



**Virtual Cardiorenal Winter school**  
**Joint event of the SFB/TRR219, EURLIPIDS and the EU-ITNs “INTRICARE”,**  
**“CaReSyAn” and “Strategy-CKD”**

01.02. - 03.02.2021

Location: ZOOM (link is valid for all 3 days)

Enter Zoom-Meeting:

<https://rwth.zoom.us/j/92658979027?pwd=bWtpSXBMZExQM3c0QkQwUC9Ka2lqdz09>

Meeting-ID: 926 5897 9027

Code: 369284

**Monday, 01.02.2021**

- |               |  |             |  |             |   |             |   |             |  |
|---------------|--|-------------|--|-------------|---|-------------|---|-------------|--|
| 15:45 – 16:00 | Enter ZOOM meeting room  |             |  |             |   |             |   |             |  |
| 16:00 – 16:10 | Welcome  |             |  |             |   |             |   |             |  |
| 16:10 – 17:30 | <p>“Poster meets slides” – brief presentations in 4 breakout sessions<br/>           (caution: 4 separate entry links, see page 4 and 5)<br/>           Chairs: Anne Babler, Nadine Kaesler, Leticia Roma, Mathias Hohl, Emiel van der Vorst, Vera Jankowski, Barbara Niemeyer, Griet Glorieux, Julie Klein, Joost Schanstra</p>   |             |  |             |   |             |   |             |  |
| 17:30 – 18:30 | <p>Early career presentations (10+5)<br/>           Chair: Claudia Goettsch</p> <table border="0" style="margin-left: 20px;"> <tr> <td style="vertical-align: top;">17:30-17:45</td> <td>Calcium dependent regulation of contribution of interleukin-1<math>\alpha</math> to CKD-associated cardiovascular complications<br/><i>Maryam Amini</i></td> </tr> <tr> <td style="vertical-align: top;">17:45-18:00</td> <td>Mapping the perivascular niche in heart failure<br/><i>Fabian Preisker</i></td> </tr> <tr> <td style="vertical-align: top;">18:00-18:15</td> <td>The role of PDGF in ex-vivo model of aortic calcification<br/><i>Burcu Yesilyurt</i></td> </tr> <tr> <td style="vertical-align: top;">18:15-18:30</td> <td>Exploring the phenotypic modulation of VSMCs by uremic toxins<br/><i>Nikolas Rapp</i></td> </tr> </table> | 17:30-17:45 | Calcium dependent regulation of contribution of interleukin-1 $\alpha$ to CKD-associated cardiovascular complications<br><i>Maryam Amini</i> | 17:45-18:00 | Mapping the perivascular niche in heart failure<br><i>Fabian Preisker</i> | 18:00-18:15 | The role of PDGF in ex-vivo model of aortic calcification<br><i>Burcu Yesilyurt</i> | 18:15-18:30 | Exploring the phenotypic modulation of VSMCs by uremic toxins<br><i>Nikolas Rapp</i> |
| 17:30-17:45   | Calcium dependent regulation of contribution of interleukin-1 $\alpha$ to CKD-associated cardiovascular complications<br><i>Maryam Amini</i>   |             |  |             |   |             |   |             |  |
| 17:45-18:00   | Mapping the perivascular niche in heart failure<br><i>Fabian Preisker</i>  |             |  |             |   |             |   |             |  |
| 18:00-18:15   | The role of PDGF in ex-vivo model of aortic calcification<br><i>Burcu Yesilyurt</i>  |             |  |             |   |             |   |             |  |
| 18:15-18:30   | Exploring the phenotypic modulation of VSMCs by uremic toxins<br><i>Nikolas Rapp</i>   |             |  |             |   |             |   |             |  |
| 18:30 - 19:00 | <p>Get together MD/PhD (Peer-to-Peer; for MD and PhD students only) - Scientific networking in the challenging time of COVID19 – What is going well?<br/>           Chairs: Andrea Buescher, Fabian Preisker, Anika Himmelsbach</p>  |             |  |             |   |             |   |             |  |

