crick Avenue, Cambridge Biomedical Campus

9.15-9.45	**Registration, tea and coffee**
10.00-10.20	**Welcome introduction:** Professor Patrick Chinnery and Professor Jan Löwe.
	Chair: Professor Patrick Chinnery **Developing Brain**
10.20-10.40	Dr Jelle van den Ameele – Connecting neural stem cells with their niche: a role for mitochondrial metabolism?
10.40-11.00	Dr Duncan Astle -Simulating connectome growth in childhood.
11.00-11.20	Dr Radu Aricescu – Molecular bridges across the synaptic cleft.
11.20-11.40	Dr Marta Zlatic - Circuits for learning, predicting, and deciding.
11.40-12.00	Professor Ole Paulsen – Development of neuronal network topology *in vitro.*
12.00-12.45	**LUNCH**
	Chair: Professor Ed Bullmore **Maturing Brain**
12.45-1.05	Dr William Schafer - Extrasynaptic neuronal connectomes.
1.05-1.25	Dr Petra Vertes – Common organisational principles in the brain – from *C. elegans* to human connectomes.
1.25-1.45	Dr Greg Jefferis - Comparing cellular connectomes.
1.45-2.05	Dr Luca Peruzotti-Jametti – Characterisation and manipulation of succinate-dependent injury in chronic neuroinflammation.
2.05- 2.25	Dr Edward Avezov - Neurite outgrowth control by innate machinery for modulation of transport through the Endoplasmic Reticulum network.
2.25-2.45	Dr Tim Rittman – Connectivity in neurodegenerative tauopathies – understanding disease across the whole brain.
2.45-3.20	**BREAK**
	Chair: Dr Michael Hastings **Ageing Brain**
3.20-3.40	Dr Andras Lakatos - What did organoids do for us? - discoveries at single cell resolution in neurodegeneration.
3.40-4.00	Professor James Rowe - Lifespan brain connectivity from fMRI and MEG: lessons from CamCAN.
4.00-4.20	Dr Will McEwan - Immunotherapy against tau in neurodegenerative disease.
4.20-4.40	Dr Michel Goedert – Cryo-EM structures of amyloid filaments from brain.
4.45	**Closing Remarks: Professor Jan Löwe**

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