



# Belgium-Netherlands Vascular Biology Conference (BeNeVBO)



Location: STUK Arts Center  
Naamsestraat 96 3000 Leuven  
Aula 02.C004  
Date: September 10-12, 2025

## Sponsors

### September 10 - STUK

**11:00-12:15** Registration

**12:15-12:30** Conference opening

### First Session – Pulmonary Arterial Hypertension

- 12.30** Rozenn Quark, KU Leuven, BE  
“Impairment of angiogenesis-driven clot resolution is a key event in the progression of chronic thromboembolic pulmonary hypertension”
- 12.50** Marie-José Goumans  
“Restore endothelial BMP signaling to protect the microvasculature in pulmonary arterial hypertension.”
- 13.10** Selected talk - Beau Fabienne Neep, Amsterdam UMC, NL  
“The Role of SOX17 in the Shear Stress Response of the Arterial Endothelium”
- 13.25** Selected talk - Cacharel Nadeem, Amsterdam UMC, NL  
“Lack of FHL2 promotes Pulmonary Arterial Hypertension via inhibition of BMP signaling”
- 13.40** Wolfgang Kübler, Charité – Universitätsmedizin Berlin, DE  
“The role of the endothelium in lung vascular remodeling in pulmonary hypertension”

**14:00-14:30** Coffee

**14.30** **Keynote lecture** - Nabila Bouatia Naji INSERM FR  
Chair Ylva Hellsten

“Leveraging Genetics and Genomics to Understand Under-Studied Vascular Diseases Predominant in Women”

## **Second Session – Lymphatic Biology**

- 15.15** Agnès Noël, U Liège, BE  
“New insights into lymphatic remodeling in lymphedema”
- 15.35** Selected talk - Pascal Brouillard, UC Louvain, BE  
“Primary lymphedema is a complex developmental disease that remains mostly unsolved, despite identification of more than 50 likely causative genes”
- 15.30** Selected talk - Jakub Ksiazkiewicz, KU Leuven, BE  
“Role of BMP/SMAD signalling in patterning of lymphatic endothelium within lymph node”
- 16.05** An Zwijsen, KU Leuven, BE  
“Lymphatic Functions Regulated by BMP-SMAD Signaling”
- 16.25** Taija Mäkinen, University of Helsinki and Wihuri Research Institute, FI  
“Single-cell insights into lymphatic vessel heterogeneity and function”

**16:45-18:10** Poster session 1

## **September 11 - STUK**

## **Third Session – Atherosclerosis**

- 09.00** Mandy Grootaert, KU Leuven, BE  
“The role of vascular smooth muscle cell senescence in atherosclerosis”
- 09.20** Judith Sluimer, University Maastricht, NL  
“Fibroblasts in health, ageing and atherosclerosis”
- 09.40** Selected talk - Justine Lallement, UC Louvain, BE  
“Liver–Heart Crosstalk in MASH: PRMT1–ADMA as a Hepatic Driver of Endothelial and Cardiac Dysfunction”
- 09.55** Selected talk - Leonardo Martin, University of Antwerp, BE  
“Mast Cells as Central Regulators of Plaque Instability in a Model of Advanced Atherosclerosis”
- 10.10** Skiander Hayat, Uniklinik RWTH Aachen University, DE  
“Spatial rewiring in human atherosclerosis”

**10:30-11:00** Coffee

## **Fourth Session – Organotypic vasculature**

- 11.00** Aernout Luttun, KU Leuven, BE  
“Transcriptional regulation of endothelial diversity in health and disease”

- 11.20** Reiner Boon, Amsterdam UMC, NL  
“Non-coding RNAs in endothelial ageing”
- 11.40** Selected talk - Soufiane Nassiri, Amsterdam UMC, NL  
“Intravenous IRON supplementation in Heart Failure with Preserved Ejection Fraction and iron deficiency (IRON-HFpEF): a comprehensive phase II multicenter placebo-controlled randomised clinical trial”
- 11.55** Selected talk - Oana Sorop, Erasmus MC, NL  
“Coronary microvascular dysfunction in postmenopausal minipigs with multiple risk factors”
- 12.10** Ylva Hellsten, University of Copenhagen, DK  
“Human microvascular dysfunction, role of sexhormones and physical activity”

**12:30-13:15** Lunch  
**13:15-14:00** Poster session 2

- 14.00** **Keynote lecture** - Max Mazzone KU Leuven BE  
Chair Ferdinand le Noble  
“Macrophage control of the tumor microenvironment”

