

29th

Kraków Conference on Endothelium



International Cultural Center,
Market Square 25, Kraków

25th - 27th SEPTEMBER 2024

Alay

13:30 – 13:45 Welcome addresses and opening remarks:
Maciej Malecki, *Vice-Rector Rector of the Jagiellonian University Medical College*
Stefan Chlopicki, *Jagiellonian Centre for Experimental Therapeutics - JCET, Jagiellonian University, Krakow, Poland*,
Gabor Csanyi, *Vascular Biology Center-VBC, Augusta, USA*,
Tilman Hackeng, *Cardiovascular Research Institute Maastricht - CARIM, Maastricht, the Netherlands*
Vicente Andrés, *Spanish National Centre for Cardiovascular Research Carlos III-CNIC, Madrid, Spain*

Keynote lecture

13:45 – 14:25 Jose J. Fuster, *CNIC, Madrid, Spain*
Clonal hematopoiesis and atherosclerotic disease: from humans to mice and back

Session I Vascular Ageing (part 1)
Chairs: Stefan Chlopicki (Poland), Tilman M. Hackeng (The Netherlands)

14:25 – 14:50 Vicente Andrés, *CNIC, Madrid, Spain*
Endothelial cell and vascular smooth muscle cell dysfunction in Hutchinson-Gilford progeria syndrome

14:50 – 15:05 Iñigo Ruiz-Polo de Lara, *CNIC, Madrid, Spain*
Role of endothelial cell A-type lamin expression in age-related cardiovascular disease

15:05 – 15:30 Catherine Shanahan, *King's College London, London, UK*
Senescence and the extracellular matrix in vascular ageing

15:30 – 15:55 Pauls Shiels, *University of Glasgow, Glasgow, Scotland*
The exposome and vascular ageing

15:55 – 16:25 Coffee break

Session II Vascular Ageing (part 2)
Chairs: Gabor Csanyi (USA), Vicente Andrés (Spain)

16:25 – 16:50 Yu Wang, *The University of Hong Kong, Hong Kong, China*
Cardiovascular protective function of SIRT1 - an update

16:50 – 17:05 Magda R. Hamczyk, *Aarhus Institute of Advanced Studies (AIAS), Denmark*
Endothelial-to-mesenchymal transition in progeria-associated atherosclerosis

17:05 – 17:20 Anna Grochot-Przeczek, *Jagiellonian University, Krakow, Poland*
Insights into the function of NRF2 / KEAP1 in endothelial biology

17:20 – 17:35 Anna Bar, *JCET, Krakow, Poland*
Accelerated ageing in endothelial-specific NRF2 knockout mice is linked to increased endothelial permeability, detected by MRI in vivo

17:35 – 17:50 Soroush Mohammadi Jouabadi, *Department of Internal Medicine, Erasmus MC, Rotterdam, The Netherlands*
Metformin enhances lifespan and endothelial health-span in an ERCC-1 accelerated mouse model of aging

17:50 – 18:05 Grzegorz Kwiatkowski, *JCET, Krakow, Poland*
Sex-specific phenotype of heart failure in ageing APOE*3Leiden. CETP dyslipidemic mice

18:05 – 18:20 Rafal Gulej, *University of Oklahoma Health Science Center, USA*
Young blood rejuvenates cerebrovascular endothelial function in aged mice: Lessons from heterochronic parabiosis experiments

18:30 – 20:00 Welcome Reception (Collegium Maius Courtyard)

Keynote lecture

08:00 – 08:40 **Joseph M. Miano, Vascular Biology Center (VBC), Augusta, USA**

A new genetic model of accelerated coronary atherosclerosis

Session III **Vascular Inflammation (part 1)**

Chairs: Cherry Wainwright (UK), Jerzy Zoladz (Poland)

08:40 – 09:05 **Gabor Csanyi, VBC, Augusta, USA**

Mechanisms of foamy monocyte formation in atherosclerosis

09:05 – 09:30 **David Stepp, VBC, Augusta, USA**

Impact of skeletal muscle metabolism on vascular function in obesity

09:30 – 09:55 **Xiaochun Long, VBC, Augusta, USA**

New Mechanisms for vascular smooth muscle degeneration in vascular disease

09:55 – 10:20 **Jiliang Zhou, Pharmacology & Toxicology, Augusta, USA**

Regulation of smooth muscle phenotype by long non-coding RNAs

10:20 – 10:45 **Tohru Fukai, VBC, Augusta, USA**

Interplay between ROS and Copper transport protein in Vascular Disease

10:45 – 11:15 **Coffee break**

Session IV **Vascular Inflammation (part 2)**

Chairs: Ryszard T. Smolenski (Poland), Anton Roks (The Netherlands)

