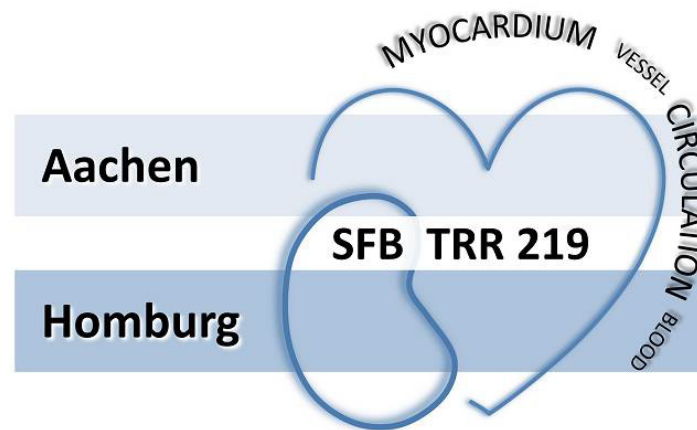


Proposal for the Third Funding Period of the
Transregional Collaborative Research Centre
SFB/TRR219

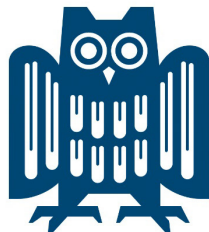
**Mechanisms of Cardiovascular Complications
in Chronic Kidney Disease**

E-Details

(Publicly available)



UNIKLINIK
RWTHAACHEN



**UNIVERSITÄT
DES
SAARLANDES**

Funding Proposal
2026 – 2027 – 2028 – 2029

Table of Contents

7. E-Details.....	A-1
7.1. Research profiles (in alphabetical order).....	A-1
7.1.1. Priv.-Doz. Dr. rer. nat. Dalia Alansary	A-1
7.1.2. Dr. med. Adelina Băleanu-Curaj, PhD (née Curaj).....	A-5
7.1.3. Univ.-Prof. Dr. med. Michael Böhm	A-9
7.1.4. Univ.-Prof. Dr. med. Peter Boor, PhD.....	A-13
7.1.5. Jun.-Prof. Dr. med. Roman David Bülow.....	A-17
7.1.6. Univ.-Prof. Dr. med. Danilo Fliser.....	A-21
7.1.7. Univ.-Prof. Dr. rer. nat. Claudia Goettsch (née Stielow).....	A-25
7.1.8. Dr. med. Konrad Hoeft.....	A-29
7.1.9. Dr. rer. nat. Mathias Hohl	A-33
7.1.10. Univ.-Prof. Dr. rer. nat. Joachim Jankowski	A-37
7.1.11. Prof. Vera Jankowski, PhD.....	A-41
7.1.12. Dr. troph. Nadine Kaesler.....	A-45
7.1.13. Univ.-Prof. Dr. med. Florian Kahles, MD	A-49
7.1.14. Prof. Dr. med. Ingrid Kindermann (née Janzen).....	A-53
7.1.15. Univ.-Prof. Dr. med. Rafael Kramann, PhD.....	A-57
7.1.16. Univ.-Prof. Dr. med. Nikolaus Marx.....	A-61
7.1.17. Prof. Dr. med. Katharina Marx-Schütt (née Heß)	A-65
7.1.18. Univ.-Prof. Barbara A. Niemeyer, PhD	A-69
7.1.19. Priv.-Doz. Heidi Noels, PhD	A-73
7.1.20. Univ.-Prof. Leticia Prates Roma, PhD	A-77
7.1.21. Jun.-Prof. Dr. med. Carolin Schneider (née Heimes).....	A-81
7.1.22. Univ.-Prof. Dr. med. Thimoteus Speer, PhD	A-85
7.1.23. Priv.-Doz. Emiel P.C. van der Vorst, PhD	A-89
7.2. Joint publications of the SFB/TRR219 in the 2 nd funding period.....	A-93
7.3. Acceptance letters of manuscripts.....	A-111
7.4. Meetings and seminars organized by the SFB/TRR219	A-113
7.5. Presentations of SFB/TRR219 PIs at national and international meetings	A-125
7.6. Awards of SFB/TRR219-associated PhD/MD students and postdocs	A-129
7.7. Scientific collaboration beyond the SFB/TRR219.....	A-131
7.8. AMICARE	A-135
7.9. List of career-focused activities organized by the SFB/TRR219 in the 2 nd funding period	A-137
7.10. List of completed or ongoing PhD/MD theses since the SFB/TRR219 start	A-139
7.11. List of IRTG activities in the 2 nd funding period.....	A-145

7.1. Research Profiles (in alphabetical order)

7.1.1. Priv.-Doz. Dr. rer. nat. Dalia Alansary

Personal Data

Title	Priv.-Doz. Dr. rer. nat.
First name	Dalia
Name	Alansary
Current position	Group leader
Current institution(s)/site(s), country	Institute of Biophysics, Saarland University – Campus Homburg, Germany
Identifiers/ORCID	0000-0002-7541-6057

Qualifications and Career

Stages	Periods and Details
Degree program	2022 Venia Legendi at Saarland University, Germany “Regulation of Calcium Dependent Processes in Immune Cells” 1994 – 2005 Study of Pharmacology Faculty of Pharmacy, Cairo University, Egypt Grade: Excellent
Doctorate	2006 – 2010 PhD Saarland University, Prof. Flockerzi (Pharmacology)/Prof. Rettig (Physiology). “Regulatory Mechanisms of the Calcium Selective Ion Channels TRPV6 and ORAI1” Grade: <i>Summa cum laude</i>
Stages of academic/professional career	Since 2012 Group leader and principal investigator Department of Molecular Biophysics, Saarland University 2010 – 2012 Postdoctoral fellow in the Department of Molecular Biophysics, Saarland 1999 – 2006 Quality control pharmacist and research assistant in the National Organization of Drug Control and Research (NODCAR), Departments of Microbiology, Pharmaceutical control and Pharmacology, Cairo, Egypt

Activities in the Research System

Grant applications and granted funding

2022 - 2023	HOMFOR-Funding “Modulatory role of mitochondrial calcium uniporter on suppressive potential of regulatory CD4 T cells”
Since 2018	Actively participated in the project C-09 and M-04 through first and second funding periods of the SFB TRR219
2017	Research Agreement with Grünenthal

2016 - 2019 FOR2289, Calcium homeostasis in neuroinflammation and -degeneration: New targets for therapy of multiple sclerosis

2013 - 2016 HOMFORexeZellent, Calcium dependent T cell activation in multiple sclerosis

Ad hoc reviewer:

Scientific reports, International Journal of Molecular Sciences, Nature Communications, Frontiers of Immunology, Science Signaling, Scientific Data

Supervision of Researchers in Early Career Phases

Supervision of 3 Bachelor theses, 2 Master theses, 3 PhD theses, currently supervising 1 PhD student, 1 Master student and 2 MD students.

Teaching activities:

Since 2011 contributed to following teaching activities as “verantwortliche Dozentin”:

- Advanced Modules Human Biology, Bioimaging, Patch-Clamp
- Lecture Human Biology, Calcium imaging in immunology
- Immunophysiology Seminar Human Biology, Multiple sclerosis, antibodies, CD4 T-cells, Alzheimer's disease
- Clinical biophysical seminar Human Medicine, X-rays
- Physics practical course Human Medicine, Electricity and X-rays

Scientific Results

Category A

1. Amini M, Frisch J, Jost P, Sarakpi T, Selejan SR, Becker E, Sellier A, Engel J, Bohm M, Hohl M, Noels H, Maack C, Schunk S, Roma LP, Niemeyer BA, Speer T, **Alansary D**. Purinergic receptor P2X7 regulates interleukin-1alpha mediated inflammation in chronic kidney disease in a reactive oxygen species-dependent manner. *Kidney Int.* 2025;107:457-475, doi:10.1016/j.kint.2024.10.024.
2. Jost P, Klein F, Brand B, Wahl V, Wyatt A, Yildiz D, Boehm U, Niemeyer BA, Vaeth M, **Alansary D**. Acute Downregulation but Not Genetic Ablation of Murine MCU Impairs Suppressive Capacity of Regulatory CD4 T Cells. *Int J Mol Sci.* 2023;24(9). doi: 10.3390/ijms24097772.
3. Knapp ML, **Alansary D**, Poth V, Forderer K, Sommer F, Zimmer D, Schwarz Y, Kunzel N, Kless A, Machaca K, Helms V, Muhlhaus T, Schroda M, Lis A, Niemeyer BA. A longer isoform of Stim1 is a negative SOCE regulator but increases cAMP-modulated NFAT signaling. *EMBO Rep.* 2022;23(3): p. e53135. doi: 10.15252/embr.202153135.
4. Wrublewsky S, Speer T, Nalbach L, Boewe AS, Pack M, **Alansary D**, Roma LP, Hoffmann MDA, Schmitt BM, Weinzierl A, Menger MD, Laschke MW, Ampofo E. Targeting Pancreatic Islet NLRP3 Improves Islet Graft Revascularization. *Diabetes.* 2022;71(8): p. 1706-1720. doi: 10.2337/db21-0851.

5. Ramesh G, Jarzembowski L, Schwarz Y, Poth V, Konrad M, Knapp ML, Schwarz G, Lauer AA, Grimm MOW, **Alansary D**, Bruns D, Niemeyer BA. A short isoform of STIM1 confers frequency-dependent synaptic enhancement. *Cell Rep.* 2021;34(11): p. 108844. doi: 10.1016/j.celrep.2021.108844.
6. Schunk SJ, Triem S, Schmit D, Zewinger S, Sarakpi T, Becker E, Hutter G, Wrublewsky S, Kuting F, Hohl M, **Alansary D**, Prates Roma L, Lipp P, Mollmann J, Lehrke M, Laschke MW, Menger MD, Kramann R, Boor P, Jahn-Dechent W, Marz W, Böhm M, Laufs U, Niemeyer BA, Fliser D, Ampofo E, Speer T. Interleukin-1 α Is a Central Regulator of Leukocyte-Endothelial Adhesion in Myocardial Infarction and in Chronic Kidney Disease. *Circulation.* 2021;144(11): p. 893-908. doi: 10.1161/CIRCULATIONAHA.121.053547.
7. Merino-Wong M, Niemeyer BA, **Alansary D**. Plasma Membrane Calcium ATPase Regulates Stoichiometry of CD4(+) T-Cell Compartments. *Front Immunol.* 2021;12: p. 687242. doi: 10.3389/fimmu.2021.687242.
8. Zewinger S, Reiser J, Jankowski V, **Alansary D**, Hahm E, Triem S, Klug M, Schunk SJ, Schmit D, Kramann R, Korbel C, Ampofo E, Laschke MW, Selejan SR, Paschen A, Herter T, Schuster S, Silbernagel G, Sester M, Sester U, Assmann G, Bals R, Kostner G, Jahn-Dechent W, Menger MD, Rohrer L, Marz W, Böhm M, Jankowski J, Kopf M, Latz E, Niemeyer BA, Fliser D, Laufs U, Speer T. Apolipoprotein C3 induces inflammation and organ damage by alternative inflammasome activation. *Nat Immunol.* 2020;21(1): p. 30-41. doi: 10.1038/s41590-019-0548-1.
9. Kircher S, Merino-Wong M, Niemeyer BA, **Alansary D**. Profiling calcium signals of in vitro polarized human effector CD4(+) T cells. *Biochimica et biophysica acta.* 2018;1865(6): p. 932-943. doi: 10.1016/j.bbamcr.2018.04.001.
10. Miederer AM*, **Alansary D***, Schwarz G, Lee PH, Jung M, Helms V, Niemeyer BA. A STIM2 splice variant negatively regulates store-operated calcium entry. *Nat Commun.* 2015;6: p. 6899. doi: 10.1038/ncomms7899. ***Equal contribution.**

Academic Distinctions

2015	Homburger Wissenschaftspreis
2015	Certificate of Excellence from Collaborative Research Center 894
2011	Dr. Eduard Martin Prize of the University of Saarland
2009	Student travel award of the Biophysical Society

Other Information

Research-relevant Training:

2023	Grundkurs im Strahlenschutz und Bereich Röntgen (RPTU)
2023	Single cell sequencing analysis (BD)
2022	FELASA course for animal research project leaders (Mainz)
2018	Research Leadership Course, EMBO Laboratory Management
2018	Photometrics Camera selection and evaluation
2017	BioVoxxel: Fiji (ImageJ) image analysis
2016	Laboratory Safety „Sicherheit in der Gentechnik“, Uni Freiburg
2016	Teach the Teacher, Saarland University
2015	Analytical flow cytometry (BD)

As a group leader in the Niemeyer lab, I was responsible for establishing techniques for immunological research that had not been applied before in our group, was responsible for project design, management, manuscript writing, project financing and student supervision. I was privileged to contribute to the establishment of splice-variant research by co-supervising students and performing own electrophysiology and microscopy experiments. The broad spectrum of subjects and techniques increased the visibility of our group and facilitated collaborations where we applied our expertise in microscopy, gene editing (CRISPR) and immunological techniques.

Data protection and consent to the processing of optional data

☒ I expressly consent to the processing of the voluntary (optional) information, including “special categories of personal data” in connection with the DFG’s review and decision-making process regarding my proposal. This also includes forwarding my data to the external reviewers, committee members and, where applicable, foreign partner organisations who are involved in the decision-making process. To the extent that these recipients are located in a third country (outside the European Economic Area), I additionally consent to them being granted access to my data for the above-mentioned purposes, even though a level of data protection comparable to EU law may not be guaranteed. For this reason, compliance with the data protection principles of EU law is not guaranteed in such cases. In this respect, there may be a violation of my fundamental rights and freedoms and resulting damages. This may make it more difficult for me to assert my rights under the General Data Protection Regulation (e.g. information, rectification, erasure, compensation) and, if necessary, to enforce these rights with the help of authorities or in court.

I may **revoke** my consent in whole or in part at any time – with effect for the future, freely and without giving reasons – vis-à-vis the DFG (postmaster@dfg.de). The lawfulness of the processing carried out up to that point remains unaffected. Insofar as I transmit “special categories of personal data” relating to third parties, I confirm that the necessary legitimization under data protection law exists (e.g. based on consent).

I have taken note of the DFG’s Data Protection Notice relating to research funding, which I can access at www.dfg.de/privacy_policy and I will forward it to such persons whose data the DFG processes as a result of being mentioned in this CV.

7.1.2. Dr. med. Adelina Băleanu-Curaj, PhD (née Curaj)

Personal Data

Title	Dr. med. PhD
First name	Adelina
Name	Băleanu-Curaj
Current position	Physician in Cardiology
Current institution(s)/site(s), country	Department of Internal Medicine I, Uniklinik RWTH Aachen, Germany
Identifiers/ORCID	0000-0002-4070-6396

Qualifications and Career

Stages	Periods and Details
Degree program	2004 – 2010 Medical School in Bucharest, Romania
Doctorate	2014 MD at University of Aachen, Germany 2017 PhD at Maastricht University, The Netherlands
Stages of academic/professional career	10/2025 – 12/2025 49% Clinician Scientist GEROK in SFB/TRR219 09/2022 – 08/2024 49% Clinician Scientist GEROK in SFB/TRR219 09/2021 – 09/2022 50% Junior Clinician Scientist RWTH University Aachen 10/2019 – 08/2021 49% Clinician Scientist GEROK in SFB/TRR219 Since 2018 Resident in Internal Medicine, Department of Internal Medicine I, Uniklinik RWTH Aachen, Germany, Prof. N. Marx 2017 – 2024 Scientific Assistant (Postdoc) at RWTH Aachen, Germany, Prof. Jankowski 2014 – 2017 PhD Student at Maastricht University, The Netherlands 2011 – 2014 PhD (to Dr. med) Student RWTH Aachen, Germany 2010 State board examination in Medicine, Romania

Supplementary Career Information

2 children, Maternity leave: July 2014 - February 2015; July 2016 – September 2017

Activities in the Research System

Reviewing activities

Journal Reviewer: *International Journal of Molecular Sciences, Biomedicines*

Memberships

German Society for Internal Medicine,
German Society for Atherosclerosis

Teaching

“Cardiorenal patient” seminar and bed-side-teaching seminars within the Curriculum of the Model degree program of Medicine in Faculty 10

Supervision of Researchers in Early Career Phases

I have successfully supervised 1 Master thesis and 1 MD thesis. Currently, I am supervising 2 ongoing PhD projects.

