

Friday, 05.11.2021

09:00 - 11:30 COVID19 - microvascular and cardiac function
Chairs: Andre Fischer, Ed Eringa

09:00 - 09:20 **Maximilian Ackermann**
COVID19: vascular inflammation, thrombosis and intussusceptive angiogenesis

09:20 - 09:30 **Anne Cuypers:** Tumor vessel co-option probed by single cell analysis

09:30 - 10:00 **Key note by Stefanie Dimmeler**
Single cell analysis to decipher endothelial responses to injury

10:00 - 10:10 **Karlijn Rombouts:** VSMC disorders and aneurysm

10:10 - 10:20 **Nadine Thomas:** S1P regulates GLUT-mediated glucose uptake in red blood cells (RBCs)

10:20 - 10:40 **Liz Jones**
Microvascular changes in the COVID infected heart

10:40 - 11:00 **Stefan Pöhlmann**
SARS-CoV-2 entry into cells and its inhibition

11:00 - 11:20 **Wolfram Zimmermann**
COVID19 Induced Heart Muscle Damage

11:20 - 11:30 **Lasti Erfinanda:** CFTR and edema formation in lung infection

11:30 - 12:30 Coffee - Lunch Break

12:30 - 15:30 Biomechanics in the cardiovascular system
Chairs: Christian Kupatt, Johannes Backs

12:30 - 13:00 **Key note by Christopher Chen**
Mechanoregulation of structure and function: a story of adhesions and the cytoskeleton

13:00 - 13:10 **Apeksha Shapeti:** Angiogenic invasion and 3D forces

13:10 - 13:20 **Eva Faurobert:** Mechanotransduction in CCM

13:20 - 13:30 **Johannes Gahn:** Klf4 and AVM pathogenesis

13:30 - 13:45 Coffee Break

13:45 - 14:15 **Key note by Carlijn Bouten**
Scaffold-driven in situ vascular tissue engineering

14:15 - 14:25
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14:35 - 14:45
14:45 - 15:15
15:15 - 15:30

Margo Daems: Smad1/5 and arterial differentiation

Freddy Suarez Rodriguez: Jagged and shear stress signaling

Nadine Bauer: Quantitative hypoxia imaging in vivo

Key note by Stephan Huveneers
Endothelial stiffness in health and disease

Poster and Travel Award ceremonies

Sponsors:

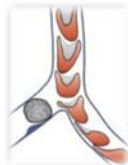


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Joint Vascular Biology meeting 2021

**German Society
for Microcirculation and Vascular Biology
&
Netherlands Vascular
Biology Organization**

**03. - 05.11.2021
Göttingen / Germany**

Contact:
German Primate Center
Leibniz Institute for Primate Research
Laboratory animal science unit
Prof. Dr. Rabea Hinkel
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Wednesday, 03.11.2021

12:00 - 12:45	Welcome and registration with drinks and snacks
12:45 - 13:00	Opening, Rabea Hinkel and Ferdinand le Noble
13:00 - 15:00	Seeing is believing – emerging imaging modalities Chairs: Axel Pries
13:00 - 13:10	Introduction of Nobel Laureate by Axel Pries and Stefan Treue
13:10 - 13:50	Key note by Stefan Hell , Nobel Laureate: Molecular resolution in fluorescence microscopy
13:50 - 14:10	Friedemann Kiefer Regional lymphatic vessel specializations
14:10 - 14:30	Katie Bentley Mouse retinal cell behaviour in 3D/4D using light sheet microscopy
14:30 - 14:50	Jan Huisken Fast and gentle imaging of vascular patterning in zebrafish with light sheet microscopy
14:50 - 15:00	Cathrin Hansen : FLIM imaging of the BBB
15:00 - 15:30	Coffee Break
15:30 - 16:00	Key note by Shahin Rafii Engineering adaptable and Hemodynamic Human Endothelial Cells for Organogenesis Chairs: Karina Yaniv
16:00 - 17:40	Molecular control of endothelial cell behavior Chairs: Liz Jones, Ferdinand le Noble
16:00 - 16:20	Lars Jakobsson Arteriovenous malformation - learning from individual cells
16:20 - 16:40	Sarah de Val Using gene enhancers to understand vessel development in the heart and beyond
16:40 - 17:00	Rui Benedito Exclusionary zoning during angiogenesis
17:00 - 17:20	Katrien de Bock Endothelial metabolism in the muscle microenvironment
17:20 - 17:40	Mariona Graupera PI3 kinase in the vasculature: isoforms matter

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Thursday, 04.11.2021
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Coffee Break
Key note by Jim Faber Collaterals—nature's endogenous bypass vessels: physiology, genetics and Darwin Chair: Ferdinand le Noble
Poster Session 1: including dinner & drinks. Location: DPZ foyer and side-rooms
Informal get together with drinks & DJ.

DZHK-session: Coronary vascular remodeling and cardiac regeneration Chairs: Ebba Brakenhielm, Guido Krenning
Key note by Jeroen Bakkers Heart regeneration: Lessons from zebrafish
Andrew Baker Defining mechanisms that control vascular remodeling
Riikka Kivelä Remodeling of the cardiac endothelial cell transcriptome by cardiovascular disease risk factors and exercise
Eldad Tzahor Fixing a broken heart
Ralf Adams formation of arteries by specialized endothelial tip cells
Sara Lelek-Greskovic : Wnt in cardiac regeneration
Coffee Break
DZHK-session: Therapeutic targeting of vascular networks Chairs: Sara de Val, Friederike Cuello
Paul Quax 14Q32 microRNAs and snoRNAs in the regulation of ischemia driven neovascularization
Christian Kupatt When microvessels shrink.... Reasons and remedies of capillary rarefaction
Tim Chico Therapeutic targeting of neurovascular coupling using novel zebrafish model

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Niels Riksen Innate immune cell reprogramming in atherosclerosis
Roland Immler : K+ channels in neutrophil recruitment
Thijs Sluiter : Myeloid PHD2 knockouts in vein grafts
Lunch Break
Hermann Rein Award Chairs: Rabea Hinkel, Bodo Levkau
Guillermo Luxan : MI and the bone vascular niche Christian Helker : Apelin in spouting angiogenesis Julia Hinterdobler : Mental stress and atherosclerosis Andreas Van Impel : Fibroblasts and Vegfc processing
Aletta Jacobs session Chairs: Kristina Lorenz, Laura Zelarayan-Behrend
Key note by Christina Ruhrberg Semaphorin regulation of organ vascular development
Ebba Brakenhielm Cardiac lymphangiogenesis in cardiovascular diseases – influence of gender
Susanne Fleig Loss of endothelial Notch signaling promotes tertiary lymphoid structure formation in parenchymatous organs
Karina Yaniv Vascular control of organ growth and regeneration
Coffee Break
Introduction Aletta Jacobs awards for junior female researchers Chair: Ferdinand le Noble, Susanne Lutz
Jasmin Kneuer : Long non-coding RNA Heat4 promotes vascular regeneration Caroline Kohnle : Long non-coding RNA MIRIAL controls endothelial cell and mitochondrial function Lian Feenstra : Calciprotein particles induce EC dysfunction by impairing the endothelial NO metabolism
Key note by Kristy Red-Horse Modeling blood flow in regenerating and non-regenerating hearts Chair: Susanne Lutz, Sabine Steffens
Poster session 2: including dinner & drinks HR and AJ award ceremonies