

Program for 18th of July, 2024

29th Kraków Conference on Endothelium 25th -27th September 2024

25th September 2024

13:30 – 13:45 Welcome addresses and opening remarks:

Maciej Malecki, Vice-Rector Rector of the Jagiellonian University

Stefan Chłopicki (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) and **Vicente Andrés** (Spanish National Centre for Cardiovascular Research Carlos III-CNIC, Madrid, Spain)

Keynote lecture: (30 min. + 10 min. questions)

13:45 – 14:25 **Jose J. Fuster, Centro Nacional de Investigaciones Cardiovasculares Carlos III (CNIC) – Madrid, Spain**

Clonal hematopoiesis and atherosclerotic disease: from humans to mice and back

Session I

Title: Vascular Ageing (part 1)

14:25 – 14:50 **Vicente Andrés, Centro Nacional de Investigaciones Cardiovasculares Carlos III (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, Centro Nacional de Investigaciones Cardiovasculares Carlos III (CNIC), Madrid, Spain (short talk)**

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

Title: Vascular Ageing (part 2)

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, Universidad de Oviedo, Oviedo, Spain (short talk)**

Endothelial-to-mesenchymal transition in progeria-associated atherosclerosis

17:05 – 17:20 **Anna Bar, JCET, Krakow, Poland (short talk)**

Accelerated ageing in endothelial-specific NRF2 knockout mice is linked to increased endothelial permeability, detected by MRI in vivo

17:20 – 17:35 **Grzegorz Kwiatkowski, JCET, Krakow, Poland (short talk)**

*Sex-specific phenotype of heart failure in ageing APOE*3Leiden. CETP dyslipidemic mice*

17:35 – 17:50 short talk selected from abstracts

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17:50 – 18:05 short talk selected from abstracts

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18:05 – 18:20 short talk selected from abstracts

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

26th September 2024

Keynote lecture:

08:30 – 09:10 **Csaba Szabo, University of Fribourg, Switzerland**
Hydrogen cyanide, the next mammalian gaseous

Session III

Title: Vascular Inflammation (part 1)

09:10 – 09:35 **Gabor Csanyi, Vascular Biology Center (VBC), Augusta, USA**
Mechanisms of foamy monocyte formation in atherosclerosis

09:35 – 10:00 **David Stepp, Vascular Biology Center (VBC), Augusta, USA**
Impact of skeletal muscle metabolism on vascular function in obesity

10:00 – 10:25 **Xiaochun Long, Vascular Biology Center (VBC), Augusta, USA**
New Mechanisms for vascular smooth muscle degeneration in vascular disease

10:25 – 10:50 **Jiliang Zhou, Medical College of Georgia, Augusta, USA**
Regulation of smooth muscle phenotype by long non-coding RNAs

10:50 – 11:20 Coffee break

Session IV

Title: Vascular Inflammation (part 2)

11:20 – 11:45 **Eric Belin de Chantemele, Vascular Biology Center (VBC), Augusta, USA**
CD4⁺ T cells expressing HIV proteins induced endothelial dysfunction and hypertension via IL-1 α -mediated, Nox1-derived ROS production

11:45 – 12:10 **Philippe Vangrieken, Cardiovascular Research Institute Maastricht (CARIM), Maastricht, The Netherlands**
Methylglyoxal as a driver of vasculopathy in diabetes and prediabetes

12:10 – 12:35 **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

12:35 – 12:50 **Marta Smeda, JCET, Krakow, Poland** (short talk)
Impact of platelet-derived TGF β 1 on integrity of murine lung microvascular endothelial barrier: age-related disruption and effect of platelet releasate milieu

12:50 – 13:05 short talk selected from abstracts
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13:05 – 13:35 Invitation to Poster Session 1 (rapid fire presentations 30 posters)

13:35 – 15:35 Lunch and Poster Viewing – Poster Session #1

Session V

Title: Platelets and Thrombosis

15:35 – 16:00 **Judith Cosemans, Cardiovascular Research Institute Maastricht (CARIM), Maastricht, The Netherlands**
Platelet-endothelial interaction in health and disease

16:00 – 16:25 **Paola van der Meijden, Cardiovascular Research Institute Maastricht (CARIM), Maastricht, The Netherlands**
Monitoring antiplatelet therapy and associated bleeding risk in high-risk patients

16:25 – 16:40 **Patrycja Kaczara, JCET, Krakow, Poland** (short talk)
Pharmacological inhibition of platelet energy metabolism as a way to potentiate antiplatelet drug action

16:40 – 16:55 **Kamil Przyborowski, JCET, Krakow, Poland** (short talk)
PDIA1 and PDIA3 differentially regulate platelet function

16:55 – 17:10 short talk selected from abstracts
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17:10 – 17:40 Coffee break