Scientific Results

Category A

1. **Curaj A**, Vanholder R, Loscalzo J, Quach K, Wu Z, Jankowski V, Jankowski J. Cardiovascular Consequences of Uremic Metabolites: an Overview of the Involved Signaling Pathways. *Circ Res*. 2024;134:592-613. doi: 10.1161/CIRCRESAHA. 123.324001.1.
2. Singh A, Kraaijeveld AO, **Curaj A**, Wichapong K, Hammerich L, de Jager SCA, Bot I, Atamas SP, van Berkel TJC, Jukema JW, Comerford I, McColl SR, Mees B, Heemskerk JWM, Nicolaes GAF, Hackeng T, Liehn EA, Tacke F, Biessen EAL. CCL18 aggravates atherosclerosis by inducing CCR6-dependent T-cell influx and polarization. *Front Immunol*. 2024;15:1327051. doi: 10.3389/fimmu.2024.1327051.
3. Wollenhaupt J, Frisch J, Harlacher E, Wong DWL, Jin H, Schulte C, Vondenhoff S, Moellmann J, Klinkhammer BM, Zhang L, **Curaj A**, Liehn EA, Speer T, Kazakov A, Werner C, van der Vorst EPC, Selejan SM, Hohl M, Böhm M, Kramann R, Biessen EAL, Lehrke M, Marx N, Jankowski J, Maack C, Boor P, Prates Roma L, Noels H. Pro-oxidative priming but maintained cardiac function in a broad spectrum of murine models of chronic kidney disease. *Redox. Biol*. 2022; 56:102459. doi: 10.1016/j.redox.2022.102459.
4. Schumacher D, **Curaj A**, Staudt M, Simseyilmaz S, Kanzler I, Boor P, Klinkhammer BM, Li X, Bucur O, Kaabi A, Xu Y, Zheng H, Nilcham P, Schuh A, Rusu M, Liehn EA. Endogenous Modulation of Extracellular Matrix Collagen during Scar Formation after Myocardial Infarction. *Int J Mol Sci*. 2022;23(23):14571. doi: 10.3390/ijms232314571.
5. **Curaj A**, Schumacher D, Rusu M, Staudt M, Li X, Simseyilmaz S, Jankowski V, Jankowski J, Dumitraşcu AR, Hausenloy DJ, Schuh A, Liehn EA. Neutrophils Modulate Fibroblast Function and Promote Healing and Scar Formation after Murine Myocardial Infarction. *Int J Mol Sci*. 2020;21(10):3685. doi: 10.3390/ijms21103685.
6. **Curaj A**, Rix A, Liehn E, Kiessling F. Ultrasound Microbubbles for Diagnosis and Treatment of Cardiovascular Diseases. *Semin Thromb Hemost*. 2020;46(5):545-552. doi: 10.1055/s-0039-1688492.
7. **Curaj A**, Wu Z, Rix A, Gresch O, Sternkopf M, Alampour-Rajabi S, Lammers T, van Zandvoort M, Weber C, Koenen RR, Liehn EA, Kiessling F. Molecular Ultrasound Imaging of Junctional Adhesion Molecule A Depicts Acute Alterations in Blood Flow and Early Endothelial Dysregulation. *Arterioscler Thromb Vasc Biol*. 2018;38(1):40-48. doi: 10.1161/ATVBAHA.117.309503.

8. **Curaj A**, Wu Z, Fokong S, Liehn EA, Weber C, Burlacu A, Lammers T, van Zandvoort M, Kiessling F. Noninvasive molecular ultrasound monitoring of vessel healing after intravascular surgical procedures in a preclinical setup. *Arterioscler Thromb Vasc Biol.* 2015;35(6):1366-73. doi: 10.1161/ATVBAHA.114.304857.
9. **Curaj A**, Wu Z, Fokong S, Liehn EA, Weber C, Lammers T, Kiessling F, Zandvoort van M. Rhodamine-loaded intercellular adhesion molecule-1-targeted microbubbles for dual-modality imaging under controlled shear stresses. *Circ Cardiovasc Imaging.* 2013;6(6):974-81. doi: 10.1161/CIRCIMAGING.113.000805.
10. Liehn EA, Postea O, **Curaj A**, Marx N. Repair after myocardial infarction, between fantasy and reality: the role of chemokines. *J Am Coll Cardiol.* 2011;58(23):2357-62. doi: 10.1016/j.jacc.2011.08.034.

Category B

Patent: VIF Cardioprotective effect of vasoconstriction-inhibiting factor (VIF) (WO 2020/161158 AI/patent published)

Academic Distinctions

2017 – 2019	Else Kröner-Fresenius-Stiftung (Individual project funding)
2021 – 2022	Junior Clinician Scientist RWTH University Aachen
2013	Poster award 81. Congress of the European Atherosclerosis Society, Lyon

Data protection and consent to the processing of optional data

☒ I expressly consent to the processing of the voluntary (optional) information, including “special categories of personal data” in connection with the DFG’s review and decision-making process regarding my proposal. This also includes forwarding my data to the external reviewers, committee members and, where applicable, foreign partner organisations who are involved in the decision-making process. To the extent that these recipients are located in a third country (outside the European Economic Area), I additionally consent to them being granted access to my data for the above-mentioned purposes, even though a level of data protection comparable to EU law may not be guaranteed. For this reason, compliance with the data protection principles of EU law is not guaranteed in such cases. In this respect, there may be a violation of my fundamental rights and freedoms and resulting damages. This may make it more difficult for me to assert my rights under the General Data Protection Regulation (e.g. information, rectification, erasure, compensation) and, if necessary, to enforce these rights with the help of authorities or in court.

I may **revoke** my consent in whole or in part at any time – with effect for the future, freely and without giving reasons – vis-à-vis the DFG (postmaster@dfg.de). The lawfulness of the processing carried out up to that point remains unaffected. Insofar as I transmit “special categories of personal data” relating to third parties, I confirm that the necessary legitimization under data protection law exists (e.g. based on consent).

I have taken note of the DFG's Data Protection Notice relating to research funding, which I can access at www.dfg.de/privacy_policy and I will forward it to such persons whose data the DFG processes as a result of being mentioned in this CV.

7.1.3. Univ.-Prof. Dr. med. Michael Böhm

Personal Data

Title	Univ.-Prof. Dr. med.
First name	Michael
Name	Böhm
Current position	Director of Department of Internal Medicine III (until end of 2025), then Senior Professorship
Current institution(s)/site(s), country	Department of Internal Medicine III Saarland University – Campus Homburg and Saarland University Medical Centre, Homburg/Saar, Germany
Identifiers/ORCID	0000-0002-2976-2514

Qualifications and Career

Stages	Periods and Details
Degree program	1993 Venia Legendi for Internal Medicine and Cardiology, Ludwig-Maximilian-Universität 1977 – 1984 Medicine Medizinische Hochschule Hannover (MHH), Germany
Doctorate	1984 Doctoral Thesis, Biochemical Pharmacology, Medizinische Hochschule Hannover (Prof. Scholz)
Stages of academic/professional career	since 2000 Director of Clinic of Internal Medicine III-Cardiology, Angiology and Intensive Care Medicine, Saarland University 1995 Professor of Internal Medicine and Cardiology at the University of Köln, Germany 1994 Heisenberg Scholarship (DFG), Gerhard Hess-Program (DFG) 1993 Consultant of Internal Medicine at the University of Köln, Germany 1986 – 1993 Scientific Assistant at Medical Clinic I at the University of München, Germany 1984 – 1986 Scientific Assistant at General Pharmacology at the University Hospital Eppendorf

Activities in the Research System

2022	Chairman Educational Board of the European Heart Failure Association
2020	Board Member of the European Heart Failure Association (ex officio since 2024)
2019	Press Spokesman of the German Society of Cardiology
2014	Honorary member of the Hellenic Society of Cardiology
2013 – 2020	Election into the Evaluation Board of Cardiology of the German Research Foundation for Cardiology (Deutsche Forschungsgemeinschaft, DFG)
2012	Honorary member and medal of merit of the Hungarian Society of Cardiology
2011	Past President of the German Cardiac Society
2009 – 2011	President of the German Society of Cardiology, Chairman of the Scientific Program Committee and Board Member of the European Society of Cardiology

Scientific Results

Category A

1. **Böhm M**, de la Sierra A, Mahfoud F, Schwantke I, Lauder L, Haring B, Vinyoles E, Gorostidi M, Segura J, Williams B, Staplin N, Ruilope LM. Office measurement vs. ambulatory blood pressure monitoring: associations with mortality in patients with or without diabetes. *Eur Heart J*. 2024;45:2851-2861. doi: 10.1093/eurheartj/ehae337.
2. **Böhm M**, Anker S, Mahfoud F, Lauder L, Filippatos G, Ferreira JP, Pocock SJ, Brueckmann M, Saloustros I, Schöler E, Wanner C, Zannad F, Packer M, Butler J. Empagliflozin, irrespective of blood pressure, improves outcomes in heart failure with preserved ejection fraction: the EMPEROR-Preserved trial. *Eur Heart J*. 2023;44:396-407. doi: 10.1093/eurheartj/ehac693
3. Mahfoud F, Kandzari DE, Kario K, Townsend RR, Weber MA, Schmieder RE, Tsioufis K, Pocock S, Dimitriadis K, Choi JW, East C, D'Souza R, Sharp ASP, Ewen S, Walton A, Hopper I, Brar S, McKenna P, Fahy M, **Böhm M**. Long-term efficacy and safety of renal denervation in the presence of antihypertensive drugs (SPYRAL HTN-ON MED): a randomised, sham-controlled trial *Lancet*. 2022;399:1401-1410. doi: 10.1016/S0140-6736(22)00455-X
4. Hohl M, Selejan SR, Wintrich J, Lehnert U, Speer T, Schneider C, Mauz M, Markwirth P, Wong DWL, Boor P, Kazakov A, Mollenhauer M, Linz B, Klinkhammer BM, Hübner U, Ukena C, Moellmann J, Lehrke M, Wagenpfeil S, Werner C, Linz D, Mahfoud F, **Böhm M**. Renal denervation prevents atrial arrhythmogenic substrate development in CKD. *Circ Res*. 2022; 130:814-828. doi: 10.1161/CIRCRESAHA.121.320104
5. Anker SD, Butler J, Filippatos G, Ferreira JP, Bocchi E, **Böhm M**, ..., Packer M; EMPEROR-Preserved Trial Investigators. Empagliflozin in heart failure with a preserved ejection fraction. *N Engl J Med*. 2021;385: 1451-1461. doi: 10.1056/NEJMoa2107038.
6. Packer M, Anker SD, Butler J, Filippatos G, Pocock SJ, Carson P, Januzzi J, Verma, Tsutsui H, Brueckmann M, Jamal W, Kimura K, Schnee J, Zeller C, Cotton D, Bocchi E, **Böhm M**, ..., Wanner C, Zannad F; EMPEROR-Reduced Trial Investigators. Cardiovascular and Renal Outcomes with Empagliflozin in Heart Failure. *N Engl J Med*. 2020;383:1413-1424 doi: 10.1056/NEJMoa2022190.
7. **Böhm M**, Kario K, Kandzari DE, Mahfoud F, Weber MA, Schmieder RE, Tsioufis K, Pocock S, Konstantinidis D, Choi JW, East C, Lee DP, Ma A, Ewen S, Cohen DL, Wilensky R, Devireddy CM, Lea J, Schmid A, Weil J, Agdirlioglu T, Reedus D, Jefferson BK, Reyes D, D'Souza R, Sharp ASP, Sharif F, Fahy M, DeBruin V, Cohen SA, Brar S, Townsend RR; SPYRAL HTN-OFF MED Pivotal Investigators. Efficacy of catheter-based renal denervation in the absence of antihypertensive medications (SPYRAL HTN-OFF MED Pivotal): a multicentre, randomised, sham-controlled trial. *Lancet* (2020)395:1444-1451. doi: 10.1016/S0140-6736(20)30554-7
8. McMurray JJV, Solomon SD, Inzucchi SE, Køber L, Kosiborod MN, Martinez FA, Ponikowski P, Sabatine MS, Anand IS, Bělohávek J, **Böhm M**, Chiang CE, Chopra VK, de Boer RA, Desai AS, Diez M, Drozd J, Dukát A, Ge J, Howlett JG, Katova T, Kitakaze M, Ljungman CEA, Merkely B, Nicolau JC, O'Meara E, Petrie MC, Vinh PN, Schou M, Tereshchenko S, Verma S, Held C, DeMets DL, Docherty KF, Jhund PS, Bengtsson O, Sjöstrand M, Langkilde AM; DAPA-HF Trial Committees and Investigators. Dapagliflozin in patients with heart failure and reduced ejection fraction. *N Engl J Med*. 2019;381:1995-2008. doi: 10.1056/NEJMoa1911303

9. Kandzari D, **Böhm M**, Mahfoud F, Townsend RR, Weber MA, Pocock S, Tsioufis K, Tousoulis D, Choi JW, East C, Brar S, Cohen SA, Fahy M, Pilcher G, Kario K on behalf of the Spyral HTN-ON MED Trial Investigators. Effect of renal denervation on blood pressure in the presence of antihypertensive drugs: 6-month efficacy and safety results from the SPYRAL HTN-ON MED proof-of-concept randomised trial. *Lancet* 2018;391: 2346–2355. doi: 10.1016/S0140-6736(18)30951-6
10. **Böhm M**, Schumacher H, Teo KK, Lonn EM, Mahfoud F, Mann JFE, Mancina G, Redon J, Schmieder RE, Sliwa K, Werber MA, Williams B, Yusuf S. Achieved blood pressure and cardiovascular outcomes in high-risk patients: results from ONTARGET and TRANSCEND trials. *Lancet* 2017;389: 2226–2237. doi: 10.1016/S0140-6736(17)30754-7

Academic Distinctions

- 2025 Carl-Ludwig Honorary Medal of the German Cardiac Society
- 2012 Order of Merit of the Federal Republic of Germany (Bundesverdienstkreuz)
- 2008 Franz Loogen Award of the Society for Cardiovascular Research
- 2002 Franz-Groß-Science Award of the German Society of Hypertension
- 2000 Arthur Weber Award of the German Society of Cardiology/Heart and Circulation Research
- 1998 E.K. Frey Award of the German Society of Intensive Care in Internal Medicine
- 1995 Walter Clawiter Award for Research in Hypertension, University of Düsseldorf
- 1994 Heisenberg Fellowship of the DFG
- 1992 Fraenkel Award of the German Society of Cardiology/Heart and Circulation Research, Asta-Medica Award, Research Award Smith-Kline Beecham
- 1990 Le Prix de Merite de la Fondation Internationale pour la Substitution de l'Experimentation Animale, Luxembourg
- 1989 Theodor-Frerichs-Award of the German Society of Internal Medicine
- 1988 Research Award of the Bundesministerium für Jugend, Frauen, Familie und Gesundheit

Scientific Journals

- Chief Editor: *Clin Res Cardiol* until 1/2025, since 4/2023 *Eur J Heart Fail*
- Consulting Editor: Basic Research in Cardiology
- Editorial Board: *Hypertension* (from 1/2023)
- Reviewer: *Circulation, Circulation Research, Hypertension, Lancet, European Journal of Heart Failure, European Heart Journal, JAMA, N Engl J Med*

Trial Experience

- National Coordinator: COMET, CORONA, ONTARGET, TRANSCEND, SENIORS, ESSENTIAL, SIMPLICITY, PARADIGM, EDIFY, RELAX-HF, DAPA-HF, GALACTIC, EMPEROR-Reduced and Preserved, METEORIC
- Executive Board: SHIFT, EDIFY, SPYRAL OFF and ON, METEORIC
- DSMB: RECORD, RELAX, RESPECT-ESUS, RELAX EU
- Steering Committee: CORONA, ONTARGET, TRANSCEND, SENIORS, ESSENTIAL, ASTRONAUT, PARADIGM HF, GALACTIC, DAPA-HF, EMPEROR CONTINUE HF, SYMPPLICITY-AF
- Principal Investigator: OPTILINK, SIMPLICITY HTN1, HTN2, EDIFY, SPYRAL, PEREGRINE, RADIANCE-HTN, TARGET BP PARAGON and others

Data protection and consent to the processing of optional data

☒ I expressly consent to the processing of the voluntary (optional) information, including “special categories of personal data” in connection with the DFG’s review and decision-making process regarding my proposal. This also includes forwarding my data to the external reviewers, committee members and, where applicable, foreign partner organisations who are involved in the decision-making process. To the extent that these recipients are located in a third country (outside the European Economic Area), I additionally consent to them being granted access to my data for the above-mentioned purposes, even though a level of data protection comparable to EU law may not be guaranteed. For this reason, compliance with the data protection principles of EU law is not guaranteed in such cases. In this respect, there may be a violation of my fundamental rights and freedoms and resulting damages. This may make it more difficult for me to assert my rights under the General Data Protection Regulation (e.g. information, rectification, erasure, compensation) and, if necessary, to enforce these rights with the help of authorities or in court.

I may **revoke** my consent in whole or in part at any time – with effect for the future, freely and without giving reasons – vis-à-vis the DFG (postmaster@dfg.de). The lawfulness of the processing carried out up to that point remains unaffected. Insofar as I transmit “special categories of personal data” relating to third parties, I confirm that the necessary legitimisation under data protection law exists (e.g. based on consent).

I have taken note of the DFG’s Data Protection Notice relating to research funding, which I can access at www.dfg.de/privacy_policy and I will forward it to such persons whose data the DFG processes as a result of being mentioned in this CV.

