



Basic Vascular Science at the Langenbeck-Virchow-House, Luisenstr. 58/59, 10117 Berlin

23rd – 24th February 2024

9:30-12:45 Friday 23rd February

BVS Morning Workshop : Advances in -Omics technology

09:30	Registration opens	
10:00	Discovery proteomics in clinical research	
	Johannes Müller-Reif	Max Planck Institute of Biochemistry, München, Germany
10:45	Exploiting cell-to-cell heterogeneity in functional genomics: single-cell analysis and machine learning shed new light on gene-gene interactions	
	Florian Heigwer	University of Applied Sciences, Bingen, Germany
11:30	Break	
12:00	NanoString spatial solutions: Multi-analyte assays with highest flexibility and accuracy	
	Christoph König	NanoString Technologies, Berlin, Germany
12:45	Close	

Friday 23rd and Saturday 24th February

BVS Meeting

DAY 1	WELCOME	
	<i>Session 1 Clinical challenges</i>	
13:40-14:10	Keynote lecture: Long-term outcomes of venous thrombosis	Erik Klok, Netherlands
14:10-14:30	Keynote lecture: Different aetiological background of aortic pathologies	Maani Hakimi, Switzerland
14:30-14:35	Development and assessment of a pathway to investigate underlying cause for acute limb ischaemia	Nicole Tay, UK
14:35-14:40	Infective native aortic aneurysms – pathogenic and imaging considerations and retrospective single-centre results	Juan Antonio Celi de la Torre, Switzerland
14:40-14:45	Circulating cell-free DNA in plasma of patients with abdominal aortic aneurysm – a potential biomarker?	Carolin Kaduk, Germany
14:45-14:50	miRNA expression before and after EVAR – biomarkers for aortic remodeling and endoleak?	Xinji Tan, Germany
14:50-14:55	Long-term stroke reducing drug therapy following carotid endarterectomy	Daryll Baker, UK
14:55-15:00	Elevated sgp130 as a biomarker for diabetic peripheral arterial disease	Mark Portou, UK
15:00-15:05	Patient acceptability and adherence to the COMPASS trial drug recommendations following symptomatic carotid endarterectomy	Lucinda Cruddas, UK
15:05-15:10	Symptomatic carotid webs – a case series of endarterectomy from a tertiary referral unit	Daniel Curley, UK
15:10-15:15	Using sirolimus to treat patients with congenital vascular malformations: Improving essential remote patient monitoring	Nicholas Evans, UK
15:15-15:20	The multi-disciplinary team: EndoAVFs	Amy Bolsworth, UK
15:20-15:50	PANEL DISCUSSION	
	<i>Session 2 Advanced imaging and engineering</i>	
16:10-16:30	Keynote lecture: Recent advances in vascular imaging and blood flow analysis	Adrien Desjardins, UK
16:30-16:40	Photoacoustic imaging demonstrates differences in microvasculature in peripheral artery disease compared to controls: results of a pilot study	Conrad Von Stempel, UK
16:40-16:50	Development of a flexible ultrasonic patch for continuous ambulatory monitoring of dialysis access blood flow	Matthew Bartlett, UK
16:50-17:00	Understanding the role of altered hemodynamics in restenosis of peripheral arterial disease using engineering tools	Federica Ninno, UK
17:00-17:10	Personalized modeling of abdominal aortic aneurysm with strain and stress analysis	Wojciech Derwich, UK
17:10-17:20	Computational fluid dynamics virtual angiogram for AVM pre-interventional treatment planning	Aloma Blanch Granada, UK
17:20-17:30	3D printed phantoms for simulation and training in vascular medicine	Jia-En Danny Chen, UK
DAY 2	<i>Session 3 Preclinical models and vascular biology</i>	
9:10-9:30	Keynote lecture: Non-invasive ultra-high frequency ultrasound and photoacoustics imaging: focus on the vessel wall	Margreet de Vries, Netherlands
9:30-9:50	Keynote lecture: Sex differences in flow-mediated atherosclerotic plaques in thrombospondin-1 KO animals	Luke Brewster, USA
9:50-10:00	Creating a diet-induced CKD mouse model to study the effect of PVAT browning on vascular remodeling in arteriovenous fistulas	Nicky Kruit, Netherlands
10:00-10:10	Correlative analysis of highly resolved AAA wall composition and strain in mice	Achim Hegner, Germany
10:10-10:20	The hydrogen sulfide donor Sodium Thiosulfate promotes matrix degradation and abdominal aortic aneurysm in wild type male mice	Florent Allagnat, Switzerland
10:20-10:30	ALK2/3 signaling inhibition reduces pro-inflammatory cytokine expression in macrophages and prevents murine vein graft failure	Vincent Sier, Netherlands
10:30-10:40	Platelet independent NO-sGC-cGMP axis promotes arteriogenesis	Franziska Heim, Germany
10:40-10:50	Therapeutic inhibition of biomechanically-activated YAP-TAZ signaling prevents Vein Graft Atherosclerosis	Thijs Sluiter, Netherlands
	<i>Session 4: Vascular biology</i>	
11:10-11:30	Keynote lecture: Leukocyte transendothelial migration process	Jaap van Buul, Netherlands
11:30-11:40	Lenti-viral overexpression of RhoGEF Trio reduces CD8 T cell extravasation into atherosclerotic vein graft lesions in mice.	Thijs Sluiter, Netherlands
11:40-11:50	Tissue resident memory T cells and PD-1 in atherosclerotic diseases	Kayleigh van Dijk, Netherlands
11:50-12:00	Short-term low protein high carbohydrate diet preconditioning improves neovascularization in a model of murine hindlimb ischemia	Clémence Bechelli, Switzerland
12:00-12:10	Gut microbiome in ageing atherosclerotic patients	Racha El Hage, Germany
12:10-12:30	Keynote lecture: How to promote revascularization: lessons from developmental biology	Ferdinand le Noble, Germany
12:30-13:00	CLOSE	

Organisers: Margreet De Vries, Elisabeth Deindl, Kerstin Troidl, Maani Hakimi, George Hamilton, Simon Parvin, Paul Quax, Thomas Schmitz-Rixen, Janice Tsui

Registration fee includes Friday night dinner: Seniors € 190, Juniors (Undergraduate and Postgraduate students, trainees) € 90

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