11:15 – 11:40 **Eric Belin de Chantemele, VBC, Augusta, USA**

CD4+ T cells expressing HIV proteins induced endothelial dysfunction and hypertension via IL-1 α -mediated, Nox1-derived ROS production

11:40 – 12:05 **Philippe Vangrieken, CARIM, Maastricht, The Netherlands**

Methylglyoxal as a driver of vasculopathy in diabetes and prediabetes

12:05 – 12:30 **Masuko Ushio-Fukai, VBC, Augusta, USA**

Integrating redox signaling, mitochondrial dynamics, and endothelial metabolism: driving angiogenesis

12:30 – 12:55 **Jaime Millán, Centro de Biología Molecular Severo Ochoa, Spanish National Research Council (CSIC), Madrid, Spain**

Harnessing Rho GTPases to preserve human endothelial barrier function during inflammation

12:55 – 13:10 **Marta Smeda, JCET, Krakow, Poland**

Impact of platelet-derived TGF β 1 on integrity of murine lung microvascular endothelial barrier: age-related disruption and effect of platelet releasate milieu

13:10 – 13:25 **Andrew Guilfoyle-Speese, VBC, Augusta, USA**

Prevention of Sarcopenic Obesity Maintains Angiogenic Capacity in PAD

13:25 – 13:40 **Lukasz Mateuszuk, JCET, Krakow, Poland**

Effect of spermidine on vascular function and endothelial phenotype

13.40 – 14:10 **Invitation to Poster Session 1 (rapid fire presentations)**

Chairs: Magdalena Sternak, Marek Grosicki

14.10 – 15.55 **Lunch and Poster Viewing – Poster Session (part 1)**

Session V

Platelets and Thrombosis

Chairs: Gabor Csanyi (USA), Tilman M. Hackeng (The Netherlands)

- 15:55 – 16:20 **Judith Cosemans, CARIM, Maastricht, The Netherlands**
Platelet-endothelial interaction in health and disease
- 16:20 – 16:45 **Paola van der Meijden, CARIM, Maastricht, The Netherlands**
Monitoring antiplatelet therapy and associated bleeding risk in high-risk patients
- 16:45 – 17:00 **Patrycja Kaczara, JCET, Krakow, Poland**
Pharmacological inhibition of platelet energy metabolism as a way to potentiate antiplatelet drug action
- 17:00 – 17:15 **Kamil Przyborowski, JCET, Krakow, Poland**
PDIA1 and PDIA3 differentially regulate platelet function
- 17:15 – 17:45 **Coffee break**

Session VI

Tissue Factor Pathway Inhibitor (TFPI) and Vascular Wall

Chairs: Stefan Chlopicki (Poland), Vicente Andrés (Spain)

- 17:45 – 18:10 **Tilman M. Hackeng, CARIM, Maastricht, The Netherlands**
Tissue factor pathway inhibitor (TFPI) and the attenuation of venous thrombosis
- 18:10 – 18:35 **Rory Koenen, CARIM, Maastricht, The Netherlands**
Regulation of TFPI by neutrophil extracellular traps (NETs)
- 18:35 – 18:50 **Vanessa Bröker, CARIM, Maastricht, The Netherlands**
The effects of tissue factor pathway inhibitor on the proliferation and phenotype of vascular cells
- 18:50 – 19:15 **Leon Schurgers, CARIM, Maastricht, The Netherlands**
Using the young to study the old: iPS cells to study vascular ageing and cardiovascular disease
- 19:30 **Get Together - Party, Venue: Pałac pod Baranami, Market Square 27**

27th September 2024

Keynote lecture

- 08:00 – 08:40 **Csaba Szabo, University of Fribourg, Switzerland**
Hydrogen cyanide, the next mammalian gaseous

Session VII

Inflammation Resolution

Chairs: Magnus Bäck (Sweden), Zoltán Ungvári (USA)

- 08:40 – 09:05 **Jesmond Dalli, Queen Mary University of London, London, UK**
Unveiling common pathways: Tackling joint and vascular inflammation to resolve multimorbidities
- 09:05 – 09:30 **Dianne Cooper, The William Harvey Research Institute, Queen Mary University of London, London, UK**
Resolution pharmacology to control comorbidities in arthritis
- 09:30 – 09:55 **Ana Briones Alonso, Universidad Autónoma de Madrid, Madrid, Spain**
Role of Resolvin D2 in vascular dysfunction and remodeling in hypertension
- 09:55 – 10:10 **Agnieszka Kij, JCET, Krakow, Poland**
Systemic and local lipid mediator status reflecting vascular health
- 10:10 – 10:40 **Coffee break**

Session VIII **Cardio-vasco-oncology**

Chairs: Rafał Olszanecki (Poland), Tomasz Rutkowski (Poland)

