

University of Edinburgh 는 SMALL VESSEL DISEASE

NETWORK



March 2020 Newsletter

News from the Network:

- The Edinburgh group of the SVD Network met on a networking day on the 28th of November 2019 at the <u>Informatics Forum</u>. Participants shared current research findings and engaged in discussion groups. The event was funded by The Row Fogo Centre for Research into Ageing and the Brain. View the agenda <u>here</u>. The next SVD Network Meeting scheduled for June 2020 has been postponed until further notice due to coronavirus outbreak.
- The 6th meeting of the Fondation Leducq 'Understanding the role of the network Perivascular Space in SVD' in New York, * scheduled for 25th-26th March 2020 has been postponed until further notice. The next meeting was to be hosted by Professor Helene Benveniste and organised by the Leducq fellows at the Yale University. The agenda included updates on the work packages, data blitz presentations from junior researchers, . discussion sessions and talks invited speakers including Professor Constantin ladecola and Dr Kristopher Kahle. Read more about the network.
- Dr <u>Sebastian Lewandowski</u> from Karolinska Institute in Stockholm (Sweden) will be giving a seminar on the 16th June 2020, 12noon-1pm, CB Seminar Room 3 (FU224) during the Monthly Neuroscience Imaging Studies (NIS) Monthly Meeting. Dr Lewandowski is one of the organisers of "The Vascular Brain" <u>Doctoral Course</u> held in his home institution, which will feature many excellent speakers.
- The CCBS Annual Away Day took place on the 30th January 2020, with a well received presentation from the SVD study group.
- Mild Stroke Study 3 (MMS 3) recruited their 100th participant 11th December 2019.
- The Brain Changes in Sleep Apnea study team performed the last brain scan, which has completed data collection, on the 23rd of December 2019. The research team would like to thank all participants who have generously devoted their time.
- The SVD study team joined the International Girls and Women in Science Day celebrations with a photo session of our colleagues in different work situations. Read more

Network Member Profile:



Dr Una Clancy is a Chief Scientist Office clinical academic fellow in Prof Joanna Wardlaw's small vessel disease group, working on multiple clinical studies including the Mild Stroke Study 3. This longitudinal study funded by the UK Dementia Research Institute, Fondation Leducq and Stroke Association investigates the role of small vessel dysfunction using advanced serial neuroimaging to identify factors influencing disease progression or regression. So far it has recruited over 100 participants in Edinburgh with recent strokes, working with collaborators at Sunnybrook Health Sciences Centre in Toronto, part of the Foundation Leducq Transatlantic Network of Excellence led by Prof Joanna Wardlaw. With a background in geriatric medicine, she is interested in relationships between neuropsychiatric symptom associations and small vessel disease, including stroke and dementia. Other interests include hillwalking and cycling.

- Dr Grant Mair won the Lucien Appel prize for his paper 'Effect of IV alteplase on the ischemic brain lesion at 24-48hours after ischemic stroke'. The prize is awarded at the European Society of Neuroradiology meeting for the best research paper.
- Dr Gaia Brezzo joined Professor Karen Horsburgh and her team to work on the Vascular Dementia Gaia priority programme. is interested neurovascular function and coupling in health and disease. Read more about the project here: https://www.vadmatrix.com/project/
- The GE Signa 1.5T MRI Scanner has been decommissioned from the Brain Research Imaging Centre located at the Western General Hospital after 20 years of world leading research that 1.5T MRI Scanner has led to major improvements patient care for common neurological diseases.



Dismantling the GE Signa

- The Centre for Cardiovascular Science has been successful in securing a BHF Centre renewal of the Research Excellence and has retained the previous funding level of £3M over 5 years. The overarching mission is diagnosis, transform stratification and treatment of patients through a new Centre of Research Excellence focusing on understanding and exploiting mechanisms that drive cardiovascular injury and repair
- Professor Joanna Wardlaw, together with Dr Francesca Chappell, Dr Maria Valdés Hernandez, Dr Lucia Ballerini Sandra Black. Prof Biessels, Dr Joel Ramirez, and Dr Hugo Kuijf has been awarded funding from Weston Brain Institute for project "Perivascular spaces: an early marker of vascular contributions to neurodegeneration". Congratulations!

Row Fogo Datasets

Valdés Hernández et al. (2019). Brain Network Measures and Spatial Lesion Distribution in a Sample of 47 Patients with Systemic Lupus Erythematosus (SLE) Shkuru et al. (2019) Systematic Review of the Literature on Definitions and Characterisation of

MS Lesions

Papers of Interest

Wardlaw et al. (2020) Perivascular spaces in the brain: anatomy, physiology and pathology Hamilton et al. 2020 Cognitive impairments in sporadic cerebral small vessel disease (SVD): a systematic review and meta-analysis of cohorts with stroke, dementia and non-clinical presentations of SVD

van Veluw et al. (2020) Editorial: Cerebral Small Vessel Diseases: From Vessel Alterations to Cortical Parenchymal Injury

Bernal et al. (2020) Analysis of dynamic texture and spatial spectral descriptors of dynamic contrast-enhanced brain magnetic resonance images for studying small vessel disease Aribisala et. al. (2020) Sleep and brain morphological changes in the eighth decade of life Whitney et. al. (2020). White matter hyperintensities mediate the association between blood-brain

barrier leakage and information processing speed

Shi et al. (2020) Small vessel disease is associated with altered cerebrovascular pulsatility but not resting cerebral blood flow.

ElTawil et al. (2019) Observer Agreement on Computed Tomography Perfusion Imaging in Acute Ischemic Stroke.

View other Leducq publications here

Volunteers needed!

If you are interested in helping to organise the next SVD network event, please contact: agnieszka.czechon@ed.ac.uk

Any news of interest? Got an article to contribute? **Contact:** agnieszka.czechon@ed.ac.uk