7.1.4. Univ.-Prof. Dr. med. Peter Boor, PhD

Personal Data

Title	Univ.-Prof. Dr. med., PhD
First name	Peter
Name	Boor
Current position	1. Chair of Translational Nephropathology, RWTH Aachen 2. Head of Digital Pathology, RWTH Aachen 3. Head of Electron Microscopy Facility, RWTH Aachen
Current institution(s)/site(s), country	Institute of Pathology, Uniklinik RWTH Aachen, Germany
Identifiers/ORCID	0000-0001-9921-4284

Qualifications and Career

Stages	Periods and Details
Degree program	2001 – 2002 Study of general medicine at the RWTH Aachen, Germany (ERASMUS Stipend) 1997 – 2004 Study of general medicine at the Faculty of Medicine, Comenius University, Bratislava, Slovakia
Doctorate	2009 Dr. med. (MD), <i>summa cum laude</i> , Medical Faculty of the RWTH Aachen, Germany, supervisor: Prof. J. Floege 2008 PhD (Clinical pharmacology), Slovak Medical University, Bratislava, Slovakia, supervisors: Prof. K. Šebeková, PhD and Prof. J. Floege 2004 MUDr. (MD) with the highest honors, Medical Faculty of the Comenius University, Bratislava, Slovakia, supervisor: Prof. K. Šebeková, PhD
Stages of academic/professional career	2021 – 2026 ERC Consolidator grant on AI-augmented, Multiscale Image-based Diagnostics of Chronic Kidney Disease, AIM.imaging.CKD Since 2020 Chair of Translational Nephropathology at the RWTH Aachen, Germany Since 2018 Full Professor (Heisenberg Professorship 2018 - 2022) Since 2009 Pathologist, and since 2018 senior consultant at the Institute of Pathology, RWTH Aachen, Germany 2008 – 2009 Internship at the Department of Clinical and Experimental Pharmacotherapy, Slovak Medical University, Bratislava, Slovakia 2005 – 2007 Research fellow at the Division of Nephrology, Uniklinik RWTH Aachen, Germany (awarded with Postgraduate Scholarship from German Academic Exchange Service) 2004 Internship at the Department of Clinical and Experimental Pharmacotherapy, Slovak Medical University, Bratislava, Slovakia

Supplementary Career Information

02 - 04/2015 Parental leave

Activities in the Research System

- Since 2023 Founding member of the Center for Computational Life Sciences (CCLS) at the RWTH Aachen
- Since 2023 Member of the RWTH AI Center
- Since 2023 Member of the Scientific Committee of the German Society of Nephrology
- Since 2023 Advisory board of National Unified Renal Translational Research Enterprise (NURTuRE), UK
- 2022 - 2024 Member of Structural Commission, Financial Commission, and the Faculty Senate of the Medical Faculty of the RWTH University Aachen
- 2022 - 2024 Scientific Advisory Board of the European Renal Association (ERA)
- Since 2022 Scientific Advisory Board, European Society of Digital & Integrative Pathology
- 2021 - 2025 Spokesperson of the Clinical Research Unit 5011 (<https://www.interakd.de>).
- Since 2021 *Ad hoc* scientific advisor for the Federal Ministry of Research and Education
- Since 2020 Head and Coordinator of the German Autopsy Registry (NAREG) & the National Research Network for Autopsies (NATON; <https://naton.network>).
- 2019 - 2022 Appointment as Expert for the World Health Organization (WHO) Digital Health Technical Advisory Group (DHTAG), focus on digital pathology
- Since 2018 Guest Professor, Medical Faculty, Comenius University, Bratislava, Slovakia
- 2015 - 2019 Member of the Research Commission of the Medical Faculty of the RWTH
- 02/2009 Sabbatical at the Cedars-Sinai Medical Center and Burns and Allen Research Institute, Los Angeles, USA

Supervision of Researchers in Early Career Phases

Since 2009 Supervised > 20 doctoral theses (MD, PhD)

Lecturer for medical students in pathology & supervisor of the online platform for virtual microscopy for medical students at the RTWH University, Lecturing for students of biology and biotechnology in the qualification profile Molecular and Applied Medicine, Lecturing for postgraduate training of nephrologists in nephropathology, Training of medical students for the Paul-Ehrlich Contest, Training of resident pathologists in general pathology, Lecturing for students in the MSc course Medical Data Science at the RWTH Aachen, Germany, Mentor for young scientists at RWTH Aachen University (TANDEMpeerMED program), Advisor & Mentor for young scientists for the Young Nephrologists Platform of the ERA-EDTA

PAULA prize for the best lecturer at the Medical Faculty of the RWTH Aachen awarded by medical students in 2015 and 2019

Scientific Results

Category A

1. Vafaei Sadr A, Bülow R, von Stillfried S, Schmitz NEJ, Pilva P, Hölscher DL, Pilehchi Ha P, Schweiker M, **Boor P**. Operational greenhouse-gas emissions of deep learning in digital pathology: a modelling study. *Lancet Digit Health* 2024;6:e58-e69. doi: 10.1016/S2589-7500(23)00219-4

2. Hölscher DL, Bouteldja N, Joodaki M, Russo ML, Lan Y, Sadr AV, Cheng M, Tesar V, Stillfried SV, Klinkhammer BM, Barratt J, Floege J, Roberts ISD, Coppo R, Costa IG, Bülow RD, **Boor P**. Next-Generation Morphometry for pathomics-data mining in histopathology. *Nat Commun* 2023;14 (1): 470. doi: 10.1038/s41467-023-36173-0.
3. von Stillfried S, Bülow RD, Röhrig R, **Boor P**, German Registry of COVID-19 Autopsies (DeRegCOVID), DeRegCOVID Collaborators. First report from the German COVID-19 autopsy registry. *Lancet Reg Health Eur* 2022;15: 100330. doi: 10.1016/j.lanepe.2022.100330.
4. Klinkhammer BM, Buchtler S, Djudjaj S, Bouteldja N, Palsson R, Edvardsson VO, Thorsteinsdottir M, Floege J, Mack M, **Boor P**. Current kidney function parameters overestimate kidney tissue repair in reversible experimental kidney disease. *Kidney Int* 2022;102(2): 307-320. doi: 10.1016/j.kint.2022.02.039.
5. Kers J, Bülow RD, Klinkhammer BM, Breimer GE, Fontana F, Abiola AA, Hofstraat R, Corthals GL, Sengers HP, Djudjaj S, von Stillfried S, Hölscher DL, Pieters TT, van Zuilen AD, Bemelman FJ, Nurmohamed AS, Naesens M, Roelofs JJTH, Florquin S, Floege J, Nguyen TQ, Kather JN, **Boor P**. Deep Learning-based classification of kidney transplant pathology: a retrospective, multicentre, proof-of-concept study. *Lancet Digit Health* 2022;4(1): e18-e26. doi: 10.1016/S2589-7500(21)00211-9.
6. Wendisch D, Dietrich O, Mari T, von Stillfried S, ..., **Boor P***, Selbach M*, Saliba A-E*, Sander LE*. SARS-CoV-2 infection triggers profibrotic macrophage responses and lung fibrosis. *Cell* 2021;184(26): 6243-6261. doi: 10.1016/j.cell.2021.11.033. ***Shared last authorship.**
7. Baues M, Klinkhammer BM, Ehling J, Gremse F, van Zandvoort MAMJ, Reutelingsperger CPM, Daniel C, Amann K, Bábíčková J, Kiessling F, Floege J, Lammers T, **Boor P**. A collagen-binding protein enables molecular imaging of kidney fibrosis in vivo. *Kidney Int* 2020;97(3): 609-614. doi: 10.1016/j.kint.2019.08.029.
8. Shi C, Kim T, Steiger S, Mulay SR, Klinkhammer BM, Bäuerle T, Melica ME, Romagnani P, Möckel D, Baues M, Yang L, Mammadova-Bach E, Sanne B, Heemskerk JWM, Braun A, Lammers T, **Boor P***, Anders HJ*. Crystal clots as therapeutic target in cholesterol crystal embolism. *Circ Res* 2020;126(8): e37-e52. doi: 10.1161/CIRCRESAHA.119.315625. ***Shared last authorship.**
9. Buhl EM, Djudjaj S, Klinkhammer BM, Ermert K, Puellas VG, Lindenmeyer MT, Cohen CD, He C, Borkham-Kamphorst E, Weiskirchen R, Denecke B, Trairatphisan P, Saez-Rodriguez J, Huber TB, Olson LE, Floege J, **Boor P**. Dysregulated mesenchymal PDGFR- β drives kidney fibrosis. *EMBO Mol Med* 2020;12(3): e11021. doi: 10.15252/emmm.201911021.
10. Sun Q, Baues M, Klinkhammer BM, Ehling J, Djudjaj S, Drude NI, Daniel C, Amann K, Kramann R, Kim H, Saez-Rodriguez J, Weiskirchen R, Onthank DC, Botnar RM, Kiessling F, Floege J, Lammers T, **Boor P**. Elastin imaging enables non-invasive staging and treatment monitoring of kidney fibrosis. *Sci Transl Med* 2019;11(486): eaat4865. doi: 10.1126/scitranslmed.aat4865.

Category B

1. Mühlfeld AS, **Boor P**. Acquired Cystic Kidney Disease and Malignant Neoplasms. In Richard J. Johnson, Jurgen Floege, Marcello Tonelli: Comprehensive Clinical Nephrology. 7th edition. *Elsevier* 2023. ISBN: 9780323825924
2. Klinkhammer BM, Lammers T, et al, **Boor P**. Non-invasive molecular imaging of kidney diseases. *Nat Rev Nephrol*. 2021;7(10):688-703. doi: 10.1038/s41581-021-00440-4.

3. **Boor P.** Artificial intelligence in nephropathology. *Nat Rev Nephrol.* 2020;6(1):4-6. doi: 10.1038/s41581-019-0220-x.
4. Djudjaj S, **Boor P.** Cellular and molecular mechanisms of kidney fibrosis. *Mol Aspects Med.* 2019;65:16-36. doi: 10.1016/j.mam.2018.06.002.
5. Klinkhammer BM, Floege J, **Boor P.** PDGF in organ fibrosis. *Mol Aspects Med.* 2018;62:44-62. doi: 10.1016/j.mam.2017.11.008.

Academic Distinctions

2024	Distinguished Fellow of the European Renal Association (FERA)
2020	Franz-Volhard Award of the German Society of Nephrology
2019	Bernd-Tersteegen Award for outstanding research in chronic kidney disease
2018	Rudolf Virchow's Award of the German Society of Pathology (DGP)
2018	Scientific Award of the Medical Faculty of the Comenius University, Bratislava
2017	Carl Ludwig Award of the German Society of Nephrology
2017	Gloria Gallo Award of the Renal Pathology Society (RPS)
2016	Award for top abstract presented by young investigator at the ERA-EDTA 53rd Congress in Vienna, Austria
2016	RWTH Lecturer, award for excellence in teaching and science of the RWTH Aachen University
2014	Liliane Striker Young Investigator Award of the Renal Pathology Society
2011	Doctoral Thesis Award ("Borchers-Plakette") of the RWTH Aachen University
2011	Participant at the 61st Meeting of Nobel Laureates in Lindau, Germany
2010	Scientific Award ("Friedrich-Wilhelm Preis") of the RWTH Aachen University

Data protection and consent to the processing of optional data

☒ I expressly consent to the processing of the voluntary (optional) information, including "special categories of personal data" in connection with the DFG's review and decision-making process regarding my proposal. This also includes forwarding my data to the external reviewers, committee members and, where applicable, foreign partner organisations who are involved in the decision-making process. To the extent that these recipients are located in a third country (outside the European Economic Area), I additionally consent to them being granted access to my data for the above-mentioned purposes, even though a level of data protection comparable to EU law may not be guaranteed. For this reason, compliance with the data protection principles of EU law is not guaranteed in such cases. In this respect, there may be a violation of my fundamental rights and freedoms and resulting damages. This may make it more difficult for me to assert my rights under the General Data Protection Regulation (e.g. information, rectification, erasure, compensation) and, if necessary, to enforce these rights with the help of authorities or in court.

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I have taken note of the DFG's Data Protection Notice relating to research funding, which I can access at www.dfg.de/privacy_policy and I will forward it to such persons whose data the DFG processes as a result of being mentioned in this CV.

7.1.5. Jun.-Prof. Dr. med. Roman David Bülow

Personal Data

Title	Jun.-Prof. Dr. med.
First name	Roman David
Name	Bülow
Current position	Juniorprofessor (W1, TT W2 for Digital Pathology), Resident Pathologist
Current institution(s)/site(s), country	Institute of Pathology, Uniklinik RWTH Aachen, Germany
Identifiers/ORCID	0000-0002-8527-7353

Qualifications and Career

Stages	Periods and Details
Degree program	2011 – 2018 Medical School, RWTH Aachen University, Germany
Doctorate	2020 Doctoral Thesis in Medicine, RWTH Aachen University, Germany; Prof. P. Boor
Stages of academic/professional career	06/2020 – 12/2021 Clinician Scientist GEROK in SFB/TRR219 Since 2023 Junior Professor for Digital Pathology Since 2020 Junior Group Leader in Digital Pathology, Institute of Pathology, Nephropathology Section, Uniklinik RWTH Aachen, Germany 2019 Digital nephropathology research rotation, Jimenez Diaz Foundation, Madrid, Spain; Mentor: Dr. Cannata-Ortiz 2019 Research rotation for genetics and OMICs in kidney diseases, University of Cyprus, Nicosia; Mentor: Prof. Dr. Deltas Since 2018 Resident Physician, Institute of Pathology, Nephropathology Section, Uniklinik RWTH Aachen, Germany

Activities in the Research System

Coordinator of internal scientific educational activities in the Institute of Pathology

Participant of the “BANFF Digital Pathology Working Group”

Ad-hoc reviewer for scientific journals, e.g., *NPJ Precision Oncology*, *Nature Communications*, *Kidney International*, *Computational and Structural Biotechnology Journal*, *Clinical Kidney Journal*, *Patterns*, *Journal of Pathology Informatics*

Grant reviewer for e.g., the Swiss National Science Foundation, Agence nationale de la recherche (French national research association (ANR)) and intramural funding of the RWTH Aachen University.

Teaching

Curricular teaching of medical students in Aachen in system blocks “Cardiovascular” and “Urinary and reproductive organs”.

Extracurricular teaching “Qualification Profile Big Data and AI in Medicine” and “Clinical Pathology Practical”

Supervision of the virtual microscopy of the Institute of Pathology at RWTH Aachen University (teaching platform with annotated digital histology)

Supervision of Researchers in Early Career Phases

Since 2020, supervisor of 2 MD theses. Currently supervision of 2 ongoing MD and 3 ongoing PhD projects.

Scientific Results

Category A

1. Vafaei Sadr, A, **Bülow, R**, von Stillfried, S, Schmitz, NEJ, Pilva, P, Hölscher, DL, Ha, PP, Schweiker, M, Boor, P. Operational greenhouse-gas emissions of deep learning in digital pathology: a modelling study. *Lancet Digit Health* 2024;6, e58–e69. doi: 10.1016/S2589-7500(23)00219-4.
2. Hölscher, DL, Goedertier, M, Klinkhammer, BM, Droste, P, Costa, IG, Boor, P*, **Bülow, RD***. tRigon: an R package and Shiny App for integrative (path-)omics data analysis. *BMC Bioinformatics* 2024;25(1):98. doi: 10.1186/s12859-024-05721-w. ***Equal contribution.**
3. Hölscher DL, Bouteldja N, Joodaki M, Russo ML, Lan YC, Sadr AV, Cheng M, Tesar V, Stillfried SV, Klinkhammer BM, Barratt J, Floege J, Roberts ISD, Coppo R, Costa IG, **Bülow RD***, Boor P*. Next-Generation Morphometry for pathomics-data mining in histopathology. *Nat Commun.* 2023;14(1):470. doi: 10.1038/s41467-023-36173-0. ***Equal contribution.**
4. **Bülow RD***, Hölscher DL*, Costa IG, Boor P. Extending the landscape of omics technologies by pathomics. *NPJ Syst Biol Appl.* 2023;9(1):38. doi: 10.1038/s41540-023-00301-9. ***Equal contribution.**
5. Georg P, Astaburuaga-García R, Bonaguro L, Brumhard S, Michalick L, Lippert LJ, Kostevc T, Gäbel C, Schneider M, Streitz M, Demichev V, Gemünd I, Barone M, Tober-Lau P, Helbig ET, Hillus D, Petrov L, Stein J, Dey HP, Paclik D, Iwert C, Mülleder M, Aulakh SK, Djudjaj S, **Bülow RD**, Mei HE, Schulz AR, Thiel A, Hippenstiel S, Saliba AE, Eils R, Lehmann I, Mall MA, Stricker S, Röhm J, Corman VM, Beule D, Wyler E, Landthaler M, Obermayer B, von Stillfried S, Boor P, Demir M, Wesselmann H, Suttorp N, Uhrig A, Müller-Redetzky H, Nattermann J, Kuebler WM, Meisel C, Ralser M, Schultze JL, Aschenbrenner AC, Thibeault C, Kurth F, Sander LE, Blüthgen N, Sawitzki B, PA-COVID-19 Study Group. Complement activation induces excessive T cell cytotoxicity in severe COVID-19. *Cell.* 2022;185(3):493–512.e25. doi: 10.1016/j.cell.2021.12.040.
6. Kers J*, **Bülow RD***, Klinkhammer BM, Breimer GE, Fontana F, Abiola AA, Hofstraat R, Corthals GL, Peters-Sengers H, Djudjaj S, von Stillfried S, Hölscher DL, Pieters TT, van Zuilen AD, Bemelman FJ, Nurmohamed AS, Naesens M, Roelofs JJTH, Florquin S, Floege J, Nguyen TQ, Kather JN, Boor P. Deep learning-based classification of kidney transplant

