



# UK Stroke Research Workshop 2024

Tuesday 17th and Wednesday 18th September 2024

Keele Hall, Keele University

Organised under the auspices of the NIHR Stroke Speciality Group and hosted by the Stroke Research Group, Keele University the 2024 UK Stroke Research Workshop is generously supported by the British and Irish Association of Stroke Physicians and the Stroke Association.

It will be held on 17th and 18th September 2024 at Keele Hall, Keele University, Stoke - on - Trent following highly successful workshops held in Cambridge, Manchester, Leicester, Sheffield and London. There will be updates on the latest stroke research including sessions on stroke in the young, developments in stroke rehabilitation, mechanisms in vascular dementia, biomarkers in stroke and controversies in acute stroke.

## Programme

### Tuesday 17th September 2024

**1025:- Welcome**

**10.30- 11.50: Interactive Workshop: Designing and Implementing a stroke research study**

**Chairs: Christina Roffe, Chris Price**

*The workshop will cover how to design a stroke research project, how to navigate research costing and the changing landscape of CRN support.*

**1030-1050: - Different designs for different studies**

*Dr Lisa Shaw, Newcastle University*

**1050 – 1110: - Choosing the right question**

*Prof Philip Bath, University of Nottingham*

**1110- 1130: How to cost a study – SOECAT and more**

*Dr James Cook, Keele University*

**1130 – 1150: Changes in the CRN infrastructure**

*Prof Chris Price, Newcastle University*

**1200 – Lunch**

**Session I: Stroke in the Young**

**Chair: Phil Ferdinand**

**1300-1320: Epidemiology of stroke in the Young**

*Dr Linxin Li, University of Oxford*

**1320-1325: Discussion**

**1325-1345: Stroke in HIV**

*Dr. Laura Benjamin, University College London*

**1345-1350: Discussion**

**1350-1410: Sickle cell disease: the dawn of new genetic treatments**

*Dr Francesca Kinsella, University of Birmingham*

**1410-1415: Discussion**

**1415-1425: Spatiotemporal analysis of transcriptomic responses to Intracerebral Haemorrhage: a Pathological Study**

*Yihui Cheng, University of Glasgow (medical student bursary winner)*

**1425-1435: B lymphocytes protect cognitive function and modulate local neuroinflammation in experimental hemorrhagic stroke**

*Samuya Maheshwari, University of Edinburgh, (medical student bursary winner)*

**1435-1540: Poster tours (with tea/coffee)**

**Session II: New developments in stroke rehabilitation**

**Chair: Claire Howard**

**1540-1600: Transmagnetic stimulation in stroke – from animal models to man**

*Prof Rick Dijkhuizen, University Medical Centre, Utrecht, The Netherlands.*

**1600-1605: Discussion**

**1605-1625: Visual perception and assessment after stroke**

*Dr. Kathleen Vancleef, Durham University*

**1625-1630: Discussion**

**1630-1650: An introduction to the new Oxford Stroke Recovery Research Hub - showcasing the neural effects of visual rehabilitation after stroke.**

*Dr. Rebecca Truby, University of Oxford*

**1650-1655: Discussion**

**1655 – 1715: Combination therapy with neuroprotection in acute stroke – the future?**

*Prof Johannes Boltze, University of Warwick*

**1715: Close**

**Conference Dinner: Keele Hall**

## **Wednesday 18th September 2024**

**Session III: Mechanisms in Vascular Dementia**

**Chair David Werring, Tracey Farr**

**0900-0920: Post stroke dementia – what's new?**

*Prof Sarah Pendlebury, University of Oxford*

**0920-0925: Discussion**

**0925-0945: Modelling vascular dementia in a dish – the search for new therapies?**

*Dr. Alessandra Granata, University of Cambridge*

**0945-0950: Discussion**

**0950-1010: Neurovascular physiology in small vessel disease**

*Dr Alastair Webb, University of Oxford*

**1010-1015: Discussion**

**1015-1025: Submitted abstract**

**Non-invasive imaging markers of glymphatic function predict dementia in UK biobank (Jane White Student prize)**

*Yutong Chen, University of Cambridge*

**1025: Posters (with tea/coffee)**

**Session IV: Biomarkers in stroke**

**Chair: Stuart Allan, Yuki Kawamura**

**1135-1155: Multiomics in stroke**

*Prof Stephanie Debette, University of Bordeaux*

**1155-1200: Discussion**

**1200-1220: Extracellular vesicles and stroke risk**

*Prof Philip James, Cardiff Metropolitan University*

**1220-1225: Discussion**

**1225-1245: Autoimmune AF**

*Prof Jin L, University Hospital Zurich*

**1245-1250: Discussion**

**1250-1300:: Proteomic profiling of endothelial function and inflammation informs mechanisms and treatment of cerebral small vessel disease (submitted abstract)**

*Zihan Sun, University of Cambridge*

**1300: Lunch**

**Session V: Controversies in stroke and top scoring abstracts**

**Chairs: Hugh Markus, Arshad Majid**

**1400-1410: Visualisation and prevalence of Charcot-Bouchard Aneurysm lenticulostriate arteries on 7T MRI in a cerebral ischemic vessel disease cohort (Submitted abstract)**

