

21e International Symposium on Biomechanics in Vascular Biology and Cardiovascular Disease

18 – 19 June 2026

Centre Louis-Jeantet – Rte de Florissant 77, Geneva

Program Thursday 18th June 2026

09:00-09:30 **Registration and Welcome Coffee**

09:30-09:45 Welcome note from the organizers
Brenda Kwak (Geneva, CH)

09:45-12:00 **Mechanotransduction**

Chairs **Paul Evans** (London, UK)

09:45-10:15 **Plenary speaker 1**
Ellie Tzima (Oxford, UK)
Mechanisms of endothelial flow sensing

10:15-11:30 **Talks (5) selected from abstracts** (10min+4min Q&A)

11:30-12:00 **Plenary speaker 2**
Hanjoong Jo (Atlanta, USA)
Flow-induced reprogramming of endothelial cells

12:00-13:15 **Lunch break**

13:15-15:00 **Effect of sex on disease vulnerability**

Chairs **Brenda Kwak** (Geneva, CH)

13:15-13:45 **Plenary speaker 3**
Ynte Ruigrok (Utrecht, NL)

Sex differences in intracranial aneurysms: Biological and hemodynamic processes

13:45-14:30

Talks (3) selected from abstracts (10min+4min Q&A)

14:30-15:00

Plenary speaker 4

Jolanda Wentzel (Rotterdam, NL)

Sex-related differences in anatomy, blood flow and atherosclerotic plaque burden and composition

15:05-15:30

Coffee break

15:30-16:30

Poster session 1

Guided tour for pre-selected abstracts (award)

Chairs

Tzung Hsiai (Los Angeles, USA) / **Jolanda Wentzel** (Rotterdam, NL)

16:30-17:30

Keynote speaker

Chair

Frank Gijzen (Rotterdam, NL)

David Steinman (Toronto, Canada)

Disordered hemodynamics in cerebrovascular disorders, with implications for vascular mechanobiology

19:15 -

Conference dinner

“La Nautique”

Program Friday 19th June 2026

08:30-11:00

Emerging concepts in mechanotransduction

Chairs

Hanjoong Jo (Atlanta, USA)

08:30-09:00

Plenary speaker 5

Tatiana Petrova (Lausanne, CH)

Mechanotransduction in lymphatic valve development

09:00-10:00

Talks (4) selected from abstracts (10min+4min Q&A)

10:00-10:30

Plenary speaker 6

Dionysios Adamopoulos (Geneva, CH)

Left atrial wall shear stress correlates with fibrosis in patients with atrial fibrillation

10:30-11:00

Plenary speaker 7

Tzung Hsiai (Los Angeles, USA)

Mechanically activated *snai1b* coordinates the initiation of myocardial delamination for trabeculation

11:00-12:00

Coffee Break & Poster session 2

12:00-13:00

Lunch break

13:00-14:30

In vitro models for biomechanical research

Chairs

Marie-Luce Bochaton-Piallat (Geneva, CH)

13:00-13:30

Plenary speaker 8

Simone Bersini (Bellinzona, CH)

High-throughput biofabrication of functional organ-specific human microvessels

13:30-14:30

Talks (4) selected from abstracts (10min+4min Q&A)

14:30-15:00 **Coffee break**

15:00-17:00 **Advanced imaging for biomechanical forces, wall structure and function**

Chairs **Philippe Bijlenga** (Geneva, CH)

15:00-15:30 **Plenary speaker 9**
Anne M. Robertson (Pittsburgh, USA)
Advanced imaging and analysis of arterial tissues to unravel the coupling between wall structure and strength.

15:30-16:30 **Talks (4) selected from abstracts** (10min+4min Q&A)

16:30-17:00 **Plenary speaker 10**
Frank Gijzen (Rotterdam, NL)
Investigating the impact of microcalcification size and volume on collagenous matrix and tissue mechanics using a tissue-engineered atherosclerotic cap model

17:00-17:15 **Awards ceremony and closing remarks**