- pathology: a retrospective, multicentre, proof-of-concept study. *Lancet Digit Health*. 2022;4(1):e18–26. doi: 10.1016/S2589-7500(21)00211-9. ***Equal contribution.**
7. Homeyer A*, Geißler C*, Schwen LO*, Zakrzewski F*, Evans T*, Strohmeier K*, Westphal M*, **Bülow RD***, Kargl M, Karjauv A, Munné-Bertran I, Retzlaff CO, Romero-López A, Sołtysiński T, Plass M, Carvalho R, Steinbach P, Lan YC, Bouteldja N, Haber D, Rojas-Carulla M, Vafaei Sadr A, Kraft M, Krüger D, Fick R, Lang T, Boor P, Müller H, Hufnagl P, Zerbe N. Recommendations on compiling test datasets for evaluating artificial intelligence solutions in pathology. *Mod Pathol*. 2022;1–11. doi: 10.1038/s41379-022-01147-y. ***Equal contribution.**
 8. Bouteldja N*, Klinkhammer BM*, **Bülow RD***, Droste P, Otten SW, Freifrau von Stillfried S, Moellmann J, Sheehan SM, Korstanje R, Menzel S, Bankhead P, Mietsch M, Drummer C, Lehrke M, Kramann R, Floege J, Boor P, Merhof D. Deep Learning-Based Segmentation and Quantification in Experimental Kidney Histopathology. *J Am Soc Nephrol*. 2021;32(1):52–68. doi: 10.1681/ASN.2020050597. ***Equal contribution.**
 9. Wendisch D, Dietrich O, Mari T, von Stillfried S, Ibarra IL, Mittermaier M, Mache C, Chua RL, Knoll R, Timm S, Brumhard S, Krammer T, Zauber H, Hiller AL, Pascual-Reguant A, Mothes R, **Bülow RD**, Schulze J, Leipold AM, Djurdjaj S, Erhard F, Geffers R, Pott F, Kazmierski J, Radke J, Pergantis P, Baßler K, Conrad C, Aschenbrenner AC, Sawitzki B, Landthaler M, Wyler E, Horst D, Deutsche COVID-19 OMICS Initiative (DeCOI), Hippenstiel S, Hocke A, Heppner FL, Uhrig A, Garcia C, Machleidt F, Herold S, Elezkurtaj S, Thibeault C, Witzernath M, Cochain C, Suttorp N, Drosten C, Goffinet C, Kurth F, Schultze JL, Radbruch H, Ochs M, Eils R, Müller-Redetzky H, Hauser AE, Luecken MD, Theis FJ, Conrad C, Wolff T, Boor P, Selbach M, Saliba AE, Sander LE. SARS-CoV-2 infection triggers profibrotic macrophage responses and lung fibrosis. *Cell*. 2021;184(26):6243–61.e27. doi: 10.1016/j.cell.2021.11.033.
 10. Kather JN, Heij LR, Grabsch HI, Loeffler C, Echle A, Muti HS, Krause J, Niehues JM, Sommer KAJ, Bankhead P, Kooreman LFS, Schulte JJ, Cipriani NA, **Buelow RD**, Boor P, Ortiz-Brüchle N, Hanby AM, Speirs V, Kochanny S, Patnaik A, Srisuwananukorn A, Brenner H, Hoffmeister M, van den Brandt PA, Jäger D, Trautwein C, Pearson AT, Luedde T. Pan-cancer image-based detection of clinically actionable genetic alterations. *Nature Cancer*. 2020;1(8):789–99. doi: 10.1038/s43018-020-0087-6.

Category B

- 2023 tRigon. Software-Package and OMICS-Analysis app (freeware)
- CRAN: <https://cran.r-project.org/web/packages/tRigon/index.html>
- README: <https://cran.r-project.org/web/packages/tRigon/readme/README.html>
- Git-Lab: <https://git-ce.rwth-aachen.de/labooratory-ai/trigon>

Academic Distinctions

- 2025 European Renal Association Curatorium Award 2025 for young researchers
- 2025 Invited Speaker at ECDP
- 2024 / 2023 Invited Speaker at DGfN Annual Conference
- 2022 Invited speaker at D-A-CH - Symposium on Digital Pathology and AI

- | | |
|------|---|
| 2021 | Invited Speaker at DGfN Annual Conference, ESP Annual Conference, Workshop on Artificial Intelligence in Pathology of the French Society of Pathology. “How to write an AI-Pathology Paper” |
| 2020 | Workshop: AI in nephropathology, Amsterdam, Netherlands |
| 2018 | Selected to participate in the Young Scientists Academy of the German Society of Pathology |

Data protection and consent to the processing of optional data

☒ I expressly consent to the processing of the voluntary (optional) information, including “special categories of personal data” in connection with the DFG’s review and decision-making process regarding my proposal. This also includes forwarding my data to the external reviewers, committee members and, where applicable, foreign partner organisations who are involved in the decision-making process. To the extent that these recipients are located in a third country (outside the European Economic Area), I additionally consent to them being granted access to my data for the above-mentioned purposes, even though a level of data protection comparable to EU law may not be guaranteed. For this reason, compliance with the data protection principles of EU law is not guaranteed in such cases. In this respect, there may be a violation of my fundamental rights and freedoms and resulting damages. This may make it more difficult for me to assert my rights under the General Data Protection Regulation (e.g. information, rectification, erasure, compensation) and, if necessary, to enforce these rights with the help of authorities or in court.

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I have taken note of the DFG’s Data Protection Notice relating to research funding, which I can access at www.dfg.de/privacy_policy and I will forward it to such persons whose data the DFG processes as a result of being mentioned in this CV.

7.1.6. Univ.-Prof. Dr. med. Danilo Fliser

Personal Data

Title	Univ.-Prof. Dr. med
First name	Danilo
Name	Fliser
Current position	Professor of Internal Medicine (end of contract: 2029) Head of Department (end of contract: 2029)
Current institutions / sites, country	Department for Internal Medicine IV, Saarland University – Campus Homburg and Saarland University Medical Centre, Homburg/Saar, Germany
Identifiers / ORCID	

Qualifications and Career

Stages	Periods and Details
Degree program	1997 Venia Legendi, Ruperto-Carola-University, Heidelberg, Germany 1980 – 1986 Studies in Medicine, University of Ljubljana, Slovenia
Doctorate	1989 University of Ljubljana, Slovenia, Prof. J. Drinovec
Stages of academic/professional career	2007 – 2029 Professor of Medicine, Saarland University, Campus Homburg, Homburg/Saar, Germany 2007 – 2029 Director Clinic for Internal Medicine IV, Saarland University Medical Centre, Homburg/Saar, Germany 2007 – 2029 Spokesman Transplant Centre, Saarland University Medical Centre, Homburg/Saar, Germany 2002 – 2007 Associate Professor of Medicine, Clinic for Nephrology, Hannover Medical School, Germany 1999 – 2002 Assistant Professor of Medicine, Clinic for Nephrology, Hannover Medical School, Germany 1999 – 2007 Head Translational Research Unit, Clinic for Nephrology, Hannover Medical School, Germany 1999 – 2007 Senior Physician, Clinic for Nephrology, Hannover Medical School, Germany 1998 – 1999 Assistant Professor of Medicine, Ruperto-Carola-University, Heidelberg, Germany 1997 – 1999 Head Clinical Research Unit, Department of Nephrology, University Medical Centre Heidelberg, Germany 1996 Postdoctoral Research Fellow, Department of Endocrinology and Metabolism, University of Virginia, Charlottesville, USA 1996 Faculty Rank in Internal Medicine

	1989 – 1996 Resident Physician & Research Fellow, Department of Nephrology, University Medical Centre Heidelberg, Germany 1987 – 1989 Resident Physician & Research Fellow, University Medical Centre, Clinic for Nephrology, Ljubljana, Slovenia
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Activities in the Research System

Spokesperson (2018) and Deputy spokesperson (2019-2025) for the SFB/TRR219 Consortium “*Mechanisms of Cardiovascular Complications in Chronic Kidney Disease*”

Reviewer for national and international research organizations (e.g. DFG, Wellcome Trust, Dutch Kidney Foundation, Kidney Research UK)

Reviewer for major international journals in general medicine (e.g. *NEJM*, *JAMA*, *Annals of Internal Medicine*), nephrology (e.g. *Kidney International*, *JASN*, *AJKD*, *NDT*, *CJASN*) and vascular medicine (e.g. *Circulation*, *EHJ*, *JACC*, *Hypertension*)

Editor for national and international journals (e.g. *NDT*, *Die Nephrologie*)

Steering Committee Member for the ‘Chronic Kidney Disease Outcomes and Practice Patterns Study’

Principal investigator for investigator-initiated clinical trials such as the EUTOPIA study and the PRIMAVERA trial

Scientific Results

Category A

1. Bonnin-Marquez A, Jankowski J, Maas SL, ... **Fliser D**, et al. Guanidinylation compromises the anti-inflammatory and anti-oxidative properties of apolipoprotein A-I in chronic kidney disease progression. *Kidney Int.* 2025;107(5):916-929. doi: 10.1016/j.kint.2025.02.010.
2. Weyrich M, Cremer S, Gerster M, ... **Fliser D**, et al. Loss of Y Chromosome and Cardiovascular Events in Chronic Kidney Disease. *Circulation* 2024;150: 746-757. doi: 10.1161/CIRCULATIONAHA.124.069139.
3. Speer T, Schunk SJ, Sarakpi T, ... **Fliser D**, et al.; 4C Study Investigators, ESCAPE Trial Investigators. Urinary DKK3 as a biomarker for short-term kidney function decline in children with chronic kidney disease: an observational cohort study. *Lancet Child Adolesc Health* 2023;7:405-414. doi: 10.1016/S2352-4642(23)00049-4.
4. Schunk SJ, Triem S, Schmit D, ... **Fliser D**, et al. The alarmin interleukin-1 α mediates leukocyte adhesion in cardiorenal diseases. *Circulation* 2021;144: 893-908. doi: 10.1161/CIRCULATIONAHA.121.053547.
5. Schunk SJ, Kleber ME, März W, ... **Fliser D**, et al; eQTLGen consortium; BIOS consortium. Genetically determined NLRP3 inflammasome activation associates with systemic inflammation and cardiovascular mortality. *Eur Heart J* 2021;42: 1742-1756. doi:10.1093/eurheartj/ehab107.
6. Schunk SJ, Hermann J, Sarakpi T, ... **Fliser D**, et al. Guanidinylation of Apolipoprotein C3 (ApoC3) Associates with Kidney and Vascular Injury. *J Am Soc Nephrol* 2021;32: 3146-3160. doi: 10.1681/ASN.2021040503.

7. Zewinger S, Reiser J, Jankowski V, ... **Fliser D**, et al. Apolipoprotein C3 induces inflammation and organ damage by alternative inflammasome activation. *Nat Immunol* 2020;21: 30-41. doi: 10.1038/s41590-019-0548-1.
8. Schunk SJ, Zarbock A, Meersch M, ... **Fliser D**, et al. Association between urinary dickkopf-3, acute kidney injury, and subsequent loss of kidney function in patients undergoing cardiac surgery: an observational cohort study. *Lancet* 2019;394: 488-496. doi: 10.1016/S0140-6736(19)30769-X.
9. Zewinger S, Rauen T, Rudnicki M, ... **Fliser D**, et al. Dickkopf-3 (DKK3) in Urine Identifies Patients with Short-Term Risk of eGFR Loss. *J Am Soc Nephrol* 2018;29: 2722-2733. doi: 10.1681/ASN.2018040405.
10. Zewinger S, Kleber ME, Tragante V, ... **Fliser D**, et al. Relations between lipoprotein(a) concentrations, LPA genetic variants, and the risk of mortality in patients with established coronary heart disease: a molecular and genetic association study. *Lancet Diabetes Endocrinol* 2017;5: 534-543. doi: 10.1016/S2213-8587(17)30096-7.

Category B

Patents

1. Novel Markers for Chronic Kidney Disease (EP2115168, US2010143951, WO2008089936, EP20070001340)
2. Symmetric dimethylarginine (SDMA) modifies high-density lipoprotein HDL to induce endothelial dysfunction (WO 2013124478 A1)

Academic Distinctions

2018 – 2025	Renal Science Chair of the European Renal Association
Since 2019	Honorary Member of the Japanese Society of Nephrology
2016 – 2019	Paper Selection Committee Chair of the European Renal Association
2016	Scientific Committee Chair of the 53. European Renal Association Congress (Vienna)
Since 2015	Fellow of the European Renal Association
2015 – 2018	Ordinary Council Member of the European Renal Association
2015 – 2018	Chair of the joint “Cardio-Renal” working group of the Deutsche Gesellschaft für Nephrologie and Deutsche Gesellschaft für Kardiologie
2005	Franz-Volhard-Award
2004	Bernd-Tersteegen-Award
1995	Nils-Alwall-Award

Data protection and consent to the processing of optional data

[X] I expressly consent to the processing of the voluntary (optional) information, including “special categories of personal data” in connection with the DFG’s review and decision-making process regarding my proposal. This also includes forwarding my data to the external reviewers, committee members and, where applicable, foreign partner organisations who are involved in the decision-making process. To the extent that these recipients are located in a third country (outside the European Economic Area), I additionally consent to them being granted access to my data for the above-mentioned purposes, even though a level of data protection comparable to EU law may not be guaranteed. For this reason, compliance with the data protection principles of EU law is not guaranteed in such cases. In this respect, there may be a

violation of my fundamental rights and freedoms and resulting damages. This may make it more difficult for me to assert my rights under the General Data Protection Regulation (e.g. information, rectification, erasure, compensation) and, if necessary, to enforce these rights with the help of authorities or in court.

I may **revoke** my consent in whole or in part at any time – with effect for the future, freely and without giving reasons – vis-à-vis the DFG (postmaster@dfg.de). The lawfulness of the processing carried out up to that point remains unaffected. Insofar as I transmit “special categories of personal data” relating to third parties, I confirm that the necessary legitimation under data protection law exists (e.g. based on consent).

I have taken note of the DFG’s Data Protection Notice relating to research funding, which I can access at www.dfg.de/privacy_policy and I will forward it to such persons whose data the DFG processes as a result of being mentioned in this CV.

7.1.7. Univ.-Prof. Dr. rer. nat. Claudia Goettsch (née Stielow)

Personal Data

Title	Univ.-Prof. Dr. rer. nat.
First name	Claudia
Name	Goettsch
Current position	Prof. of Physiology
Current institution(s)/site(s), country	Institute of Physiology; Medical Faculty Carl Gustav Carus, TU Dresden
Identifiers/ORCID	0000-0002-7973-1329

Qualifications and Career

Stages	Periods and Details
Degree program	2019 Venia Legendi for Experimental Cardiovascular Research, RWTH Aachen, Germany, Title: Molecular mechanisms of vascular calcification 1998 – 2003 Study of Nutritional Science Friedrich Schiller University Jena, Germany 2003 <i>Diploma</i> (Dipl. Trophologe)
Doctorate	2003 – 2006 PhD student Department of Vascular Endothelium and Microcirculation, Technical University Dresden, Germany (Prof. H. Morawietz) 2007 PhD defence, Technical University Dresden, Germany, Title: <i>“Regulation of oxidative stress by biomechanical forces and high-fat diet in the cardiovascular system.”</i> Magna cum laude
Stages of academic/professional career	Since 2025 Professor of Physiology Institute of Physiology; Medical Faculty Carl Gustav Carus, TU Dresden, Germany (Prof. Dr. S. Speier) Since 2018 Head of the Graduate School of the SFB TRR219, RWTH Aachen, Germany 2016 – 2024 Research group leader Department of Internal Medicine I, Uniklinik RWTH Aachen, Germany (Prof. Dr. med. N. Marx) 2011 – 2016 Senior Postdoctoral Research Fellow Harvard University Medical School, Center for Interdisciplinary Cardiovascular Sciences, Cardiovascular Division, Brigham and Women’s Hospital, Boston, MA, USA (Prof. E Aikawa, MD, PhD) 2007 – 2011 Postdoc, Division of Endocrinology, Diabetes and Bone Diseases, Technical University, Dresden, Germany (Prof. Dr. med. LC Hofbauer)

Supplementary Career Information

10/2006 – 08/2007 Maternity leave

Activities in the Research System

- Since 2025 Member of the *Commission of Experimental Cardiology* of the German Cardiac Society
- Since 2025 Member of Dresden International Graduate School for Interdisciplinary Life Science (DIGS-ILS), TU Dresden
- Since 2024 Nucleus member of the working group “Vascular Biology”, German Cardiac Society
- Since 2024 Board member, German Society of Arteriosclerosis (treasure)
- 2022 - 2024 Chair of MD doctoral program ‘Promotionskolleg’, Medical Faculty, RWTH Aachen University, Germany (2019-2022 vice-chair)
- 2019 - 2024 Member of several commissions, Medical Faculty, RWTH Aachen University, Germany
- Since 2022 Editorial board of *Journal Bone and Mineral Research*
- Since 2020 Nucleus member of the Working Group “Atherosclerosis and Vascular Biology”, European Society of Cardiology (2022-2024: treasure; since 10/2024: ex officio member)
- Since 2019 Scientific board of Trillium Extracellular Vesicles – Journal of the German Society of Extracellular Vesicles
- Since 2017 Member of the Women’s Leadership Committee, International Society of Applied Cardiovascular Biology
- Since 2011 Scientific reviewer for DFG, Deutsche Herzstiftung, Arthritis Research UK, Dutch Heart Foundation, DLR Germany, Vidi talent program, FNS - Switzerland
- Since 2009 Reviewer of numerous scientific journals

Organization of scientific meetings

- 2025 Scientific lead: 2nd Spring School AG4, AG41, AG23, German Cardiac Society, Glashuetten
- 2024 Co-organization: ‘Joint meeting of German SFB research consortia & graduate schools’ organized by the SFB/TRR219, 09.-10.10.2024, Frankfurt
- 2024 Scientific lead: 1st Spring School AG4 & AG41, German Cardiac Society, Glashuetten
- 2022 Co-organizer of Cardioresenal Summer school, Skopje, North Macedonia
- 2020 Co-organizer of the fall meeting of the German Society of Extracellular Vesicles
- 2018 Co-organizer of the workshop on Applied Cardiovascular Biology, ISACB, France
- Since 2018 Organizer of the annual summer school of the Cardio-Renal Graduate School
- Since 2018 Organizer of the annual basic research retreat, Cardiology Department