*Yeerfan Jiaerken, University of Cambridge*

**1410-1420: Automated tool for the longitudinal assessment of cognitive decline in Stroke Survivors (Submitted abstract)**

*Caitlin Illingworth, University of Sheffield*

**1420-1430: Linking microstructural white matter changes to visual perceptual deficits in PCA stroke (Submitted abstract)**

*Sara Ajina University College London*

**14.30-14.40 Immune-mediated resilience to vascular cognitive impairment (Submitted abstract)**

*Barry McColl, University of Edinburgh*

**1440-15.05: Early detection of stroke – the value (or not) of AI**

*Prof Iris Grunwald, University of Dundee*

**15.05-15.10 Discussion**

**1510-1530: Uric acid in acute stroke**

*Dr. S. Amaro – Hospital Clinic, Barcelona*

**15.35-15.40 Discussion**

**1540: Concluding remarks and prizes**

**1600: Close**

**RCP CPD applied for: 12 hours**

## POSTERS

- 1. Qualitative assessment of astrocyte morphology following photothrombotic occlusion of mouse sub-pial vessels in a mini-stroke model**

Andrea Cuschieri, University of Malta (Medical student bursary winner)

- 2. Qualitative assessment of astrocyte morphology following photothrombotic occlusion of mouse sub-pial vessels in a mini-stroke model**

Abdalla Hammad, Arab Academy for Science, Technology and Maritime Transport (Medical student bursary winner)

- 3. Integrated care management for patients following acute stroke: a systematic review**

Isik Kaya, University of Liverpool

- 4. A novel distress scoring system and web-based intervention for neuropsychological support following Subarachnoid Haemorrhage (SAH)**

Grace Lee, University of Glasgow

- 5. The effects of nicotinamide mononucleotide and nicotinamide riboside on an in vitro stroke model**

Danial, Rostami-Hochaghan, University of Sheffield Medical (student bursary winner)

- 6. Co-design of information on modifiable risk factors for Brain Health to reduce risk of vascular dementia.**

Grace Steadman, University of Sheffield

- 7. Completing an audit cycle of optimising modifiable risk factors for Brain Health in the neurology memory service to reduce risk of vascular dementia.**

Grace Steadman, University of Sheffield Medical

- 8. The quality of life and associated factors of stroke patients followed up at medical clinics of Colombo South Teaching Hospital**

Manojya Indeewara Thilakarathna,

- 9. Prognostic Significance of Lymphocyte-Monocyte Ratio in the Patients with Acute Ischemic Stroke**

Rukesh Yadav, Maharajgunj Medical Campus, Institute of Medicine, Tribhu

- 10. Septic Cardioembolic Stroke: Case Report**

Clara Chen, University of Cambridge

**11. Redesigning Orthotics Provision Within the Stroke Pathway**

Heather Skinner, Lancashire Teaching Hospitals

**12. Risk factors, mechanisms, and clinical outcomes after stroke in young adults: UCL Young Stroke Systematic Evaluation Study (ULYSSES)**

Raafiah Mussa, University College, London,

**13. Prevalence and patterns of patient-reported non-motor outcomes after stroke in young adults: UCL Young Stroke Systematic Evaluation Study (ULYSSES)**

Raafiah Mussa, University College, London,

**14. Cerebral microbleeds and their association with inflammation and blood brain barrier leakage in cerebral small vessel disease**

Lupei Cai, University of Cambridge

**15. Effect of Apathy in Cerebral Small Vessel Disease on Quality of Life and Carer Burden**

Oriane Marguet, University of Cambridge

**16. Cerebrovascular events in Thrombotic Thrombocytopenic Purpura**

Udit Gupta, York Teaching Hospital

**17. Prevalence, natural history, and predictors of patient-reported non-motor outcomes after stroke: a systematic review and meta-analysis**

Hatice Ozkan, University College, London

**18. Codesign of implementation and evaluation plans for Health Improvement Practitioner support within community stroke rehabilitation services**

Kirsten Sorensen, Keele University

**19. A Deep Learning Based Pipeline for the Analysis of Lenticulostriate Artery Morphology in Cerebral Small Vessel Disease from 7 Tesla MRA**

Rui Li, University of Cambridge

**20. The effect of end-tidal carbon dioxide levels on dynamic cerebral autoregulation in acute ischaemic stroke: an INFOMATAS study.**

Lauren Walker, University of Leicester

**21. Golden Hour for Stroke (GHOSt) ,À a prospective observational study of biomarkers in acute stroke and a focus on collaborative working**

Hazel Smith, University Hospitals Birmingham NHS Trust

**22. Sulcal hyperintensity is an early imaging finding in cerebral amyloid angiopathy-related inflammation.**

Larysa Panteleienko, University College, London

**23. Brain macrophage diversity and ECM remodelling underpins temporally evolving human perihematoma inflammation**

Jack Barrington, University of Edinburgh

**24. Brain macrophage diversity and ECM remodelling underpins temporally evolving human perihematoma inflammation**

Nikhil Math, St George's Hospital London