

Joint Symposium Imperial BHF CRE and DRI

The heart brain axis: zooming in on vascular dementia

Friday 5 May 2023,

Room 1202,1203, 12th Floor Uren Building, White City Campus

9:00-9:20

Registration and refreshments

9:20-9:30

Welcome: Professor Martin Wilkins, BHF CRE Director and Professor Paul Matthews, Director DRI-Imperial

09:30-11:20

Pathology

Chairpersons: Prof Costanza Emanuelli & Prof Anna Randi

09:30 Overview of pathology and emerging science - Dr Atticus Hainsworth, Reader in Cerebrovascular Disease, St George's Hospital

09:50 Vascular pathology as a primary driver of late life neurodegeneration - Dr Axel Montagne, DRI-Edinburgh

10:10 Optogenetic and pharmacological approaches to investigate the role of inhibitory interneurons in the control of CBF – Dr Clare Howarth, Department of Psychology, Sheffield University

10:30 Transcriptional control of brain endothelial cell homeostasis – Dr Graeme Birdsey, NHLI

10:50 Small vessel disease in dementia – Dr Stergios Tsartsalis, Department of Brain Sciences

Break 11:10-11:30

11:30-12:50

Insights from..

Chairpersons: Dr Sonya Babu-Narayan & Professor Paul Matthews

11:30 Cell specific epigenetic changes in cerebrovascular disease - Dr Alexi Nott, DRI- Imperial

11:50 Functional imaging – Dr Jason Berwick, Department of Psychology, University of Sheffield

12:10 Advances in non-invasive ultrasound of brain microvasculature - Professor Mengxing Tang, Department of Bioengineering

12:30 Ion channels - Prof Julia Gorelik, NHLI

12:50-14:00

Networking during Buffet Lunch & Presentation of Posters



14:00-15:20

Data science

Chairpersons: Prof. Ioanna Tzoulaki & Professor Edwin Chilvers

14:00 Advancing technologies for creating reference atlas of the microvasculature - Professor Caleb Webber, Director of the DRI, University of Cardiff

14:20 Assessment of dementia neuropathologies using machine learning feature selection - Professor Dennis Wang, NHLI

14:40 New strategies for druggable target discovery – Dr Verena Zuber, School of Public Health

15:00 Transcriptomics – Dr Prashant Srivastava, NHLI

15:20-17:00

Emerging translational studies

Chairpersons: Prof. Martin Wilkins & Dr Rasha Al-Lamee

1. 15:20 Intensive blood pressure lowering to prevent dementia: where do we stand? – Dr Otavio Berwanger, the George Institute
2. 15:40 GLP-1 clinical studies in dementia – Dr Paul Edison, Department of Brain Sciences
3. 16:00 TSPO as a therapeutic target for dementia -Dr Dave Owen, Department of Brain Sciences
4. 16:20 Novel approaches to evaluate cognitive impairment in patients with cerebrovascular disease – Dr Fatemeh Geranmayeh, Department of Brain Sciences
5. 16:40 Remote monitoring of cerebrovascular disease interventions – Professor Paresh Malhotra, Department of Brain Sciences

17:00-17:15

Closing Remarks

17:15-17:30

Poster Awards (presented by Dr Alexi Notts & Professor Costanza Emanuelli)

17:30-19:00

Drinks & Nibbles during Networking