Supervision of Researchers in Early Career Phases

Supervision of multiple doctoral dissertations, PhDs (defended: 4), MDs (defended: 4)

Scientific Results

Category A

1. Hutcheson JD, **Goettsch C**. Cardiovascular Calcification heterogeneity in chronic kidney disease. *Circ Res*. 2023;132:993-1012. doi: 10.1161/CIRCRESAHA.123.321760.
2. Iqbal F*, Schlotter F*, Becker-Greene D*, Lupieri A, **Goettsch C**, Hutcheson JD, Rogers MA, Itoh S, Halu A, Lee LH, Blaser MC, Mlynarchik AK, Hagita S, Kuraoka S, Chen HY, Engert JC, Passos LSA, Jha PK, Osborn EA, Jaffer FA, Body SC, Robson SC, Thanassoulis G, Aikawa M, Singh SA, Sonawane AR, Aikawa E. Sortilin enhances fibrosis and calcification in aortic valve disease by inducing interstitial cell heterogeneity. *Eur Heart J*. 2023;44:885-898. doi: 10.1093/eurheartj/ehac818.
3. Jankowski V, Saritas T, Kjolby MF, Hermann J, Speer T, Himmelsbach A, Mahr K, Heuschkel M, Schunk SJ, Thirup S, Winther S, Bottcher M, Nyegard M, Nykjaer A, Kramann R, Kaesler N, Jankowski J, Floege J, Marx N, **Goettsch C**. Carbamylated sortilin associates with cardiovascular calcification in patients with chronic kidney disease. *Kidney Int*. 2022;101:574-584. doi: 10.1016/j.kint.2021.10.018.
4. Heuschkel M, Babler A, Heyn J, van der Vorst E, Steeman M, Gesper M, Kappel B, Magne D, Goueffic Y, Jahnen-Dechent W, Kramann R, Marx N, Quillard T, **Goettsch C**. Distinct role of mitochondrial function and protein kinase C in intimal and medial calcification in vitro. Manuscript in preparation. *Front Cardiovasc Med*. 2022;9:959457. doi: 10.3389/fcvm.2022.959457.
5. Heuschkel MA, Skenteris NT, Hutcheson JD, van der Valk DD, Bremer J, Goody P, Hjortnaes J, Jansen F, Bouten CVC, van den Bogaardt A, Matic L, Marx N, **Goettsch C**. Integrative Multi-Omics Analysis in Calcific Aortic Valve Disease Reveals a Link to the Formation of Amyloid-Like Deposits. *Cells*. 2020;9:2164. doi: 10.3390/cells9102164.
6. **Goettsch C**, Iwata H, Hutcheson JD, O'Donnell CJ, Chapurlat R, Cook NR, Aikawa M, Szulc P, Aikawa E. Serum Sortilin Associates With Aortic Calcification and Cardiovascular Risk in Men. *Arterioscler Thromb Vasc Biol*. 2017;37:1005-1011. doi: 10.1161/ATVBAHA.116.308932.
7. Kramann R, **Goettsch C**, Wongboonsin J, Iwata H, Schneider RK, Kuppe C, Kaesler N, Chang-Panesso M, Machado FG, Gratwohl S, Madhurima K, Hutcheson JD, Jain S, Aikawa E, Humphreys EB. Adventitial MSC-like cells are progenitors of vascular smooth muscle cells and drive vascular calcification in chronic kidney disease. *Cell Stem Cell*; 2016;19:628-642. doi: 10.1016/j.stem.2016.08.001.
8. **Goettsch C***, Hutcheson JD, Aikawa M, Iwata H, Pham T, Nykjaer A, Kjolby M, Rogers M, Michel T, Shibasaki M, Hagita S, Kramann R, Rader DJ, Libby P, Singh SA, Aikawa E* (*corr. authors). Sortilin mediates vascular calcification via its recruitment into extracellular vesicles. *J Clin Invest* 2016;126:1323-36. doi: 10.1172/JCI80851.
9. Hutcheson JD, **Goettsch C**, Bertazzo S, Maldonado N, Ruiz JL, Goh WWB, Yabusaki K, Faits T, Bouten C, Franck G, Quillard T, Libby P, Aikawa M, Weinbaum S, Aikawa E. Genesis and growth of extracellular-vesicle-derived microcalcification in atherosclerotic plaques. *Nat Mater* 2016;15:335-43. doi: 10.1038/nmat4519.
10. Hutcheson JD*, **Goettsch C***, Pham T, Iwashita M, Aikawa M, Singh SA, Aikawa E. Enrichment of calcifying extracellular vesicles using density-based ultracentrifugation protocol. *J Extracell Vesicles* 2014;3:25129. doi: 10.3402/jev.v3.25129. ***Equal contribution.**

Category B

Patent: Sortilin 1 is a novel inducer of vascular calcification, Patent number: U.S. Patent No. 10508278; Date of Patent: December 17, 2019; Inventors: E Aikawa, C Goettsch, M Aikawa

Mitochondrial phosphate carrier targets for treating soft-tissue calcification, Publication number: 20170355988; Publication date: December 14, 2017, Inventors: E Aikawa, J Hutcheson, C Goettsch, M Aikawa

Academic Distinctions

- 2017 W.H. Hauss Award, German Atherosclerosis Society
- 2016 Allan Callow Young Investigator Award, International Society for Applied Cardiovascular Biology, Banff, Canada
- 2016 Finalist for the Peter-Hans-Hofschneider Professorship, Zurich, Switzerland
- 2016 Finalist for the 2016 Irvine H. Page Young Investigator Research Award, Annual Meeting of the Arteriosclerosis, Thrombosis, and Vascular Biology Society, Nashville, TN, USA
- 2014 Alan Lerner Research Poster Award from Brigham and Women's Hospital Cardiovascular Division, Boston, MA

Data protection and consent to the processing of optional data

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I have taken note of the DFG’s Data Protection Notice relating to research funding, which I can access at www.dfg.de/privacy_policy and I will forward it to such persons whose data the DFG processes as a result of being mentioned in this CV.

7.1.8. Dr. med. Konrad Hoeft

Personal Data

Title	Dr. med.
First name	Konrad
Name	Hoeft
Current position	Physician Scientist
Current institution(s)/site(s), country	Department of Nephrology and Immunology, Uniklinik RWTH Aachen, Germany
Identifiers/ORCID	0000-0002-0265-0061

Qualifications and Career

Stages	Periods and Details
Degree program	2010 – 2017 Medical School, RWTH Aachen University, Germany
Doctorate	2019 Doctoral Thesis in Medicine, Department of Anesthesiology, RWTH Aachen University, Germany, Disputation with summa cum laude
Stages of academic/professional career	Since 2024 Dual Post-Doctoral Fellowship, Center for Cardiovascular Research, St. Louis, USA and Department of Nephrology and Immunology, Uniklinik RWTH Aachen, Germany (R. Kramann and K.J. Lavine) Since 2017 Residency, Department of Nephrology and Immunology, Uniklinik RWTH Aachen, Germany Directors: Prof. J. Flöge (until 07/2023) and Prof. R. Kramann (since 08/2023) 2024 – 2025 Dual Post-Doctoral Fellowship, Department of Nephrology and Immunology, Uniklinik RWTH Aachen, Germany and Department of Internal Medicine, Nephrology and Transplantation, Erasmus Medical Center, Rotterdam, Netherlands (Supervisor: R. Kramann) 2017 – 2023 Post-Doctoral Fellowship, Institute of Experimental Medicine and Systems Biology & Department of Nephrology and Immunology, Uniklinik RWTH Aachen, Germany (Supervisor: R. Kramann) 2014 – 2017 Medical Doctorate, Massachusetts General Hospital, Harvard Medical School, Boston, USA (10/2014-07/2015) and RWTH Aachen University, Germany (Supervisors: R. Rossaint, D. Bloch, A. Bagchi)

Activities in the Research System

Since 2025	Member of the START committee (Intramural program of the RWTH Aachen Faculty of Medicine to support young researchers) Clinical investigator within the TaC:Drop trial , a multicentre, open-label, randomised, two-arm, superiority trial for comparison of Envarsus vs. Advagraft in renal allograft transplantation
2023	Co-Founder Sequantrix GmbH, RWTH Biotech Spinout for Drug Development in Fibrotic Diseases using Artificial Intelligence Institutional Founder & Funding: Home BioSciences RWTH Innovation Spin-off Award 2023
Teaching	
Since 2024	Seminars in Nephrology, BSc Midwifery, RWTH Aachen University
Since 2023	Leader Taskforce “Improving renal fellowship training and education” of the Medical Clinic II, RWTH Aachen University
Since 2023	Lecture Internal Medicine for dentistry students, RWTH Aachen
Since 2021	Anamnesis training for medical students, RWTH Aachen Medical School
Since 2018	Clinical examination courses for medical students, RWTH Aachen Medical School

Ad hoc reviewer

Kidney International, Nephrology Dialysis Transplantation, BMC Anesthesiology, Cardiovascular Research

Supervision of Researchers in Early Career Phases

Direct supervisor of 3 medical doctoral candidates (2 graduated with summa cum laude) and 1 master student. Currently direct supervision of 2 ongoing MD projects.

Scientific Results

Category A

1. **Hoeft K***, Bleckwehl T*, Schumacher D, ... Milting H, Hayat S, Kramann R. Label-free single-cell RNA Multiplexing leveraging Genetic Variability. *Nature Communications* 2024;15(1):10612. doi: 10.1038/s41467-024-54270-6.
2. **Hoeft K***, Koch L*, Ziegler S, Zhang L, Luetke S, ... Mann M, Sengle G, Hayat S, Kramann R. ADAMTS12 promotes fibrosis by restructuring extracellular matrix to enable activation of injury-responsive fibroblasts. *The Journal of Clinical Investigation* 2024;134(18):e170246. doi: 10.1172/JCI170246.
3. **Hoeft K***, Schaefer GJL*, Kim, H, Schumacher D, ... Boor P, Schneider RK, Hayat S, Kramann R. Platelet-instructed SPP1+ macrophages drive myofibroblast activation in fibrosis in a CXCL4-dependent manner. *Cell Reports* 2023;42(2):112131. doi: 10.1016/j.celrep.2023.112131.
4. Peisker F, Halder M, Nagai J, Ziegler S, Kaesler N, **Hoeft K**, ... Costa I, Kramann R. Mapping the cardiac vascular niche in heart failure. *Nature Commun* 2022;13(1):3027. doi: 10.1038/s41467-022-30682-0.
5. Gross A, Zhou B, Bewersdorf L, Schwarz N, Schacht GM, Boor P, **Hoeft K**, ..., Merkel R, Leube RE, Strnad P. Desmoplakin Maintains Transcellular Keratin Scaffolding and Protects

- From Intestinal Injury *Cellular and Molecular Gastroenterology and Hepatology* 2022;13(4):1181–200. doi: 10.1016/j.jcmgh.2021.12.009
6. Kuppe C, Ramirez Flores RO, Li Z, ... **Hoeft K**, ..., Schapiro D, Schneider RK, Lavine K, Milting H, Costa IG, Saez-Rodriguez J, Kramann R. Spatial multi-omic map of human myocardial infarction. *Nature* 2022;608 (7924):766-777. doi:10.1038/s41586-022-05060-x.
 7. Xu Y, Kuppe C, Perales-Patón J, Hayat S, Kranz J, Abdallah AT, Nagai J, Li Z, Peisker F, Saritas T, Halder M, Menzel S, **Hoeft K**, ... Saez-Rodriguez J, Freedman BS, Kramann R. Adult human kidney organoids originate from CD24+ cells and represent an advanced model for adult polycystic kidney disease. *Nature Genetics* 2022;54(11):1690-1701. doi: 10.1038/s41588-022-01202-z.
 8. Kramann R, Machado FG, Wu H, Kusaba T, **Hoeft K**, Schneider R, Humphreys BD. *Parabiosis and single-cell RNA-Sequencing reveal a limited contribution of monocytes to myofibroblasts in kidney fibrosis JCI Insight* 2018;3(9):e99561. doi: 10.1172/jci.insight.99561.
 9. **Hoeft K**, Bloch DB, Graw JA, Malhotra R, Ichinose F, Bagchi A. Iron Loading Exaggerates the Inflammatory Response to the Toll-like Receptor 4 Ligand Lipopoly-saccharide by Altering Mitochondrial Homeostasis. *Anesthesiology* 2017;127(1):121–35. doi: 10.1097/ALN.0000000000001653.
 10. **Hoeft K**, Kramann R. Developmental Signaling and Organ Fibrosis *Current Pathobiology Reports* 2017;5(2):133–43. doi:10.1007/s40139-017-0136-8.

Category B

1. Patent: ADAMTS12 as a target molecule for the treatment of chronic renal failure and renal fibrosis. (DE102022132156A, 04/2024)
2. Patent: ADAMTS12 and HMCN1 as target molecules for the treatment of chronic kidney insufficiency and kidney fibrosis (DE102024112149.1, 12/2022)
3. Koch L, **Hoeft K**, Kramann R. Artesunate: attenuating TLR4/MD2 signaling to alleviate cardiac fibrosis. *Signal Transduct Target Ther.* 2025 10 (1): 46. doi:10.1038/s41392-025-02131-z.
4. Koch L, Kramann R, **Hoeft K**. Die Metalloprotease ADAMTS12 als Schnittstelle zwischen Fibrose und Heilung (The metalloprotease ADAMTS12 at the intersection between fibrosis and regeneration). *NEPHRO-News* 2024 06/24
5. Seibt T, Wahida A, **Hoeft K**, Kemmner S, Linkermann A, Mishima E, Conrad M. The biology of ferroptosis in kidney disease. *Nephrology Dialysis Transplantation* 2024 39(11):1754-1761. doi:10.1093/ndt/gfae097.
6. Varo, H, Wagenmakers A, **Hoeft K**., Callemeyn J, Bodewes R, Bramer W, Stubbs, , Kramann R., Naesens M, Clahsen-Van Groningen M.C. Expanding the Scope of Microvascular Inflammation: Unveiling Its Presence Beyond Antibody-Mediated Rejection Into T-Cell Mediated Contexts. *Transplant International* 2024 37, 13464. doi.org/10.3389/ti.2024.13464
7. Science communication: video abstract, ADAMTS12 promotes fibrosis and enables activation of injury-responsive fibroblasts for *The Journal of Clinical Investigation*; www.youtube.com/watch?v=RyiTCuDwLM0
8. Science communication: informational video for the public on ADAMTS12 as part of the paper of the month program of the RWTH Aachen Medical Faculty; www.youtube.com/watch?v=qWNoK9rxZU8

Academic Distinctions

- 2025 Paper of the Month Award of the RWTH Aachen Medical Faculty
- 2021 3. Price Junge Niere Meeting 2021 (DGfN)
- 2020 Borchers Plakette, RWTH Aachen University, for doctoral thesis
- 2014 Boehringer Ingelheim Fonds MD Fellowship
- 2014 Deans List (Top 5%), Medical School, RWTH Aachen, Germany

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I have taken note of the DFG’s Data Protection Notice relating to research funding, which I can access at www.dfg.de/privacy_policy and I will forward it to such persons whose data the DFG processes as a result of being mentioned in this CV.

7.1.9. Dr. rer. nat. Mathias Hohl

Personal Data

Title	Dr. rer. nat.
First name	Mathias
Name	Hohl
Current position	Postdoc / Laboratory Supervisor
Current institution(s)/site(s), country	Department of Internal Medicine III Saarland University – Campus Homburg and Saarland University Medical Centre, Homburg/Saar, Germany
Identifiers/ORCID	0000-0001-6946-9825

Qualifications and Career

Stages	Periods and Details
Degree program	2002 – 2007 Molecular Biochemistry University of Saarland, Germany 2001 Graduated as a 'Diplom-Biologe' at the University of Kaiserslautern under the supervision of PD M. Redenbach 1996 – 2001 Biology University Kaiserslautern, Germany
Doctorate	2007 Graduated as a PhD (Dr. rer. nat.) at the University of the Saarland under the supervision of Prof. G. Thiel
Stages of academic/professional career	Since 2013 Permanent position as a laboratory supervisor at the Department of Internal Medicine III, Saarland University, Campus Homburg and Saarland University Medical Centre, Homburg/Saar, Germany Since 2006 Scientific assistant (Postdoc position) at the Department of Internal Medicine III, Saarland University, Campus Homburg and Saarland University Medical Centre, Homburg/Saar, Germany

Scientific Results

Category A

- Hohl M**, Lauder L, Sevimli Ö, Tokcan M, Wagmann L, Götzinger F, Schneider C, Hübner U, Lehnert U, Meyer MR, Böhm M, Mahfoud F. Efficacy of Antihypertensive Drugs of Different Classes After Renal Denervation in Spontaneously Hypertensive Rats. *Hypertension*. 2023; 80(6):e90-e100. doi: 10.1161/HYPERTENSIONAHA.122.20756.