## Tuesday, 02.02.2021

15:45 – 16:00 Enter ZOOM meeting room

<https://rwth.zoom.us/j/92658979027?pwd=bWtpSXBMZExQM3c0QkQwUC9Ka2lqdz09>

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16:00 – 16:30 Early career presentations (10+5)

Chair: Joachim Jankowski

16:00-16:15 Identification of circulating calprotectin as a predictor of cardiovascular outcome and mortality in CKD patients  
*Ana Amaya Garrido*

16:15-16:30 Disturbed Vitamin K Uptake in Experimental and Clinical Chronic Kidney Disease  
*Nadine Kaesler*

16:30 – 17:30

Rapid fire talks (5+2)

Chair: Joachim Jankowski

16:30-16:37 Small change, big impact: microRNA-26b attenuates atherosclerosis development  
*Linsey Peters*

16:40-16:47 The gut hormone GLP-2 is upregulated in acute inflammation and protects against sepsis in mice  
*Robert Mertens*

15:50-16:57 Glucocorticoid receptor-signaling promotes sortilin by histone modification  
*Anika Himmelsbach*

17:00-17:07 Gut-derived metabolite indole-3-propionic acid modulates mitochondrial function in cardiomyocytes and alters cardiac function  
*Maren Gesper*

17:10-17:17 Post-translational Modifications of Proteins in Cardiorenal Syndrome  
*Valeria Saar Kovrov*

17:20-17:27 Early Vascular Ageing in Chronic Kidney Disease - The Role of Nrf2 and Senescence  
*Sam Hobson*

17:30 – 18:00

New developments in flow cytometry.

*Prof. Oliver Pabst*, Institute of Molecular Medicine, RWTH Aachen

### Wednesday, 03.02.2021

15:45 – 16:00 Enter ZOOM meeting room

<https://rwth.zoom.us/j/92658979027?pwd=bWtpSXBMZExQM3c0QkQwUC9Ka2lqdz09>

Meeting-ID: 926 5897 9027

Code: 369284

16:00 – 17:00 Early career presentations (10+5)

Chair: Heidi Noels

16:00-16:15 Cardiac characterization of diverse mouse strains after induction of uremic cardiomyopathy by adenin-rich diet  
*Julia Moellmann*

16:15-16:30 Human cardiomyocytes derived from peripheral blood: new opportunities for cardiorenal research  
*Rogier Veltrop*

16:30-16:45 Identification and characterization of endogenous calcification inhibiting peptide -CBF1  
*Shruti Bharagava*

16:45-17:00 Fifty shades of grey: DIY guide to make a protein happy  
*Robert Dzhanayev*

17:00 – 18:15 Clinician Scientist Gerok-Program session (10+5)

Chair: Michael Lehrke

17:00-17:15 Myofibroblast origins in human kidney fibrosis.  
*Dr. med. Christoph Kuppe*, Institute of Experimental Medicine and Systems Biology, Aachen

17:15-17:30 Deep Learning in renal histopathology.  
*Dr. med. Roman Bülow*, Nephropathology, Aachen

17:30-17:45 Modulation of the sympathetic nervous system prevents the development of an atrial arrhythmogenic substrate in chronic kidney disease.  
*Dr. med. Jan Wintrich*, Cardiology, Homburg

17:45-18:00 Cardioprotective effects and their therapeutic impact of the recently identified peptide "Vasoconstriction-Inhibiting Factor" (VIF) on a murine model of myocardial infarction.  
*Dr. med. Adelina Curaj*, IMCAR, Aachen

18:00-18:15 Coronary plaque composition influences biomechanical stress and predicts plaque rupture - an optical coherence tomography study.  
*Dr. med. Andrea Milzi*, Cardiology, Aachen

18:15 – 19:00 Clinician Scientist – what you always wanted to ask as a MD student.

