



ARTERY 24

10-11 October 2024
National Museum Cardiff
Cardiff, Wales
www.arterysociety.org



WEDNESDAY 9 OCTOBER 2024

13.00 – 19.00	Exhibition set up
19.00-22.00	Young investigator networking evening

THURSDAY 10 OCTOBER 2024

08.00	Registration
09.00-09.15	Conference opening remarks Carmel McEniery / Barry McDonnell
09.15 – 09.40	Opening lecture Prof. Eric Stohr - Leibneiz University, Hannover
09.40 -10.40	Oral session CardioVascular Haemodynamics and the Brain. Physiological Society/Experimental Physiology sponsored Symposium Professor Kevin Murphy, Cardiff University Brain Research Imaging Centre Professor William Cornwell, University of Colorado
10.40 -11.25	Refreshments, guided exhibitor viewing, YI business meeting
11.25 – 12.05	Oral session 1 Young Investigator Award Abstracts session 1
	Quantitative aortic Na[18F]F positron emission tomography computed tomography as a tool to associate vascular calcification with major adverse cardiovascular events Tom Lieveise, University Medical Center Groningen
	Assessing Cardiac Function in Healthy Subjects Using Photoplethysmography-Based Pulsewave Parameters and Composite Scores: A Comparative Study with Echocardiography Dr Daniel Kulin, Semmelweis University
	Minimal increase in blood pressure with age in a large, diverse sample of adults with Down syndrome Dr Meghan Shirley Bezerra, Children's Hospital Of Philadelphia
	The Association of Structural Versus Load-Dependent Large Artery Stiffness Mechanisms with Cerebrovascular Damage and Cortical Atrophy in Humans Dr Matthew Armstrong, Syracuse University
12.05 – 12.25	Invited lecture Professor Andrea Kelly - University of Pennsylvania, USA

12.30 – 12.50	Open Abstracts session 1
	Time-varying and contractility-dependent wave reflection properties of the left ventricle: in-vivo and in-silico evidence A/Prof Jonathan Mynard, Murdoch Children's Research Institute
	Non-invasive pressure gradient estimation of stenotic lesions in renal multifocal fibromuscular dysplasia: A pilot study Dr Alessandro Giudici, Maastricht University
12.50 – 13.05	Poster Storm 1
	The effects of 8-weeks post exercise hot water immersion on blood pressure and vascular health in physically inactive middle-aged adults Dr Charles Steward, University Of Nottingham
	Pressure dependence of aortic pulse wave velocity determined using a hydrostatic pressure gradient model in young and older human adults Dr Dinu Santha Chandran, All India Institute Of Medical Sciences, New Delhi
	Capturing network knowledge in MINDSHIFT: from transdisciplinary concept to first pilot data Rita Chamoun, Maastricht University
	Adipose Mesenchymal Stem Cells Exhibit Enhanced Osteogenic Differentiation in Chronic Kidney Disease Elvira Bragado-García, Instituto Pluridisciplinar and Facultad de Farmacia, UCM
	The Relationship Between Total Arterial Compliance and Large Arterial Stiffness Indexes Cemre Çelikbudak Orhon, EPFL Laboratory of Hemodynamics and Cardiovascular Technology (LHTC)
	Impact of hydrostatic pressure on measured and predicted regional arterial stiffness Sanam Khataei, Chu De Québec Research Center, Hôtel-dieu De Québec Hospital
	Measuring pulse-wave velocity in the healthy human brain using dynamic inflow magnitude contrast MRI Dr Ian Driver, Cardiff University
Can we predict preeclampsia development? A systematic review and trimester-based meta-analysis of aortic biomarkers in complicated and normal pregnancies Gisele J. Bentley, Macquarie University	
13.05 – 13.45	Lunch
13.45 – 14.45	Poster session 1
14.45 – 15.45	Career development lectures
15.45 – 16.15	Refreshments
16.15 – 16.35	Invited Lecture Prof. Patrick Segers, Belgium
16.35 – 16.55	Invited Lecture Prof. Andrew Sharp - UCD, Dublin
16.55 – 17.15	Open Abstracts session 2
	Longitudinal trajectories of reservoir-excess pressure parameters in people with type 2 diabetes

	Dr Kunihiro Aizawa, University of Exeter Medical School Image-based continuous analysis of the photoplethysmography signal for assessing vascular age Sara Vardanega, King's College London
17.15 – 17.30	Lifetime Achievement: In memory of Prof. Michel Safar and Prof. Michael O'Rourke
17.40 – 18.30	ARTERY Annual Business meeting
20.00 – 23.00	Conference dinner and Ceremony