2. **Hohl M**, Selejan SR, Wintrich J, Lehnert U, Speer T, Schneider C, Mauz M, Markwirth P, Wong DWL, Boor P, Kazakov A, Mollenhauer M, Linz B, Klinkhammer BM, Hübner U, Ukena C, Moellmann J, Lehrke M, Wagenpfeil S, Werner C, Linz D, Mahfoud F, Böhm M. Renal Denervation Prevents Atrial Arrhythmogenic Substrate Development in CKD. *Circ Res*. 2022; 130(6):814-828. doi: 10.1161/CIRCRESAHA.121.320104.
3. Selejan SR, Linz D, Mauz M, **Hohl M**, Huynh AKD, Speer T, Wintrich J, Kazakov A, Werner C, Mahfoud F, Böhm M. Renal denervation reduces atrial remodeling in hypertensive rats with metabolic syndrome. *Basic Res Cardiol*. 2022;117(1):36. doi: 10.1007/s00395-022-00943-6.
4. **Hohl M**, Mayr M, Lang L, Nickel AG, Barallobre-Barreiro J, Yin X, Speer T, Selejan SR, Goettsch C, Erb K, Fecher-Trost C, Reil JC, Linz B, Ruf S, Hübschle T, Maack C, Böhm M, Sadowski T, Linz D. Cathepsin A contributes to left ventricular remodeling by degrading extracellular superoxide dismutase in mice. *J Biol Chem*. 2020;295(36):12605-12617. doi: 10.1074/jbc.RA120.013488.
5. Linz B, **Hohl M**, Lang L, Wong DWL, Nickel AG, De La Torre C, Sticht C, Wirth K, Boor P, Maack C, Speer T, Jespersen T, Schotten U, Sanders P, Böhm M, Linz D. Repeated exposure to transient obstructive sleep apnea-related conditions causes an atrial fibrillation substrate in a chronic rat model. *Heart Rhythm*. 2020;17:S1547-5271(20)30974-7, doi: 10.1016/j.hrthm.2020.10.011.
6. Linz B, **Hohl M**, Mishima R, Saljic A, Lau DH, Jespersen T, Schotten U, Sanders P, Linz D. Pharmacological inhibition of sodium-proton-exchanger subtype 3-mediated sodium absorption in the gut reduces atrial fibrillation susceptibility in obese spontaneously hypertensive rats. *Int J Cardiol Heart Vasc*. 2020;28:100534, doi: 10.1016/j.ijcha.2020.100534.
7. **Hohl M**, Erb K, Lang L, Ruf S, Hübschle T, Dhein S, Linz W, Elliott AD, Sanders P, Zamyatkin O, Böhm M, Schotten U, Sadowski T, Linz D. Cathepsin A mediates ventricular remote remodeling and atrial cardiomyopathy in rats with ventricular ischemia/reperfusion. *JACC Basic Transl Sci*. 2019;4(3):332-344, doi: 10.1016/j.jacbts.2019.01.008.
8. **Hohl M**, Linz D, Fries P, Müller A, Stroeder J, Urban D, Speer T, Geisel J, Hummel B, Laufs U, Schirmer SH, Böhm M, Mahfoud F. Modulation of the sympathetic nervous system by renal denervation prevents reduction of aortic distensibility in atherosclerosis prone ApoE-deficient rats. *J Transl Med*. 2016;14(1):167, doi: 10.1186/s12967-016-0914-9.
9. Linz D, **Hohl M**, Dhein S, Ruf S, Reil JC, Kabiri M, Wohlfart P, Verheule S, Böhm M, Sadowski T, Schotten U. Cathepsin A mediates susceptibility to atrial tachyarrhythmia and impairment of atrial emptying function in Zucker diabetic fatty rats. *Cardiovasc Res*. 2016;110(3): 371-80. doi: 10.1093/cvr/cvw071.
10. Nickel AG, von Hardenberg A, **Hohl M**, Löffler JR, Kohlhaas M, Becker J, Reil JC, Kazakov A, Bonnekoh J, Stadelmaier M, Puhl SL, Wagner M, Bogeski I, Cortassa S, Kappl R, Pasioka B, Lafontaine M, Lancaster CR, Blacker TS, Hall AR, Duchon MR, Kästner L, Lipp P, Zeller T, Müller C, Knopp A, Laufs U, Böhm M, Hoth M, Maack C. Reversal of mitochondrial transhydrogenase causes oxidative stress in heart failure. *Cell Metab*. 2015;22(3): 472-84. doi: 10.1016/j.cmet.2015.07.008.

Other Information

Memberships: Deutsche Gesellschaft für Kardiologie (DGK)
Heart Failure Association (HFA)
European Society of Cardiology (ESC)

Data protection and consent to the processing of optional data

☒ I expressly consent to the processing of the voluntary (optional) information, including “special categories of personal data” in connection with the DFG’s review and decision-making process regarding my proposal. This also includes forwarding my data to the external reviewers, committee members and, where applicable, foreign partner organisations who are involved in the decision-making process. To the extent that these recipients are located in a third country (outside the European Economic Area), I additionally consent to them being granted access to my data for the above-mentioned purposes, even though a level of data protection comparable to EU law may not be guaranteed. For this reason, compliance with the data protection principles of EU law is not guaranteed in such cases. In this respect, there may be a violation of my fundamental rights and freedoms and resulting damages. This may make it more difficult for me to assert my rights under the General Data Protection Regulation (e.g. information, rectification, erasure, compensation) and, if necessary, to enforce these rights with the help of authorities or in court.

I may **revoke** my consent in whole or in part at any time – with effect for the future, freely and without giving reasons – vis-à-vis the DFG (postmaster@dfg.de). The lawfulness of the processing carried out up to that point remains unaffected. Insofar as I transmit “special categories of personal data” relating to third parties, I confirm that the necessary legitimisation under data protection law exists (e.g. based on consent).

I have taken note of the DFG’s Data Protection Notice relating to research funding, which I can access at www.dfg.de/privacy_policy and I will forward it to such persons whose data the DFG processes as a result of being mentioned in this CV.

7.1.10. Univ.-Prof. Dr. rer. nat. Joachim Jankowski

Personal Data

Title	Univ.-Prof. Dr. rer. nat.
First name	Joachim
Name	Jankowski
Current position	Full professor (W3) and Department Chair
Current institution(s)/site(s), country	Institute for Molecular Cardiovascular Research, Uniklinik RWTH Aachen, Germany
Identifiers/ORCID	0000-0002-4528-2967

Qualifications and Career

Stages	Periods and Details
Degree program	2001 Venia Legendi for exp. Pathobiochemistry, University of Bochum, Germany (Univ.-Prof. Dr. W. Zidek) 1986 – 1991 Chemistry, University of Bochum, Germany
Doctorate	1992 – 1995 PhD study at the University of Bremen, Germany
Stages of academic/professional career	2022 Co-founder AMICARE Development GmbH Since 2018 Spokesman of the DFG-SFB/TRR219 “Mechanisms of cardiovascular complications in chronic kidney disease” Since 2018 Chairman of ERA-EDTA working group “EUTox” 2018 Distinguished Fellow of the European Renal Association (FERA) 2018 – 2021 Coordinator of EU-ITN “CaReSyAn” Since 2014 Director of the Institute for Molecular Cardiovascular Research, RWTH Aachen, Germany 2010 – 2014 Univ. Professor “Experimental Nephrology and Hypertension”, Charité, Germany 2007 – 2010 Associate Professor at the University Hospital Charité, Germany 2001 – 2007 Assistant Professor at the University Hospital Charité, Germany; head of the working group “Bioanalytics” 1996 – 2000 Scientific Assistant (Working Group Leader) at the University of Bochum, Germany 1995 – 1996 Scientific Assistant (Post-doc) at the University of Münster, Germany 1992 – 1995 Scientific Assistant of the company “biomedical Inc.”, Germany 1992 Scientific Assistant of Max-Planck Institute for System-Physiology, Dortmund, Germany

Activities in the Research System

Reviewing activities and participation in boards and panels

Journal Reviewer: *Journal of Chromatography, Journal of proteomics, Journal of clinical proteomics, Kidney International, Toxins, Circulation, Circulation Research, Nature Medicine, Nature Communication,*

Thesis Reviewer (PhD): RWTH Aachen, DE; Charité Berlin, DE; Maastricht University, NL

Grant / Abstract Reviewer: German Research Foundation (DFG); Dutch Research Council (NWO), French National Research Agency (ANR), Fonds National de la Recherche Scientifique (FNRS), Bundesministerium für Bildung und Forschung (BMBF), Hartstichting (NL), Österreichischer Wissenschaftsfonds (FWF)

Boards and panels: NDT Editorial Board, ESAO Board, IJAO Editorial Board, WAA Board, Circulation research Editorial Board, Chair of the EUTox working group, chair of the COST-action PerMediK

Memberships

German Society for Nephrology, German Society for Cardiology, European Society of Artificial Organs (ESAO), European Renal Association, European Uremic Toxin Work Group (EUTox)

Teaching

Several lecture series and seminars within the Curriculum of the Model degree program of Medicine in Faculty 10 and degree courses in Faculty 1

Coordinator of cross-border lecture series for Master students in Germany, Belgium and the Netherlands

Organisation of ESAO Summer School 2022, organisation of the Joint meeting of German DFG-funded CRC consortia graduate schools focusing on heart, vasculature and kidney

Coordinator of the “New Tools for the Prevention of Cardiovascular Diseases and Disorders in Chronic Kidney Disease” (NTCVD) biobank embedded in the National Genome Research Network in Germany

Coordinator of the EU-ITN “Combatting the CardioRenal Syndrome: towards an integrative Analysis to reduce cardiovascular burden in chronic kidney disease” (CaReSyAn).

Professor at the School for Cardiovascular Diseases at University of Maastricht, The Netherlands

Supervision of Researchers in Early Career Phases

Supervision of several PhD students at RWTH Aachen and Charité Berlin (>30), 3 successful habilitations, currently ongoing supervision of 20 PhD students and 8 MD students

Scientific Results

Category A

1. Puente-Secades S, Mikolajetz D, Gayrard N, Jankowski V, Hermann J, Bhargava S, Meyer A, Argilés A, Saritas T, van der Vorst E, Wu Z, Noels H, Tepel M, Alghamdi K, Ward D, Zidek W, Floege J, Schurgers L, Orth-Alampour S, **Jankowski J**. Vaso-constriction Inhibiting Factor: An endogenous inhibitor of vascular calcification as a calcimimetic of calcium-

- sensing receptor. *Cardiovas Res*. 2025;29;121(3):507-521. doi: 10.1093/cvr/cvaf016.
2. Curaj A, Vanholder R, Loscalzo J, Quach K, Wu Z, Jankowski V, **Jankowski J**. Cardiovascular Consequences of Uremic Metabolites: an Overview of the Involved Signaling Pathways. *Circ Res*. 2024;134:592-613. doi:10.1161/CIRCRESAHA.123.324001.1.
 3. Wu Z, Lohmoller J, Kuhl C, Wehrle K, **Jankowski J**. Use of Computation Ecosystems to Analyze the Kidney-Heart Crosstalk. *Circ Res*. 2023;132:1084-1100. doi: 10.1161/CIRCRESAHA.123.321765.
 4. Wu Z, Jankowski V, **Jankowski J**. Irreversible post-translational modifications - Emerging cardiovascular risk factors. *Mol Aspects Med*. 2022;86:101010. doi: 10.1016/j.mam.2021.101010.
 5. **Jankowski J**, Floege J, Fliser D, Böhm M, Marx N. Cardiovascular disease in chronic kidney disease: pathophysiological insights and therapeutic options. *Circulation*. 2021;143:1157-1172.10. doi: 10.1161/CIRCULATIONAHA.120.050686.
 6. Noels H, Lehrke M, Vanholder R, **Jankowski J**. Lipoproteins and fatty acids in CKD: from molecular and metabolic alterations to pathophysiology and risk for kidney and heart. *Nature Nephrology Reviews*. 2021;17(8):528-542. doi: 10.1038/s41581-021-00423-5.
 7. Hermann J, Brehmer K, Jankowski V, Lellig M, Hohl M, Mahfoud F, Speer T, Schunk SJ, Tschernig T, Thiele H, **Jankowski J**. Registration of image modalities for analyses of tissue samples using 3D image modelling. *Proteomics Clin Appl*. 2021;15:e1900143. doi: 10.1002/prca.201900143.
 8. Noels H, Boor P, Goettsch C, Hohl M, Jahnen-Dechent W, Jankowski V, Kindermann I, Kramann R, Lehrke M, Linz D, Maack C, Niemeyer B, Roma LP, Schuett K, Speer T, Wagenpfeil S, Werner C, Zewinger S, Böhm M, Marx N, Floege J, Fliser D, **Jankowski J**. The new SFB/TRR219 Research Centre. *Eur Heart J*. 2018;39(12):975-977. doi: 10.1093/eurheartj/ehy083.
 9. Salem S, Jankowski V, Asare Y, Liehn E, Welker P, Raya-Bermudez A, Pineda-Martos C, Rodriguez M, Munoz-Castaneda JR, Bruck H, Marx N, Machado FB, Staudt M, Heinze G, Zidek W, **Jankowski J**. Identification of the Vasoconstriction-Inhibiting Factor (VIF), a potent endogenous cofactor of Angiotensin II acting on the Angiotensin II Type 2 Receptor. *Circulation*. 2015;131(16):1426-34. doi: 10.1161/CIRCULATIONAHA.114.013168.
 10. Jankowski V, Tolle M, Vanholder R, Schonfelder G, van der Giet M, Henning L, Schlueter H, Paul M, Zidek W, **Jankowski J**. Uridine adenosine tetraphosphate: a novel endothelium-derived vasoconstrictive factor. *Nat Med* 2005;11: 223-227. doi: 10.1038/nm1188

Category B

Patents

1. Process for the removal of protein-bound toxins from the blood of chronic renal failure using high-frequency, electric fields (DE 10 2012 025 164.5/US-Ser. No. 61/740026)
2. Process for the removal of protein-bound toxins from the blood of uraemic patients (102011078700.3)
3. Perfusion for the co-culture of endothelial cells and smooth muscle cells to determine changes in the vascular pathophysiology s (P678009DE)
4. Diagnosis of chronic kidney disease by quantitative analysis of post-translational modifications of plasma proteins EP3132269B1

5. Cardioprotective effect of vasoconstriction-inhibiting factor (VIF) (WO 2020/161158 AI/patent published)
6. Peptides for prevention or treating heart and blood vessel diseases (EP20306687.3/patent application)

Academic Distinctions

Since 2019 Chair of European Uremic Toxin Work Group EUTox

Data protection and consent to the processing of optional data

☒ I expressly consent to the processing of the voluntary (optional) information, including “special categories of personal data” in connection with the DFG’s review and decision-making process regarding my proposal. This also includes forwarding my data to the external reviewers, committee members and, where applicable, foreign partner organisations who are involved in the decision-making process. To the extent that these recipients are located in a third country (outside the European Economic Area), I additionally consent to them being granted access to my data for the above-mentioned purposes, even though a level of data protection comparable to EU law may not be guaranteed. For this reason, compliance with the data protection principles of EU law is not guaranteed in such cases. In this respect, there may be a violation of my fundamental rights and freedoms and resulting damages. This may make it more difficult for me to assert my rights under the General Data Protection Regulation (e.g. information, rectification, erasure, compensation) and, if necessary, to enforce these rights with the help of authorities or in court.

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I have taken note of the DFG’s Data Protection Notice relating to research funding, which I can access at www.dfg.de/privacy_policy and I will forward it to such persons whose data the DFG processes as a result of being mentioned in this CV.

