THE University of Edinburgh
SMALL VESSEL DISEASE
NETWORK

THE UNIVERSITY *of* EDINBURGH
Row Fogo Centre for Research into Ageing and the Brain

Small Vessel Diseases Research

March 2021 Newsletter

News from the Network:

- The SVD Network Meeting, held on the 18th February 2021, received interest from clinical and pre-clinical research groups. This year, the event was held fully online. Presentation recordings will soon be available. Link

- Professor Ian Marshall has retired. SVD Research will be always grateful for his contributions, particularly in the field of MRI. He is still with us as Emeritus Chair of Magnetic Resonance Physics.

- SVD Research has welcomed new staff members: Dr Axel Montagne who joined from USC as a Chancellor's Fellow and Roberto Duarte Coello, a new Research Fellow

- Dr Salvatore Rudilosso - a Visiting Research Fellow from Hospital Clínic of Barcelona - will stay with the SVD Research group until April 2021.

- Prof Sandra Black, from the Leducq Network, won a Lifetime Achievement Award from the Society for Behavioural and Cognitive Neurology. Prof Black gave her talk for the Fondation Leducq Network on the 26th

January 2021. Her lecture will shortly be available on the Row Fogo Centre website. Congratulations!

- Dr Una Clancy received two additional awards for her presentations on MSS3: first prize at the Harvey Symposium 2020, run by the Royal Society of Medicine (30th October 2020), and the RCPE 47th Sir John Halliday Croom Prize-January 2021. Congratulations!

- The UK DRI Vascular Theme Early Career Researcher community held their first "get to know each other" event (9th March 2021). To get involved email: s.sri@ukdri.ucl.ac.uk

- A new database Cerebrovascular Diseases Image Databank was launched in Dec 2020.

- OSIPI Task Force 2.3: DCE/DSC contributions: an international initiative aiming to collect and harmonise DCE/DSC code snippets from developers, is led by Dr Michael Thrippleton.

Network Member Profile:

Maria Valdés Hernández is the Row Fogo Lecturer in Image Processing and Analysis since 2011. She has a background in software and electronic engineering. She obtained her BEng and MSc degrees in Cuba and her PhD in Japan, and is a Fellow of the Higher Education Academy since 2012. Her main research interests are the discovery of novel imaging biomarkers of disease and the development of automatic methods for reconstructing and extracting information from images. She has worked on the development of the image processing algorithms at the Centre for Clinical Brain Sciences in the University of Edinburgh and in the design of current image processing pipelines and image analysis-related post-graduate courses at the Edinburgh Imaging Academy. She enjoys gardening, DIY, travelling and watching TV series in the evenings. Maria is a co-author of numerous software releases, and co-editor of "Predictive Intelligence in Medicine"(2020).

- SVD Research publication rated as the most-read research article in *Journal of Cerebral Blood Flow and Metabolism,* in 2020. Link
- The LACI-2 trial was featured in "The Scotsman"
- Recognition for an SVD Research publication in the field of radiology. Link

Vacancies:

- Research Fellow for a BHF & Alan Turing Institute funded project "Uncovering retinal microvascular predictors of compromised brain haemodynamics in small vessel disease". Application deadline: 31st March 2021. Link
- 3 x Transitional Research Fellow and 2 x Clinical Research Fellow positions have opened at the BHF Centre for Cardiovascular Sciences. Application deadline: 2nd April 2021. Link

Upcoming Events of Interest:

- NEUROFLUIDS webinar featuring a talk from Prof Helene Benveniste (26th March). Registration link

- MUIA 2021 (12th - 14th July, 2021) – abstract submission open until 31st May.
- 13th SINAPSE Scientific Meeting - call for abstracts extended, the conference has been postponed to Autumn 2021.
- 10th UK & Ireland Early Career BBB Symposium took place in November 2020. The next symposium is planned for October / November 2021.

Support SVD Research!

- The Row Fogo Centre for Research into Ageing and the Brain has launched a new **Easy Fundraising** page, enabling the charity to receive donations from retailers. Please use this website while online shopping. More information
- A new **LinkedIn** for **SVD Research**. Please, join the SVD Research LinkedIn community. Help our research to get noticed: follow us on the SVD Research LinkedIn page.

Books/ Book Chapters

[…] Wardlaw (2021) Hankey's Clinical Neurology. 20% discount available with a flyer.

Doubal […] Wardlaw (2020). Section 4 Vascular Disease, Chapter 21, Small vessel disease. In Brayne C, Feigin V, Launer L, Logroscino G, eds. Oxford Textbook of Neurologic and Neuropsychiatric Epidemiology. Oxford University Press, Oxford, 2020. DOI link: 10.1093/med/9780198749493.001.0001

Publications of interest

Bernal et al (2021) A four-dimensional computational model of dynamic contrast-enhanced magnetic resonance imaging measurement of subtle blood-brain barrier leakage

Valdes-Hernandez et al (2021) Post-stroke Cognition at 1 and 3 Years Is Influenced by the Location of White Matter Hyperintensities in Patients With Lacunar Stroke

Liebeskind & Wardlaw (2021) Imaging Advances: Acute-on-Chronic Stroke

Clancy et al (2021) Neuropsychiatric symptoms associated with cerebral small vessel disease: a systematic review and meta-analysis

Stringer et al (2021) A Review of Translational Magnetic Resonance Imaging in Human and Rodent Experimental Models of Small Vessel Disease

Papanastasiou et al (2020) Pharmacokinetic modelling for the simultaneous assessment of perfusion and 18F-flutemetamol uptake in cerebral amyloid angiopathy using a reduced PET-MR acquisition time: Proof of concept

Hamilton et al (2020) Cognitive impairment in sporadic cerebral small vessel disease: A systematic review and meta-analysis

Zhang *et al* (2020). The Application of Optical Coherence Tomography Angiography in Cerebral Small Vessel Disease, Ischemic Stroke, and Dementia: A Systematic Review.

Sigfridsson et al (2020) Deficiency of Nrf2 exacerbates white matter damage and microglia/macrophage levels in a mouse model of vascular cognitive impairment

McFall et al (2020) UK consensus on pre-clinical vascular cognitive impairment functional outcomes assessment: Questionnaire and workshop proceedings

Quick et al (2020) A Vessel for Change: Endothelial Dysfunction in Cerebral Small Vessel Disease

Other publications

Small Vessel Disease Research – Edinburgh Research Explorer | **Leducq Network publications**

Interested in helping to organise the next SVD network event? **Any news of interest? Got an article to contribute?** Please contact: SVDs@ed.ac.uk

Follow our recent news and events
Row Fogo Centre website
Follow SVD Research on LinkedIn

Row Fogo Centre Easy Fundraising page