

University of Edinburgh 를 SMALL VESSEL DISEASE

NETWORK



July 2018 Newsletter

News from the Network:

Welcome to the first newsletter from the UoE small vessel disease network!

Our launch event took place at the end of last year with a day of talks, career advice and networking activities. Stay posted for news of our next event!





Launch of the UoE SVD network, November 2017

- The 3rd meeting of the Fondation Leducq network Understanding the role of the Perivascular Space in SVD took place in Edinburgh, 10-11th May 2018. The meeting was organised by the Leducq fellows at the University of Edinburgh and over 50 members of the network were in attendance. As part of a busy agenda, we heard research updates from each of the teams involved in the project, and invited guest Professor William Van Nostrand spoke about his work on CADASIL models. Read more about the network at www.small-vessel-disease.org
- Dr Michael Stringer recently visited the team of Professor Berislav Zlokovic, member of the Leducq network and expert in Alzheimer's Disease and related disorders, at the University of Southern California. Michael gave a seminar during his visit entitled 'Small vessel disease: Cerebrovascular Reactivity and Other Biomarkers' which you can watch here



Attendees of the 3rd Fondation Leducq SVD network meeting, 10-11th April, Royal Society of Edinburgh

The inaugural lecture of Professor Anna Williams took place on 30th April 2018. Anna, Professor of Regenerative Neurology, gave a lecture entitled 'Mending myelin: orchestrating brain repair in MS'.

Network Member Profile:



Dr Lizzie Hill joined the CCBS team in January as a Sleep Research Fellow, working on a study investigating small vessel disease in adults with obstructive sleep apnoea (OSA) in collaboration with Sunnybrook Health Sciences Centre in Toronto, part of the Foundation Leducq Transatlantic Network of Excellence led by Prof Joanna Wardlaw. Participants will undergo MRI scanning to assess small vessel disease before and after 4 months of continuous positive airway pressure (CPAP) therapy for OSA, along with measures of cognitive function and sleep.

Lizzie trained in the Department of Sleep Medicine, RIE alongside Dr Renata Riha. Lizzie is active within the sleep community, with a particular interest in training and education. Outside interests include yoga, music festivals, campervanning and craft beer.

 Congratulations to the Edinburgh researchers who received awards at the recent Stroke Association ceremony in London.

Professor Rustam Al-Shahi Salman (PI): Stroke Association Priority Programme Award <u>Neuro-Inflammation after Cerebral Haemorrhage in Edinburgh (NICHE)</u>

Professor Colin Smith (PI): Joint Stroke Association and Medical Research Council Priority Programme Award *Maximising a small vessel disease brain bank resource*

Dr Grant Mair (PI): Edith Murphy Foundation Senior Clinical Lectureship award <u>Realising the full</u> potential of routinely-available brain imaging to improve use of acute treatments and long term clinical <u>outcomes in patients with ischaemic stroke</u>

Dr Emily Sena (PI): Stroke Association Kirby Laing Foundation Senior Non-Clinical Lectureship award <u>Increasing the experimental validity and utility of preclinical stroke research</u>

Dr Stewart Wiseman: Postdoctoral fellowship <u>The eye and brain: Evaluation of the retinal nerve fibres and vessels as markers of small vessel disease progression or regression on neuroimaging</u>



Dr Stewart Wiseman



Dr Grant Mair, Dr Emily Sena, Hilary Reynolds, Prof Colin Smith and Prof Rustam Al-Shahi Salman at the ceremony. Image © Stroke Association

Read more about the Stroke Association and current funding opportunities here



Papers of Interest:

- A themed edition of <u>Clinical Science</u> features work on SVD from several Edinburgh based scientists including:
- Horsburgh et al. (2018) Small vessels, dementia and chronic diseases molecular mechanisms and pathophysiology. 132(8):851-868
- <u>Rajani and Williams</u> (2017) Endothelial cell-oligodendrocyte interactions in small vessel disease and aging. 131(5):369-379
- <u>Duncombe et al.</u> (2017) Chronic cerebral hypoperfusion: a key mechanism leading to vascular cognitive impairment and dementia. Closing the translational gap between rodent models and human vascular cognitive impairment and dementia. 131(19):2451-2468

Other papers of interest:

- <u>Rajani et al.</u> (2018) Reversal of endothelial dysfunction reduces white matter vulnerability in cerebral small vessel disease in rats. *Science Translational Medicine* 10(448)
- Montagne et al. (2018) Pericyte degeneration causes white matter dysfunction in the mouse central nervous system. Nat Med. 24(3):326-337.
- Hase et al. (2018) White matter degeneration in vascular and other ageing-related dementias.
- Faraco et al. (2018) Dietary salt promotes neurovascular and cognitive dysfunction through a gut-initiated TH17 response. Nat Neurosci 21(2):240-249

Volunteers needed!

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

Any news of interest?

Got an article to contribute?

Contact:

rosalind.brown@ed.ac.uk