Session VI

Title: Tissue Factor Pathway Inhibitor (TFPI) and Vascular Wall

17:40 – 18:05 **Tilman M. Hackeng, Cardiovascular Research Institute Maastricht (CARIM), Maastricht, The Netherlands**

Tissue factor pathway inhibitor (TFPI) and the attenuation of venous thrombosis

18:05 – 18:30 **Rory Koenen, Cardiovascular Research Institute Maastricht (CARIM), Maastricht, The Netherlands**

Regulation of TFPI by neutrophil extracellular traps (NETs)

18:30 – 18:45 **Vanessa Bröker, Cardiovascular Research Institute Maastricht (CARIM), Maastricht, The Netherlands (short talk)**

The effects of tissue factor pathway inhibitor on the proliferation and phenotype of vascular cells

18:45– 19:10 **Leon Schurgers, Cardiovascular Research Institute Maastricht (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: Palac pod Baranami, Market Square 27 (3 min. walk from the conference place)

27th September 2024

Keynote lecture:

08:30 – 09:10 **Joseph M. Miano, Vascular Biology Center (VBC) – Augusta, USA**
A new genetic model of accelerated coronary atherosclerosis

Session VII

Title: Inflammation Resolution

09:10 – 09:35 **Jesmond Dalli, Queen Mary University of London, London, UK**
Unveiling common pathways: Tackling joint and vascular inflammation to resolve multimorbidities

09:35 – 10:00 **Mauro Perretti, The William Harvey Research Institute, Queen Mary University of London, London, UK**
Resolution pharmacology to control comorbidities in arthritis

10:00 – 10:25 **Ana Briones Alonso, Universidad Autónoma de Madrid, Madrid, Spain**
Role of Resolvin D2 in vascular dysfunction and remodeling in hypertension

10:25 – 10:40 **Agnieszka Kij, JCET, Krakow, Poland (short talk)**
Systemic and local lipid mediator status reflecting vascular health

10:40 – 11:10 Coffee break

Session VIII

Title: Cardio- and vasco-oncology

11:10 – 11:35 **Laura Cádiz Barrera, Centro Nacional de Investigaciones Cardiovasculares Carlos III (CNIC), Madrid, Spain**
Anthracycline cardiotoxicity: Pathophysiological mechanisms and novel therapeutic targets

11:35 – 12:00 **Pieter-Jan Guns, University of Antwerp, Antwerp, Belgium**
SERPINA3, a novel marker of endothelial cell dysfunction in chemotherapy-related cardiovascular dysfunction?

12:00 – 12:25 **Jeanette Woolard, University of Nottingham, Nottingham, UK**
Role of Endothelial Receptors in the Hypertension Induced by VEGFR-2 Inhibitors

12:25 – 12:50 **Zoltán V. Varga, Semmelweis University, Budapest, Hungary**

Immune checkpoint signaling and heart failure

12:50 – 13:15 **Marijke J E Kuijpers, Cardiovascular Research Institute Maastricht (CARIM), Maastricht, The Netherlands**

Tyrosine kinase inhibitors for treatment of solid tumors: effects on platelet function and signalling

13:15 – 13:30 **Elzbieta Buczek, JCET, Krakow, Poland** (short talk)

BRAF and MEK inhibitors: investigating the mechanisms of vascular toxicity

13:30 – 13:45 short talk selected from abstracts

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13.45 – 14.15 Invitation to Poster Session 2 (rapid fire presentations 30 posters)

14.15 – 16:15 Lunch and Poster Viewing – Poster Session #2

Session IX

Title: Heterogeneity of Vascular Beds

16:15 – 16:40 **Aernout Lutun, Centre for Molecular and Vascular Biology, Catholic University of Leuven, Leuven, Belgium**

Transcriptional regulation of endothelial heterogeneity in health and disease

16:40 – 17:05 **David Fulton, Vascular Biology Center (VBC), Augusta, USA**

The role of PBK in pulmonary vascular remodeling

17:05 – 17:20 **Ignacio Benedicto Español, Centro de Investigaciones Biológicas Margarita Salas (CIB Margarita Salas), Spanish National Research Council (CSIC), Madrid, Spain**

Role of endothelial cells in age-related defective liver regeneration

17:20 – 17:35 **Izabela Czyzyska-Cichon, JCET, Krakow, Poland**

Liver sinusoidal endothelial cells (LSECs) and hepatocyte metabolism in chronic heart failure

17:35 – 17:50 **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 – 18:05 short talk selected from abstracts

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Closing lecture: (30 min. + 10 min.)

18:05 – 18:45 **Rhian M Touyz, Institute of the McGill University Health Centre (RI-MUHC) –
Montreal, Canada**

Aging and the vasculature in health and disease

18.45 – 19.00 **Conference closing and poster awards ceremony**

19:30 – 21:00 **Wawel Castle Visit (special tour after Wawel is closed)**