7.1.11. Prof. Vera Jankowski, PhD

Personal Data

Title	Prof. PhD
First name	Vera
Name	Jankowski
Current position	Apl. Professor and core facility leader
Current institution(s)/site(s), country	Institute for Molecular Cardiovascular Research, Uniklinik RWTH Aachen, Germany
Identifiers/ORCID	0009-0003-6416-0230

Qualifications and Career

Stages	Periods and Details
Degree program	2011 Habilitation and Venia legendi in Experimental Medicine, Charité Berlin, Germany 2001 – 2002 Study of Biochemistry, Free University of Berlin, Germany 1999 – 2001 Study of Biochemistry, Ruhr University of Bochum, Germany 1995 – 1999 Study of Medicine, Ruhr University of Bochum, Germany
Doctorate	2005 PhD in medical Science at the Institute of Biochemistry, University of Ghent, Belgium & Charité Berlin, Germany (supervisor: Prof. Dr. R. Vanholder)
Stages of academic/professional career	Since 2019 apl. Professor assignment, Uniklinik RWTH Aachen, Germany Since 2014 Research Group Leader (permanent position) at Institute for Molecular Cardiovascular Research, Uniklinik RWTH Aachen, Germany 2006 – 2014 Scientific Assistant at the Medical Clinic IV at the Hospital Charité – Berlin (CBF) 2006 – 2011 Habilitation study at the Medical Clinic IV at the Hospital Charité – (CBF)

Supplementary Career Information

Apprenticeship as tax assistant

Activities in the Research System

Memberships

RWTH Senate Member, Member European Uremic Toxin (EUTOX)

Teaching

Several lecture series and seminars within the Curriculum of the Model degree program of Medicine in Faculty 10 and degree courses in Faculty 1, RWTH Aachen University, Germany

Supervision of Researchers in Early Career Phases

Supervision of several PhD students at RWTH Aachen and Charité Berlin, 9 ongoing supervisions of PhD students and 3 ongoing supervisions of MDs

Scientific Results

Category A

1. Bonnin-Marquez A, Jankowski J, Maas SL, Hermann J, Kahles F, Lellig M, Fliser D, Schunk S, Stamellou E, Berger M, Speer T, Kalim S, Leong Wong DW, van der Vorst EPC, **Jankowski V**. Guanidinylation compromises the anti-inflammatory and anti-oxidative properties of apolipoprotein A-I in chronic kidney disease progression. *Kidney Int*. 2025;25:S0085-2538(25)00171-1. doi: 10.1016/j.kint.2025.02.010.
2. Kaesler N, Suresh K, Frisch J, Ziegler S, Grommes J, Gombert A, Prates Roma L, Kuppe C, Jankowski J, Floege J, de la Puente Secades S, Kramann R, **Jankowski V**. Vitamin K preserves gamma-glutamyl carboxylase activity against carbamylations in uremia: Implications for vascular calcification and adjunct therapies. *Acta Physiol (Oxf)*. 2025;241(5):e70040. doi: 10.1111/apha.70040.
3. Lellig M, Rodriguez M, Lopez-Baltanas R, Hermann J, Wollenhaupt J, Noels H, Zidek W, Tepel M, Mahfoud F, Jankowski J, Munoz-Castaneda JR, **Jankowski V**. Pyridoxal-5'-phosphate: A cost-effective treatment candidate for hypertensive patients? *J Intern Med*. 2024;296:435-448. doi: 10.1111/joim.20015.
4. Hermann J, Schurgers L, **Jankowski V**. Identification and characterization of post-translational modifications: Clinical implications. *Mol Aspects Med*. 2022;86: 101066. doi: 10.1016/j.mam.2022.101066.
5. **Jankowski V**, Saritas T, Kjolby M, Hermann J, Speer T, Himmelsbach A, Mahr K, Augusto Heuschkel M, Schunk SJ, Thirup S, Winther S, Bottcher M, Nyegard M, Nykjaer A, Kramann R, Kaesler N, Jankowski J, Floege J, Marx N, Goettsch C. Carbamylated sortilin associates with cardiovascular calcification in patients with chronic kidney disease. *Kidney International*. 2022; 101(3): 574-584. doi: 10.1016/j.kint.2021.10.018.
6. Schunk SJ, Hermann J, Sarakpi T, Triem S, Lellig M, Hahm E, Zewinger S, Schmit D, Becker E, Möllmann J, Lehrke M, Kramann R, Boor P, Lipp P, Laufs U, März W, Reiser J, Jankowski J, Fliser D, Speer T, **Jankowski V**. Guanidinylated Apolipoprotein C3 (ApoC3) Associates with Kidney and Vascular Injury. *Journal of the American Society of Nephrology*. 2021; 29;32(12):3146-3160. doi: 10.1681/ASN.2021040503.
7. Kork F, Jankowski J, Goswami A, Weis J, Brook G, Yamoah A, Anink J, Aronica E, Fritz S, Huck C, Schipke C, Peters O, Tepel M, Noels H, **Jankowski V**. Golgin A4 in CSF and granulovasoklar degeneraions of patients with Alzheimer disease. *Neurology*. 2018; 6;91(19):e1799-e1808. doi: 10.1212/WNL.0000000000006457.

8. Salem S, **Jankowski V**, Asare Y, Liehn E, Welker P, Raya-Bermudez A, Pineda-Martos C, Rodriguez M, Muñoz-Castañeda JR, Bruck H, Marx N, Machado FB, Staudt M, Heinze G, Zidek W, Jankowski J. Identification of the Vasoconstriction-Inhibiting Factor (VIF), a Potent Endogenous Cofactor of Angiotensin II Acting on the Angiotensin II Type 2 Receptor. *Circulation*. 2015;131(16):1426-34. doi: 10.1161/CIRCULATIONAHA.114.013168.
9. **Jankowski V**, Schulz A, Kretschmer A, Mischak H, Boehringer F, van der Giet M, Janke D, Schuchardt M, Herwig R, Zidek W, Jankowski J. The enzymatic activity of the VEGFR2 receptor for the biosynthesis of dinucleoside polyphosphates. *J Mol Med (Berl)*. 2013; 91(9):1095-107. doi: 10.1007/s00109-013-1036-y.
10. **Jankowski V**, Tölle M, Vanholder R, Schönfelder G, van der Giet M, Henning L, Schlüter H, Paul M, Zidek W, Jankowski J. Uridine adenosine tetraphosphate: a novel endothelium-derived vasoconstrictive factor. *Nature Medicine*. 2005;11(2):223-7. doi: 10.1038/nm1188.

Category B

Patents

1. Diagnosis of chronic kidney disease by quantitative analysis of post-translational modifications of plasma proteins EP3132269B1
2. Method for detection Lupus Nephritis: U.S Patent Application No.:147/767,014 ; European patent Application No:19202446.1
3. Process for the removal of protein-bound toxins from the blood of chronic renal failure using high-frequency, electric fields (DE 10 2012 025 164.5/US 61/740026
4. Cardioprotective effect of vasoconstriction-inhibiting factor (VIF) (WO 2020/161158)

Academic Distinctions

Honors and Awards

- 2007 Mentee of the Mentoring Program of the Charité
- 2007 Young Investigators, European Society of Hypertension, Milan, Italy
- 2006 Young Investigators, European Society of Hypertension, Madrid, Spain
- 2006 Rahel Hirsch Fellow, Charité
- 2006 Doctoral Award of the Berlin Scientific Society" e.V.
- 2005 Young Investigators, European Society of Hypertension, Milan, Italy
- 2005 34th Rostock Talks on Cardiovascular Function and Hypertension, Rostock, Germany
- 2004 Young Investigators, European Society of Hypertension, Paris, France
- 2004 Young Investigators, ERA-EDTA, Lisbon, Portugal
- 2004 Abstract -Grant ERA-EDTA, Lisbon, Portugal
- 2003 Young Investigators, European Society of Hypertension, Milan, Italy

Data protection and consent to the processing of optional data

☒ I expressly consent to the processing of the voluntary (optional) information, including “special categories of personal data” in connection with the DFG’s review and decision-making process regarding my proposal. This also includes forwarding my data to the external reviewers, committee members and, where applicable, foreign partner organisations who are involved in the decision-making process. To the extent that these recipients are located in a third country (outside the European Economic Area), I additionally consent to them being granted access to my data for the above-mentioned purposes, even though a level of data protection comparable to EU law may not be guaranteed. For this reason, compliance with the data protection principles of EU law is not guaranteed in such cases. In this respect, there may be a violation of my fundamental rights and freedoms and resulting damages. This may make it more difficult for me to assert my rights under the General Data Protection Regulation (e.g. information, rectification, erasure, compensation) and, if necessary, to enforce these rights with the help of authorities or in court.

I may **revoke** my consent in whole or in part at any time – with effect for the future, freely and without giving reasons – vis-à-vis the DFG (postmaster@dfg.de). The lawfulness of the processing carried out up to that point remains unaffected. Insofar as I transmit “special categories of personal data” relating to third parties, I confirm that the necessary legitimisation under data protection law exists (e.g. based on consent).

I have taken note of the DFG’s Data Protection Notice relating to research funding, which I can access at www.dfg.de/privacy_policy and I will forward it to such persons whose data the DFG processes as a result of being mentioned in this CV.

7.1.12. Dr. troph. Nadine Kaesler

Personal Data

Title	Dr. troph.
First name	Nadine
Name	Kaesler
Current position	Scientific employee
Current institution(s)/site(s), country	Department of Nephrology and Immunology, Uniklinik RWTH Aachen, Germany
Identifiers/ORCID	0000-0001-8097-7660

Qualifications and Career

Stages	Periods and Details
Degree program	2001 – 2007 Nutritional Science, Rheinische Friedrich-Wilhelms-University, Bonn, Germany
Doctorate	2014 PhD in Nutrition and Food Science, Rheinische Friedrich-Wilhelms-University, Bonn, Germany
Stages of academic/professional career	Since 2020 Member of the Nutrition and Dietetics team of the Uniklinik RWTH Aachen Since 2016 Scientific employee, Institute of Experimental Medicine and Systems Biology, Uniklinik RWTH Aachen, Prof. R. Kramann Since 2009 Scientific employee, Division of Nephrology and Immunology, Uniklinik RWTH Aachen, Prof. J. Floege (until 2023) Prof. R. Kramann (since 2023) 2007 – 2009 Scientific employee, Clinic for Cardiology, Pneumology and Angiology and Internal Intensive Medicine, Uniklinik RWTH Aachen, Prof. M. Kelm 2006 – 2007 Diploma thesis at the Institute of Molecular Biotechnology, RWTH Aachen, Prof. R. Goerlich

Supplementary Career Information

Currently, my research activities encompasses interdisciplinary projects in the fields of nephrology, cardiology and nutrition science. Especially, I am interested in the vitamin K metabolism in uremic calcification as well as in uremic cardiomyopathy. I work on basic science in fields of organ crosstalk up to translational approaches including industrial cooperations. Furthermore, my work includes the scientific coordination of clinical studies. Moreover, I support epilepsy patients on a ketogenic diet, in collaboration with the Department of Epileptology, Neurology, Uniklinik RWTH Aachen.

Activities in the Research System

Memberships

Verband für Ernährung und Diätetik e.V.

Ad-hoc Reviewer

Continuous peer-reviewing activities, various scientific journals (*Kidney International*, *Clinical Kidney Journal*, *British Journal of Nutrition*, etc.)

Presentations at national and international scientific meetings

Regular oral and poster presentations including Deutsche Gesellschaft für Nephrologie, European Renal Association, American Society of Nephrology, Deutsche Gesellschaft für Ernährungsmedizin

Teaching activities at the RWTH Aachen

Since 2024: Lectures on gender and co-morbidities for physicians

Since 2022: Practical courses cell biology for medical students
Lecture nutrition science for physicians

Since 2021: Lectures in the seminar nutritional medicine

2018: Practical course co-morbidities for medical students

Since 2018: Regular participation in didactic trainings

Invited talks

2024 Cardiorenal Disease & Nutrition, Aachen Conference on Cardio-Renal Disease and Diabetes, Germany

2023 The role of the nutrition team and the use of ketogenic protocols in use in Germany; Dr. Schaer, Triest, Italy
Bedeutsame Labor-Parameter bei Nierenkrankheiten; VFED Jahreskongress Aachen, Germany

Cardiac Remodeling in CKD, DGfN, Berlin, Germany
2022 Was ist Vitamin K2?; VFED Jahreskongress, Aachen, Germany
Vitamin K und Kalzifizierung; DGfN, Berlin, Germany

2020 Sclerostin and the vascular Bone Axis; EUROD Wintermeeting, Leuven, Belgium

2018 Nicotinamid als Phosphatmodulator im urämischen Mausmodell, DGfN Medicine Mittagssymposium, Berlin, Germany

2015 Überblick zu Mausmodellen in der kardiorenenalen Forschung; Home Academy, Fresenius Medical Care, Saarland, Germany

Clinical Studies

Impact of diet on the microbiome in CKD patients

Food supply during dialysis in Germany (EK AC 23-268)

Vitamin D uptake in chronic kidney disease <https://drks.de/search/de/trial/DRKS00029157>

Vitamin K uptake in chronic kidney disease <https://drks.de/search/de/trial/DRKS00025281>

Supervision of Researchers in Early Career Phases

Since 2009 I have co-supervised numerous medical students in their experimental lab work. Currently, I support 2 medical students.

Scientific Results

Category A

1. **Kaesler N**, Kaushik S, Frisch J, Ziegler S, Grommes J, Gombert A, Roma LP, Kuppe C, Jankowski J, Floege J, de la Puente-Secades S, Kramann R, Jankowski V. Vitamin K preserves gamma-glutamyl carboxylase activity against carbamylations in uremia: Implications for vascular calcification and adjunct therapies. *Acta Physiol (Oxf)*. 2025;241(5):e70040. doi: 10.1111/apha.70040.
2. **Kaesler N**, Cheng M, Nagai J, O'Sullivan J, Peisker F, Bindels EMJ, Babler A, Moellmann J, Droste P, Franciosa G, Dugourd A, Saez-Rodriguez J, Neuss S, Lehrke M, Boor P, Goettsch C, Olsen JV, Speer T, Lu TS, Lim K, Floege J, Denby L, Costa I, Kramann R. Mapping cardiac remodeling in chronic kidney disease. *Sci Adv*. 2023;9(47). doi: 10.1126/sciadv.adj4846.
3. Kuppe C, Ramirez Flores RO, Li Z, Hayat S, Levinson RT, Liao X, Hannani MT, Tanevski J, Wünnemann F, Nagai JS, Halder M, Schumacher D, Menzel S, Schäfer G, Hoeft K, Cheng M, Ziegler S, Zhang X, Peisker F, **Kaesler N**, Saritas T, Xu Y, Kassner A, Gummert J, Morshuis M, Amrute J, Veltrop RJA, Boor P, Klingel K, Van Laake LW, Vink A, Hoogenboezem RM, Bindels EMJ, Schurgers L, Sattler S, Schapiro D, Schneider RK, Lavine K, Milting H, Costa IG, Saez-Rodriguez J, Kramann R. Spatial multi-omic map of human myocardial infarction. *Nature*. 2022;608(7924):766-777. doi: 10.1038/s41586-022-05060-x.
4. Peisker F, Halder M, Nagai J, Ziegler S, **Kaesler N**, Hoeft K, Li R, Bindels EMJ, Kuppe C, Moellmann J, Lehrke M, Stoppe C, Schaub MT, Schneider RK, Costa I, Kramann R. Mapping the cardiac vascular niche in heart failure. *Nat Commun*. 2022;13(1):3027. doi: 10.1038/s41467-022-30682-0.
5. Cirilli I, Orlando P, Silvestri S, Marcheggiani F, Dłudla PV, **Kaesler N**, Tiano L. Carboxylative efficacy of trans and cis MK7 and comparison with other vitamin K isomers. *Biofactors*. 2022;48(5):1129-1136. doi: 10.1002/biof.1844.
6. **Kaesler N**, Schreibing F, Speer T, Puente-Secades S, Rapp N, Drechsler C, Kabgani N, Kuppe C, Boor P, Jankowski V, Schurgers L, Kramann R, Floege J. Altered vitamin K biodistribution and metabolism in experimental and human chronic kidney disease. *Kidney Int*. 2022;101(2):338-348. doi: 10.1016/j.kint.2021.10.029.
7. **Kaesler N**, Schurgers LJ, Floege J. Vitamin K and cardiovascular complications in chronic kidney disease patients. *Kidney Int*. 2021;100(5):1023-1036. doi: 10.1016/j.kint.2021.06.037.
8. **Kaesler N**, Baid-Agrawal S, Grams S, Nadal J, Schmid M, Schneider MP, Eckardt KU, Floege J, Bergmann MM, Schlieper G, Saritas T. Low adherence to CKD-specific dietary recommendations associates with impaired kidney function, dyslipidemia, and inflammation. *Eur J Clin Nutr*. 2021;75(9):1389-1397. doi: 10.1038/s41430-020-00849-3.
9. **Kaesler N**, Goettsch C, Weis D, Schurgers L, Hellmann B, Floege J, Kramann R. Magnesium but not nicotinamide prevents vascular calcification in experimental uraemia. *Nephrol Dial Transplant*. 2020;35(1):65-73. doi: 10.1093/ndt/gfy410.
10. **Kaesler N**, Verhulst A, De Maré A, Deck A, Behets GJ, Hyusein A, Evenepoel P, Floege J, Marx N, Babler A, Kramer I, Kneissel M, Kramann R, Weis D, D'Haese PC, Brandenburg VM. Sclerostin deficiency modifies the development of CKD-MBD in mice. *Bone*. 2018;107:115-123. doi: 10.1016/j.bone.2017.11.015.

Data protection and consent to the processing of optional data

☒ I expressly consent to the processing of the voluntary (optional) information, including “special categories of personal data” in connection with the DFG’s review and decision-making process regarding my proposal. This also includes forwarding my data to the external reviewers, committee members and, where applicable, foreign partner organisations who are involved in the decision-making process. To the extent that these recipients are located in a third country (outside the European Economic Area), I additionally consent to them being granted access to my data for the above-mentioned purposes, even though a level of data protection comparable to EU law may not be guaranteed. For this reason, compliance with the data protection principles of EU law is not guaranteed in such cases. In this respect, there may be a violation of my fundamental rights and freedoms and resulting damages. This may make it more difficult for me to assert my rights under the General Data Protection Regulation (e.g. information, rectification, erasure, compensation) and, if necessary, to enforce these rights with the help of authorities or in court.

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I have taken note of the DFG’s Data Protection Notice relating to research funding, which I can access at www.dfg.de/privacy_policy and I will forward it to such persons whose data the DFG processes as a result of being mentioned in this CV.