Chairs: Claudia Goettsch, Heidi Noels

Panel: Dr. med. Christoph Kuppe, Dr. med. Roman Bülow, Dr. med. Andrea Milzi, Dr. med. Jan Wintrich, Dr. med. Adelina Curaj

**“Poster meets slides” – brief presentations in 4 breakout sessions**

Monday 01.02.2021; 16:10 – 17:30

Breakout session 1

Chairs: Leticia Roma, Vera Jankowski, Nadine Kaesler

Enter Zoom-Meeting:

<https://rwth.zoom.us/j/97113889595?pwd=L29YOXYxTUNqVG9taGpBNDI4ZWRzUT09>

Meeting-ID: 971 1388 9595

Code: 080832

Name	Title
Sai Sahana Sundararaman Sophie Schiestel Bilal Mir Hoda Alibiglou Jonas Heyn Andrea Büscher	CaSR in adipocytes does not influence atherosclerosis in-vivo.  The role of adipose tissue secretome in vascular calcification PIKfyve inhibition reduces vascular calcification TNAP maturation and activation in calcifying vascular smooth muscle cells Interplay of ER and mitochondria in vascular calcification Cell-specific differential sensitivity towards free and protein-bound mineral determine bone mineralization vs. calcification

Breakout session 2

Chairs: Barbara Niemeyer, Julie Klein, Joost Schanstra

Enter Zoom-Meeting:

<https://rwth.zoom.us/j/93110677481?pwd=SjZlUS9PcWZ1bnY1L1dyZkthNzNwZz09>

Meeting-ID: 931 1067 7481

Code: 319247

Name	Title
Michaela Lellig Jonas Schroer Lehnert, Ulrike	Angioprotectin: clarification of biosynthesis Effect of CKD on platelets and thrombus formation Modulation of the sympathetic nervous system prevents the development of an atrial arrhythmogenic substrate in CKD
Pascal Mann	The SGLT2 inhibitor ertugliflozin modulates cardiac substrate metabolism in a mouse model of cardiac hypertrophy
Eleni Petra	Characterization of the urine peptidome in cardiorenal syndrome: renal and heart disease in one profile.
Tianlin He	Urinary peptides in heart failure: a link to molecular pathophysiology

### Breakout session 3

Chairs: Emiel van der Vorst, Griet Glorieux

Enter Zoom-Meeting:

<https://rwth.zoom.us/j/94433663087?pwd=Zm01SFpLdGVlU0EvdWM3WFdTN2VWQT09>

Meeting-ID: 944 3366 3087

Code: 035436

Name	Title
Christian Hemmers	Identification of cardiokines influencing fibroblasts and vasoactivity
Eva Straussfeld	Chemokines and cardiac remodeling after myocardial infarction in CKD
Robert W. Mertens	The role of GIP in murine sepsis
Maria C. Arrivas	The gut hormone GLP-2 predicts cardiovascular risk in patients with acute myocardial infarction
Andrea Bonnin-Marquez	HDL immune-mediated modifications: a view into apoA-I in CKD
Maurice Halder	Dissecting the cellular origin of in stent re-stenosis

### Breakout session 4

Chairs: Mathias Hohl, Anne Babler

Enter Zoom-Meeting:

<https://rwth.zoom.us/j/95941579971?pwd=NEQzYjFoY3Vpc1NzNVJLMkk4NFZYUT09>

Meeting-ID: 959 4157 9971

Code: 178948

Name	Title
Julia Wirth	Analyzing early effects of CKD on the heart: towards a mouse model?
Katja Ermert	Characterization of renal microvasculature in healthy and diseased kidneys
Patrick Droste	A new mouse model of glomerular thrombotic microangiopathy and cardiac hypertrophy
Marina Heuschkel	Discovery multi-omics approach in glucose-dependent vascular calcification: the role of the taurine/hypotaurine pathway as a metabolic pla
Matthias Kampmann	Exploring the role of ER translocation in cardiovascular calcification
Jeppe Christensen	CRS model for diagnostic biomarker assessment