- 10:40 – 11:05** **Laura Cádiz Barrera, CNIC, Madrid, Spain**
Anthracycline cardiotoxicity: Pathophysiological mechanisms and novel therapeutic targets
- 11:05 – 11:30** **Pieter-Jan Guns, University of Antwerp, Antwerp, Belgium**
SERPINA3, a novel marker of endothelial cell dysfunction in chemotherapy-related cardiovascular dysfunction?
- 11:30 – 11:55** **Jeanette Woolard, University of Nottingham, Nottingham, UK**
Role of Endothelial Receptors in the Hypertension Induced by VEGFR-2 Inhibitors
- 11:55 – 12:20** **Zoltán V. Varga, Semmelweis University, Budapest, Hungary**
Immune checkpoint signaling and heart failure
- 12:20 – 12:45** **Marijke J E Kuijpers, CARIM, Maastricht, The Netherlands**
Tyrosine kinase inhibitors for treatment of solid tumors: effects on platelet function and signalling
- 12:45 – 13:00** **Elzbieta Buczek, JCET, Krakow, Poland**
BRAF and MEK inhibitors: investigating the mechanisms of vascular toxicity
- 13.00 – 13.30** **Invitation to Poster Session 2 (rapid fire presentations)**
Chairs: Marta Stojak, Marta Pacia

Lunch and Poster Viewing – Poster Session (part 2)

Session IX **Heterogeneity of Vascular Beds**

Chairs: Zoltan Benyó (Hungary), Yu Wang (Hong Kong)

- 15:15 – 15:40** **Aernout Lutun, Centre for Molecular and Vascular Biology, Catholic University of Leuven, Leuven, Belgium**
Transcriptional regulation of endothelial heterogeneity in health and disease
- 15:40 – 16:05** **David Fulton, VBC, Augusta, USA**
The role of PBK in pulmonary vascular remodeling
- 16:05 – 16:20** **Ignacio Benedicto Español, Centro de Investigaciones Biológicas Margarita Salas (CIB Margarita Salas), Madrid, Spain**
Role of endothelial cells in age-related defective liver regeneration
- 16:20 – 16:35** **Izabela Czyzyska-Cichon, JCET, Krakow, Poland**
Liver sinusoidal endothelial cells (LSECs) and hepatocyte metabolism in chronic heart failure
- 16:35 – 16:50** **Katarzyna Mleczko-Sanecka, International Institute of Molecular and Cell Biology in Warsaw, Poland**
Liver sinusoidal endothelial cells constitute a major route for hemoglobin clearance
- 17:50 – 17:05** **Mateusz Gawrysiak, Medical University of Lodz, Poland**
The involvement of the lung vascular endothelium in antiviral immunity during respiratory viral infections
- 17:05 – 17:20** **Elisabeth Fließer, Medical University of Graz, Austria**
Unveiling the role of Lung Endothelial Cell Dynamics in the progression of pulmonary fibrosis
- 17:20 – 18:00** **Closing lecture**
Rhian M Touyz, Institute of the McGill University Health Centre (RI-MUHC), Montreal, Canada
Aging and the vasculature in health and disease
- 18.00 – 18.15** **Conference closing and poster awards ceremony**
- 18:30 – 20:00** **Wawel Castle Visit** (special tour after Wawel is closed)

CONFERENCE CHAIRS

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Tilman Hackeng (the Netherlands) - Co-Chair

Vicente Andrés (Spain) - Co-Chair

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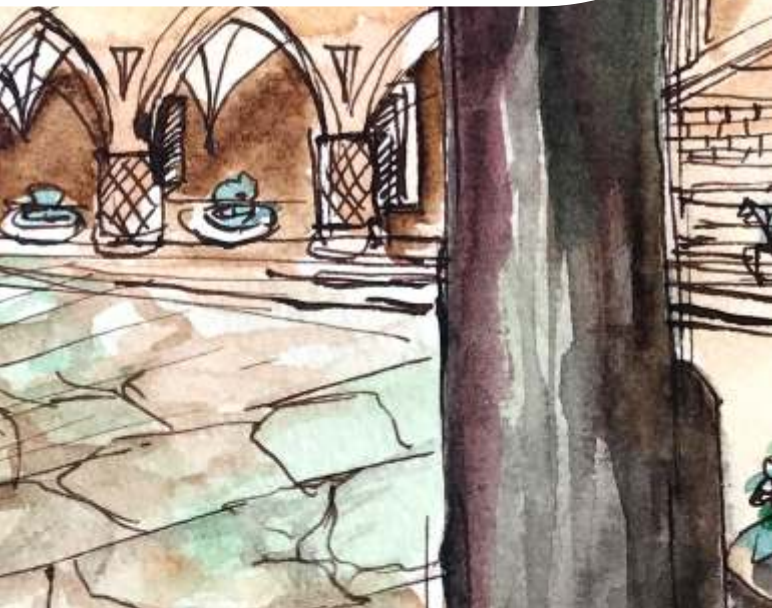
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