FRIDAY 11 OCTOBER 2024

08.00 – 09.00	Registration
09.00 – 09.40	Young Investigator Award Abstract session 2
	Atherosclerosis development under control of blood macromolecular crowding Dr Rümeyza Bascetin, Université De Lorraine, DCAC
	Does adiposity contribute to gender-related differences in vascular ageing? Dr Anna Hernandez-Rubio, King's College London
	Multiethnic Blood Pressure Response to Submaximal Exercise Testing in Young-to-Middle Adulthood and Associations with Hypertension: The NHANES dataset João Marôco, University Of Massachusetts Boston
	Neuroendocrine influence of menstrual oestrogen on cerebral blood flow, arterial transit time and beyond Dr Melissa Emily Wright, Cardiff University
09.40 – 10.25	ARTERY/VascAgeNet: Vascular ageing translation to practice: mind the gaps and follow the trends! Introduction WG1: Knowledge Exchange Chloe Park & Rachel Climie WG2: Technological Innovation Jordi Alastruey & Dimitrios Terentes Printzios WG3: Clinical Research and Practice Giacomo Pucci & Rosa Maria Bruno Roundtable Q&A
10.25 – 11.00	Refreshments, guided exhibitor viewing
11.00 – 12.00	Oral session Maternal Haemodynamics Symposium Professor Basky Thilaganathan, St Georges University Hospitals NHS Foundation Trust Professor Wilfried Gyselars, Hasselt University Professor Christoph Lees, Imperial College London
12.00 – 12.40	Open abstracts session 3
	Identification of novel proteins as potential regulators of pulse pressure in humans: evidence from proteome-wide Mendelian randomization Dr Marie-joe Dib, University Of Pennsylvania

	<p>The unique extracellular matrix in bicuspid aortic valve aortopathy Dr Riaz Akhtar, University Of Liverpool</p> <p>Sex differences in exaggerated exercise blood pressure among older adults Julia Spaczynska, University College London</p> <p>Inhibition of Salivary Carbonic Anhydrase VI (Gustin) by Acetazolamide but not Chlortalidone Reveals a Novel Mechanism for Regulating the (Dietary/Endogenous) Nitrate-Nitrite-NO Pathway and Blood Pressure in Healthy Volunteers Dr Andrew Webb, King's College London</p>
12.45 – 13.00	<p>Poster storm 2</p> <p>A randomized-controlled exercise trial to improve endothelial function independent of cardiovascular risk – The VascuFit Study Dr Karsten Koenigstein, Department of Sport, Exercise and Health; University of Basel</p> <p>Exercise blood pressure is similar in a population based sample of adult men and women when reported relative to exercise workload. Annali Olivelle MRC Unit for Lifelong Health and Ageing, University College London</p> <p>The association between central to peripheral arterial stiffness ratio and the carotid atherosclerotic burden Dr Davide Agnoletti, University Of Bologna</p> <p>Autonomic regulation of large artery stiffness: a pilot study in hypertension Bushra Farukh, King's College London</p> <p>Brachial and central 24 hour blood pressures and pulsatile hemodynamics in heart failure with reduced ejection fraction Dr Kathrin Danninger, Cardiology Department, Klinikum Wels-Grieskirchen</p> <p>Identifying arterial markers having prognostic value for cardiovascular events among metabolic syndrome subjects Agnė Jucevičienė, Faculty Of Medicine, Vilnius University</p> <p>Very High Frequency Ultrasound in the follow-up of patients with Giant Cell Arteritis: a paradigm shift? Dr Anne Van Gessel, University Medical Centre Groningen</p> <p>Comparison of carotid artery measurement by ultrasound using two semi-automated analysis programs Lorena Topala, UCL</p>
13.00 – 13.45	Lunch
13.45 – 14.45	Poster session 2
14.45 – 15.15	<p>McDonald Lecture Prof. Pierre Boutouyrie, Paris, France</p>
15.15 – 15.45	Refreshments
15.45 – 16.05	<p>Invited lecture Using AI and Standardized Peripheral Arterial Waveforms to Assess Biologic Age Prof Gary Mitchell, USA</p>
16.05 – 16.45	Open abstracts session 4

	<p>An ultrasound dual-array technique for the assessment of functional and structural arterial properties Dr Paolo Mattesini, University Of Florence</p>
	<p>AI-based estimation of cardiac output from in silico peripheral pressure waveforms: the roles of topology and proximity to the heart Dr Lydia Aslanidou, Epfl</p>
	<p>Outcomes of cardiac function in participants with long COVID compared to healthy individuals Lamis Alghamdi, University College London</p>
16.45 – 17.00	<p>Closing remarks Young Investigator Awards Poster awards</p>