

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

Margo Daems: Smad1/5 and arterial differentiation

14:25 - 14:35

Freddy Suarez Rodriguez: Jagged and shear stress signaling

14:35 - 14:45

Nadine Bauer: Quantitative hypoxia imaging in vivo

14:45 - 15:15

Key note by Stephan Huveneers
Endothelial stiffness in health and disease

15:15 - 15:30

Poster and Travel Award ceremonies

Sponsors:



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Integrating
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Joint Vascular Biology meeting 2021

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

**03. - 05.11.2021
DPZ / Göttingen / Germany**

Contact:
German Primate Center
Leibniz Institute for Primate Research
Laboratory animal science unit
Prof. Dr. Rabea Hinkel
Phone: 0049 551 3851241
Mail: gfmvb2021@dpz.eu

DPZ
Deutsches Primatenzentrum
Leibniz Institut für Primatenforschung

Wednesday, 03.11.2021		17:40 - 18:00	Coffee Break	12:30 - 12:50	Niels Riksen Innate immune cell reprogramming in atherosclerosis
12:00 - 12:45	Welcome and registration with drinks and snacks	18:00 - 18:30	Key note by Jim Faber Collaterals—nature's endogenous bypass vessels: physiology, genetics and Darwin Chair: Ferdinand le Noble	12:50 - 13:00	Roland Immler: K+ channels in neutrophil recruitment
12:45 - 13:00	Opening, Rabea Hinkel and Ferdinand le Noble			13:00 - 13:10	Thijs Sluiter: Myeloid PHD2 knockouts in vein grafts
13:00 - 15:00	Seeing is believing – emerging imaging modalities Chairs: Axel Pries	18:30 - 20:30	Poster Session 1: including dinner & drinks. Location: DPZ foyer and side-rooms	13:10 - 14:30	Lunch Break
13:00 - 13:10	Introduction of Nobel Laureate by Axel Pries and Stefan Treue	>20:30	Informal get together with drinks & DJ.	14:30 - 15:30	Hermann Rein Award Chairs: Rabea Hinkel, Bodo Levkau
13:10 - 13:50	Key note by Stefan Hell, Nobel Laureate: Molecular resolution in fluorescence microscopy		***	14:30 - 14:45	Guillermo Luxan: MI and the bone vascular niche
13:50 - 14:10	Friedemann Kiefer Regional lymphatic vessel specializations	Thursday, 04.11.2021		14:45 - 15:00	Christian Helker: Apelin in spouting angiogenesis
14:10 - 14:30	Katie Bentley Mouse retinal cell behaviour in 3D/4D using light sheet microscopy	09:00 - 11:00	DZHK-session: Coronary vascular remodeling and cardiac regeneration Chairs: Ebba Brakenhielm, Guido Krenning	15:00 - 15:15	Julia Hinterdobler: Mental stress and atherosclerosis
14:30 - 14:50	Jan Huysken Fast and gentle imaging of vascular patterning in zebrafish with light sheet microscopy	09:00 - 09:30	Key note by Jeroen Bakkers Heart regeneration: Lessons from zebrafish	15:15 - 15:30	Andreas Van Impel: Fibroblasts and Vegfc processing
14:50 - 15:00	Cathrin Hansen: FLIM imaging of the BBB	09:30 - 09:50	Andrew Baker Defining mechanisms that control vascular remodeling	15:30 - 18:15	Aletta Jacobs session Chairs: Kristina Lorenz, Laura Zelarayan-Behrend
15:00 - 15:30	Coffee Break	09:50 - 10:10	Riikka Kivelä Remodeling of the cardiac endothelial cell transcriptome by cardiovascular disease risk factors and exercise	15:30 - 16:00	Key note by Christina Ruhrberg Semaphorin regulation of organ vascular development
15:30 - 16:00	Key note by Shahin Rafii Engineering adaptable and Hemodynamic Human Endothelial Cells for Organogenesis Chairs: Karina Yaniv, Bianca Nitzsche	10:10 - 10:30	Eldad Tzahor Fixing a broken heart	16:00 - 16:20	Ebba Brakenhielm Cardiac lymphangiogenesis in cardiovascular diseases – influence of gender
16:00 - 17:40	Molecular control of endothelial cell behavior Chairs: Liz Jones, Ferdinand le Noble	10:30 – 10:50	Ralf Adams formation of arteries by specialized endothelial tip cells	16:20 - 16:40	Susanne Fleig Loss of endothelial Notch signaling promotes tertiary lymphoid structure formation in parenchymatous organs
16:00 - 16:20	Lars Jakobsson Arteriovenous malformation - learning from individual cells	10:50 - 11:00	Sara Lelek-Greskovic: Wnt in cardiac regeneration	16:40 - 17:00	Karina Yaniv Vascular control of organ growth and regeneration
16:20 - 16:40	Sarah de Val Using gene enhancers to understand vessel development in the heart and beyond	11:00 - 11:30	Coffee Break	17:00 - 17:45	Coffee Break
16:40 - 17:00	Rui Benedito Exclusionary zoning during angiogenesis	11:30 - 13:10	DZHK-session: Therapeutic targeting of vascular networks Chairs: Sara de Val, Friederike Cuello	17:45 - 18:15	Introduction Aletta Jacobs awards for junior female researchers Chair: Ferdinand le Noble, Susanne Lutz
17:00 - 17:20	Katrien de Bock Endothelial metabolism in the muscle microenvironment	11:30 - 11:50	Paul Quax 14Q32 microRNAs and snoRNAs in the regulation of ischemia driven neovascularization	17:45 - 17:55	Jasmin Kneuer: Long non-coding RNA Heat4 promotes vascular regeneration
17:20 - 17:40	Mariona Graupera PI3 kinase in the vasculature: isoforms matter	11:50 - 12:10	Christian Kupatt When microvessels shrink.... Reasons and remedies of capillary rarefaction	17:55 - 18:05	Caroline Kohnle: Long non-coding RNA MIRIAL controls endothelial cell and mitochondrial function
		12:10 - 12:30	Tim Chico Therapeutic targeting of neurovascular coupling using novel zebrafish model	18:05 - 18:15	Lian Feenstra: Calciprotein particles induce EC dysfunction by impairing the endothelial NO metabolism
				18:15 - 18:45	Key note by Kristy Red-Horse Modeling blood flow in regenerating and non-regenerating hearts Chairs: Susanne Lutz, Sabine Steffens
				19:00	Poster session 2: including dinner & drinks HR and AJ award ceremonies