#### **Fifth Session – Mechanobiology (Chaired by Peter Hordijk and Cara Trivett)**

- 14.45** Stephan Huveneer, Amsterdam UMC, NL  
“When tensions rise: force-dependent regulation of endothelial adhesions in development and disease”
- 15.05** Hans van Oosterwyck, KU Leuven, BE  
“Quantifying cell-matrix forces during angiogenic invasion and their role for cerebral cavernous malformations”
- 15.25** Selected talk - Tong Xu, Amsterdam UMC  
“Phosphoproteomics Maps Calcineurin-NFAT-DSCR1.4 Signaling as Druggable Axis in Gαq-R183Q–Driven Capillary Malformations”
- 15.40** Selected talk - Emilie Maufroy, Université Libre de Bruxelles, BE  
“Hemodynamic and Microvascular Adaptations to Interval vs. Continuous Training: A Macro-to-Micro-Perspective”
- 15.55** Maud Martin, Université Libre de Bruxelles, BE  
“The role of microtubules during sprouting angiogenesis: with or without a Y ?”

**16:15-16:45** Coffee

#### **Sixth Session – Engineered Vascular Structures**

- 16.45** Kristina Haase European Molecular Biology Laboratory ES  
“Engineered Vasculature – bridging human biology with translation”
- 17.05** Selected talk - Mattia Manenti Technical University Eindhoven NL  
“Unravelling Neointima Hyperplasia: the Role of Flow Disturbances in Endothelial Cell Activation and Matrix (Dis)organization”
- 17.20** Lieven Thorrez KU Leuven BE

- 17.35** Selected talk - Segolene Ladaigue Institut Curie INSERM Fr  
 “A vascularized lung tumor-on-chip approach to decipher how endothelium and tumor microenvironment crosstalk shapes immune infiltration.”
- 17.50** Valeria Orlova Lieden University Medical Center NL  
 “Next-Generation Vascular Disease Models Using Patient-Derived Human Induced Pluripotent Stem Cells (hiPSCs)”
- 19:30** Conference dinner
- 20:00 Concert at STUK (JOEnah, not an official conference event)
- 21:15 Concert at STUK (de Kloe, <https://vi.be/platform/dekloe>, not an official conference event)

## September 12 - STUK

### Seventh Session – Cerebrovascular (Chaired by Hannelore Kemps & Annelies Bronckaers)

- 09.00** Benoit Vanhollebeke, Université Libre de Bruxelles, BE  
 “Single-cell control mechanism of brain angiogenesis and blood-brain barrier formation”
- 09.20** Inge Mulder, Amsterdam UMC, NL  
 “Imaging of Stroke – New insights in impaired (micro-)vascular perfusion in mice”
- 09.40** Selected talk - Amanda Moya Gomez, Hasselt University, BE  
 “ELF-EMS improves angiogenesis under ischemic conditions”
- 09.55** Selected talk - Lisa van Beers, Amsterdam UMC, NL  
 “An in vivo model to study Cerebral Arterial Gas Embolism”
- 10.10** Sebastien Foulquier, Maastricht University, NL  
 “Cardiometabolic stress disrupts crucial mechanotransduction in the brain microvasculature: relevance for cerebral small vessel disease.”
- 10:30-11:00** Coffee
- 11.00** **Keynote lecture** – Mikka Vikkula de Duve Institute BE  
 Chair Marie-José Goumans  
 “Vascular malformations: from genetic causes to preclinical models and clinical trials”

### Eighth Session – Vascular Inflammation (Chaired by Jaap van Buul & Lynn Roth)

- 11.45** Katrien de Bock, ETH Zurich, CH  
 “Exercise as a model to study endothelial functional heterogeneity”
- 12.05** Venkat Ayyalasomayajula, Amsterdam UMC, NL  
 “VASCUL-AID: predictions with AI and proteomics of disease progression in aortic aneurysms”
- 12.25** Patrick Sips, U Gent, BE  
 “Studying the role of inflammation in the development of thoracic aortic disease associated with Marfan syndrome”

- 12.45** Selected talk - HA Hoang Thai, Université Libre de Bruxelles, BE  
“Volumetric imaging and single-cell RNAseq atlases identify vascular remodeling as a driver of human dental pulp response during tooth decay progression”
- 13.00** Selected talk - Stan Muijens, Maastricht University Medical Centre, NL  
“Vascular Remodeling Outcomes in Human Arteriovenous Fistula Maturation are Associated to Long Non-Coding RNA expression”
- 13:15** Awards and closing