7.1.13. Univ.-Prof. Dr. med. Florian Kahles, MD

Personal Data

Title	Univ.-Prof. Dr. med., MD
First name	Florian
Name	Kahles
Current position	Senior Physician in Cardiology, DFG Emmy Noether Group Leader, W2-Professor for Experimental Cardiology
Current institution(s)/site(s), country	Department of Internal Medicine I Uniklinik RWTH Aachen, Germany
Identifiers/ORCID	0000-0001-6343-2562

Qualifications and Career

Stages	Periods and Details
Degree program	2008 – 2015 Medical studies at the University of Bonn, RWTH Aachen (Germany), University Hospital of Basel (Switzerland)
Doctorate	2015 Doctoral thesis (summa cum laude), RWTH Aachen (Prof. N. Marx), "PDE4 inhibition reduces neointima formation and inhibits VCAM-1 expression and histone methylation in an Epac-dependent manner"
Stages of academic/professional career	Since 2024 W2 University Professor of Experimental Cardiology Since 2023 DFG Emmy Noether-Group leader 2024 Fachkunde im Strahlenschutz 2024 Senior Physician Clinical Cardiology 2024 Board certification Internal Medicine and Cardiology 2022 FELASA C-Certificate (EU category B) 2021 Emergency medicine certification Since 2020 Independent research group leader, PI 2017 – 2020 Postdoctoral Fellowship, Massachusetts General Hospital, Harvard University, Boston, USA (Dr. Filip Swirski) 2016 GCP-Certificate, Uniklinik RWTH Aachen 2015 – 2024 Resident/Fellow, Department of Internal Medicine I, Uniklinik RWTH Aachen, Germany (Prof. N. Marx) 2014 FELASA B-Certificate, Uniklinik RWTH Aachen 2011 – 2020 Member of research laboratory of Prof. N. Marx, Uniklinik RWTH Aachen, Germany 2007 – 2010 Emergency medical services

Activities in the Research System

Membership leadership committees

Since 2025	Nucleus member Section Clinical Atherosclerosis (AG41), DGK
Since 2024	Deputy Speaker Section Heart and Diabetes (AG23), DGK; Nucleus member Section Vascular Biology (AG4), DGK; Ambassador YoungDGK
Since 2022	Member Task Force Basic Science, DGK Board-Member „Wissenschaftlicher Beirat“, DGAF
Since 2018	Member of Young Internists, DGIM
Since 2015	Member Cardiovascular Section, DGIIN
Since 2013	Member of DGK Sections: YoungDGK (S3), Atherosklerose (AG41), Vascular Biology (AG4), Interventional Cardiology (AGIK), Chronic Heart Failure (AG10)

Reviewing activities and participation in boards and panel

Reviewer activity:

Else-Kröner-Fresenius Foundation (EKFS), German Cardiac Society (DGK), Dutch Heart Foundation, British Heart Foundation, Deutsches Zentrum für Herz-Kreislauf-Forschung (DZHK), START-Program of the Faculty of Medicine, RWTH Aachen, ERS Seed Fund and Clinician-Scientist Grant Program, RWTH Aachen

Ad hoc reviewer:

European Heart Journal, Arteriosclerosis, Thrombosis, and Vascular Biology, Cardiovascular Research, JACC: Basic to Translational Science, Basic Research in Cardiology, iScience (Cell Press), Diabetes and Vascular Disease Research, Molecular Metabolism, Liver International, Atherosclerosis, Molecular and Cellular Endocrinology, Diabetes, Obesity and Metabolism, Endocrinology, Diabetes & Metabolism, Hämostaseologie, Frontiers in Immunology, Frontiers in Cardiovascular Medicine, Journal of Cachexia, Sarcopenia and Muscle, Diabetes, Stoffwechsel und Herz, Mucosal Immunology

Editorial boards:

Diabetes and Vascular Disease Research (Associate Editor), *Frontiers in Cardiovascular Medicine* (Review Editor), *Frontiers in Cardiovascular Medicine* (Guest Associate Editor 2021)
Die Diabetologie (Editorial Board Member)

Guideline writing activities: DGK/ESC Pocket Guidelines on CVD and Diabetes 2023

Supervision of Researchers in Early Career Phases

Supervision of 1 MD and 1 Phd student at Massachusetts General Hospital, Harvard University, Boston, USA, currently supervision of 10 MD students, 5 PhD students and 1 postdoc at RWTH

Scientific Results

Category A

1. Bonnin-Marquez A*, Jankowski J*, Maas SL, Hermann J, **Kahles F**, Lellig M, Fliser D, Schunk S, Stamellou E, Berger M, Speer T, Kalim S, Leong Wong DW, van der Vorst EPC*, Jankowski V*. Guanidinylation compromises the anti-inflammatory and anti-oxidative properties of apolipoprotein A-I in chronic kidney disease progression. *Kidney Int.* 2025;107(5):916-929. doi: 10.1016/j.kint.2025.02.010.

2. Rau M, Kurt B, Hartmann O, Lobo de Sá FD, Schwarz M, Thiele K, Hartmann NK, Spiesshoefer J, Möllmann J, Hohl M, Selejan SR, van der Vorst EPC, Dahl E, Marx N, **Kahles F***, Lehrke M* (*shared last authorship). Proenkephalin A 119-159 (penKid) and mortality in stable patients at high cardiovascular risk. *Clin Kidney J.* 2024;17(9):sfae246. doi: 10.1093/ckj/sfae246.
3. Janssen H*, **Kahles F***, Liu D, Downey J, Koekkoek LL, Roudko V, D'Souza D, McAlpine CS, Halle L, Poller WC, Chan CT, He S, Mindur JE, Kiss MG, Singh S, Anzai A, Iwamoto Y, Kohler RH, Chetal K, Sadreyev RI, Weissleder R, Kim-Schulze S, Merad M, Nahrendorf M, Swirski FK. Monocytes re-enter the bone marrow during fasting and alter the host response to infection. *Immunity.* 2023;14:S1074-7613(23)00036-5. doi: 10.1016/j.immuni.2023.01.024. ***Equal contribution.**
4. **Kahles F**, Rau M, Reugels M, Foldenauer AC, Mertens RW, Arrivas MC, Schröder J, Idel P, Moellmann J, van der Vorst EPC, Marx N, Lehrke M. The gut hormone glucose dependent insulinotropic polypeptide is downregulated in response to myocardial injury. *Cardiovasc Diabetol.* 2022 5;21(1). doi: 10.1186/s12933-022-01454-3.
5. **Kahles F**, Rückbeil MV, Arrivas MC, Mertens RW, Moellmann J, Biener M, Giannitsis E, Katus HA, Marx N, Lehrke M. Association of glucose-dependent insulinotropic polypeptide levels with cardiovascular mortality in patients with acute myocardial infarction. *J Am Heart Assoc.* 2021 6;10(13). doi: 10.1161/JAHA.120.019477.
6. Sundararaman SS, Peters LJF, Jansen Y, Gencer S, Yan Y, Nazir S, Bonnin Marquez A, **Kahles F**, Lehrke M, Biessen EAL, Jankowski J, Weber C, Döring Y, van der Vorst EPC. Adipocyte calcium sensing receptor is not involved in visceral adipose tissue inflammation or atherosclerosis development in hyperlipidemic Apoe^{-/-} mice. *Sci Rep.* 2021;11(1):10409. doi: 10.1038/s41598-021-89893-y.
7. **Kahles F**, Rückbeil MV, Mertens RW, Foldenauer AC, Arrivas MC, Moellmann J, Lebherz C, Biener M, Giannitsis E, Katus HA, Marx N, Lehrke M. GLP-1 levels predict cardiovascular risk in patients with acute myocardial infarction. *Eur Heart J.* 2020 14;41(7):882-889. doi: 10.1093/eurheartj/ehz728.
8. He S*, **Kahles F***, Rattik S*, Nairz M, McAlpine CS, Anzai A, Selgrade D, Fenn AM, Chan CT, Mindur JE, Valet C, Poller WC, Halle L, Rotllan N, Iwamoto Y, Wojtkiewicz GR, Weissleder R, Libby P, Fernández-Hernando C, Drucker DJ, Nahrendorf M, Swirski FK. Gut intraepithelial T cells calibrate metabolism and accelerate cardiovascular disease. *Nature.* 2019;566(7742):115-119. doi: 10.1038/s41586-018-0849-9. ***Equal contribution.**
9. **Kahles F**, Liberman A, Halim C, Rau M, Möllmann J, Mertens RW, Rückbeil M, Diepolder I, Walla B, Diebold S, Burgmaier M, Lebherz C, Marx N, Lehrke M. The incretin hormone GIP is upregulated in patients with atherosclerosis and stabilizes plaques in ApoE^{-/-} mice by blocking monocyte/macrophage activation. *Mol Metab.* 2018;14:150-157. doi: 10.1016/j.molmet.2018.05.014.
10. **Kahles F**, Meyer C, Möllmann J, Lebherz C, Findeisen HM, Diebold S, Trautwein C, Koch A, Tacke F, Marx N, Lehrke M. GLP-1 Secretion Is Increased by Inflammatory Stimuli in an IL-6-Dependent Manner, Leading to Hyperinsulinemia and Blood Glucose Lowering. *Diabetes.* 2014;63(10):3221-9. doi: 10.2337/db14-0100.

Academic Distinctions

2024 INTERREG Blue Zone grant

2023 Paul Dudley White International Scholar Award, American Heart Association,

2023	Finalist PAULA RWTH Aachen teaching award for extraordinary dedication
2022	Rudi-Busse-Young-Investigator-Award, German Cardiac Society (DGK)
2021	EFSD/Novo Nordisk Foundation Future Leaders Award
2020	Oskar-Lapp-Preis, German Cardiac Society (DGK); Friedmund Neumann-Preis, Schering-Foundation; Publication Award, Else Kröner-Fresenius-Foundation; Diabetes Research Award, Heinz Bürger-Büsing-Foundation, German Heart Foundation grant, Ernst- und Berta Grimmke-Foundation grant, German Heart Research Foundation grant, ERA-CVD European Joint Transnational Grant
2019	DIVI Research Prize, German Interdisciplinary Association for Intensive Care and Emergency Medicine
2019 - 2020	Research Scholarship, German Heart Foundation
2019	Young Investigator Award, German Society of Internal Medicine (DGIM), Young Investigator Award, German Cardiac Society (DGK)
2018	Uta und Jürgen Breunig-Award 2018, German Heart Foundation
2017 - 2019	DFG-Scholarship (Harvard University, Boston, USA)
2017	Else-Kröner-Fresenius-Foundation grant, German Cardiac Society Research Grant
2016	Research Award, Hans- and Gertie Fischer Foundation, Borchers-Plakette RWTH Aachen, Start-Up Grant, German Research Foundation
2015	Intensive Care Medical Award, German Society of Internal Intensive Care and Emergency Medicine, Young Investigator Award (DGIM), Young Investigator Award (German Society of Atherosclerosis)
2014	Young Researcher's Highlights Award, Rheinisch-Westfälische Gesellschaft of Internal Medicine, Young Investigator Award (DGIM), ERASMUS-Placements scholarship, University of Bonn, Germany
2013	Research Scholarship, Manfred-Lautenschläger Foundation, Germany

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7.1.14. Prof. Dr. med. Ingrid Kindermann (née Janzen)

Personal Data

Title	Prof. Dr. med.
First name	Ingrid
Name	Kindermann
Current position	Professor for Internal Medicine and Cardiology
Current institution(s)/site(s), country	Department of Internal Medicine III Saarland University – Campus Homburg and Saarland University Medical Centre, Homburg/Saar, Germany
Identifiers/ORCID	www.researchgate.net/profile/Ingrid-Kindermann

Qualifications and Career

Stages	Periods and Details
Degree program	2014 Venia Legendi in Internal Medicine and Cardiology at Saarland University Medical Center (Prof. M. Böhm) 1987 – 1993 Medicine, Saarland University – Campus Homburg, Germany
Doctorate	2002 Doctoral thesis, Saarland University – Campus Homburg, Germany (Prof. M. Böhm, Prof. B. Schwaab)
Stages of academic/professional career	Since 2019 Professor for Internal Medicine and Cardiology, Department of Internal Medicine III, Saarland University 2018 Qualification as Heart Failure Specialist (German Society of Cardiology) 2015 – 2017 Training Specialized Psychotherapy, University Medical Center Freiburg, Germany 2014 Training Psychocardiology, University Medical Center Freiburg, Germany Since 2014 Senior Physician, Department of Internal Medicine III, Saarland University Medical Center, Homburg/Saar, Germany 2005 – 2014 Senior Resident, Department of Internal Medicine III, Saarland University Medical Center, Homburg/Saar, Germany 2005 Board Certification of Cardiology Since 2005 Head of the Special Cardiology Outpatient Clinic/HFU Outpatient Clinic of the Department of Internal Medicine III, Saarland University Medical Center, Homburg/Saar, Germany Since 2005 Head of the Clinical Study Center of Internal Medicine III, Saarland University Medical Center, Homburg/Saar, Germany 2003 Board Certification of Internal Medicine

	1999 Advanced Training at the Krannert Institute of Cardiology, Indiana University, Indianapolis (K. L. March, M.D., PhD) 1993 – 2005 Resident for Internal Medicine and Cardiology, Department of Internal Medicine III, Saarland University Medical Center, Homburg/Saar 1985 – 1987 Training as Assistant Medical Technician, University Hannover Medical School, Germany
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Activities in the Research System

Memberships:	German Society of Cardiology (DGK), German Society of Internal Medicine (DGIM), European Society of Cardiology (ESC)
Since 2024	Member of the Advisory Board of the Executive Board of the German Society of Internal Medicine (DGIM)
Since 2024	Chair of the Working Group “Psychosocial Cardiology” (AG30) of the German Society for Cardiology (DGK)
Since 2021	Vice-chair of the program commission of the German Society of Cardiology (DGK)
Since 2019	FESC Fellow of the European Society of Cardiology
2018 - 2021	Nucleus-member of the Working Group “Psychosocial Cardiology” (AG30) of the German Society for Cardiology
Since 2017	Member of the program commission of the German Society for Internal Medicine (DGIM)
2016 - 2020	Nucleus-member of the ESC Working Group on Myocardial and Pericardial Diseases of the European Society of Cardiology (ESC)
Since 2016	Member of the Advisory Board for Certification of Heart Failure Units of the German Society of Cardiology
2009	Award of the „Arbeitsgemeinschaft Leitende Kardiologische Krankenhausärzte e.V (ALKK)“

Scientific Results

Category A

1. Spaderna H, Brandenburg VM, Lauterbach M, Partetzke TM, Schwab SU, Voss F, **Kindermann I**. Associations of fear of physical activity, coping style and self-reported exercise behavior in patients with chronic heart failure. *PLoS One*. 2024;19(9):e0309952. doi: 10.1371/journal.pone.0309952.
2. Nies RJ, Ney S, **Kindermann I**, Bewarder Y, Zimmer A, Knebel F, Hahn K, Spethmann S, Luedike P, Michel L, Rassaf T, Papathanasiou M, Störk S, Cejka V, Polzin A, Voss F, Kelm M, Unsöld B, Meindl C, Paulus M, Yilmaz A, Chamling B, Morbach C, Pfister R. Real-world characteristics and treatment of cardiac transthyretin amyloidosis: A multicentre, observational study. *ESC Heart Fail*. 2024;12(2):1203-1216. doi: 10.1002/ehf2.15126.
3. Caforio ALP, Kaski JP, Gimeno JR, Elliott PM, Laroche C, Tavazzi L, Tendera M, Fu M, Sala S, Seferovic PM, Heliö T, Calò L, Blagova O, Amin A, **Kindermann I**, Sinagra G, Frustaci A, Bonnet D, Charron P, Maggioni AP; CMY Registry Investigators. Endomyocardial biopsy: safety and prognostic utility in paediatric and adult myocarditis in the European Society of

- Cardiology EURObservational Research Programme Cardiomyopathy and Myocarditis Long-Term Registry. *Eur Heart J*. 2024;45(28):2548-2569. doi: 10.1093/eurheartj/ehae169.
4. Thurner L, Kessel C, Fadle N, Regitz E, Seidel F, **Kindermann I**, Lohse S, Kos I, Tschöpe C, Kheiroddin P, Kiblboeck D, Hoffmann MC, Bette B, Carbon G, Cetin O, Preuss KD, Christofyllakis K, Bittenbring JT, Pickardt T, Fischer Y, Thiele H, Baldus S, Stangl K, Steiner S, Gietzen F, Kerber S, Deneke T, Jellinghaus S, Linke A, Ibrahim K, Grabmaier U, Massberg S, Thilo C, Greulich S, Gawaz M, Mayatepek E, Meyer-Dobkowitz L, Kindermann M, Birk E, Birk M, Lainscak M, Foell D, Lepper PM, Bals R, Krawczyk M, Mevorach D, Hasin T, Keren A, Kabesch M, Abdul-Khaliq H, Smola S, Bewarder M, Thurner B, Böhm M, Pfeifer J, Klingel K. IL-1RA Antibodies in Myocarditis after SARS-CoV-2 Vaccination. *N Engl J Med*. 2022;387(16):1524-1527. doi: 10.1056/NEJMc2205667.
 5. Garcia-Pavia P, Rapezzi C, Adler Y, Arad M, Basso C, Brucato A, Burazor I, Caforio ALP, Damy T, Eriksson U, Fontana M, Gillmore JD, Gonzalez-Lopez E, Grogan M, Heymans S, Imazio M, **Kindermann I**, Kristen AV, Maurer MS, Merlini G, Pantazis A, Pankuweit S, Rigopoulos AG, Linhart A. Diagnosis and treatment of cardiac amyloidosis: a position statement of the ESC Working Group on Myocardial and Pericardial Diseases. *Eur Heart J*. 2021;42(16):1554-1568. doi: 10.1093/eurheartj/ehab072.
 6. Yilmaz A, Bauersachs J, Bengel F, Büchel R, **Kindermann I**, Klingel K, Knebel F, Meder B, Morbach C, Nagel E, Schulze-Bahr E, Aus dem Siepen F, Frey N. Diagnosis and treatment of cardiac amyloidosis: position statement of the German Cardiac Society (DGK). *Clin Res Cardiol*. 2021;110(4):479-506. doi: 10.1007/s00392-020-01799-3.
 7. Kontorovich AR, Patel N, Moscati A, Richter F, Peter I, Purevjav E, Selejan SR, **Kindermann I**, Towbin JA, Böhm M, Klingel K, Gelb BD. Myopathic Cardiac Genotypes Increase Risk for Myocarditis. *JACC Basic Transl Sci*. 2021;6(7):584-592. doi: 10.1016/j.jacbts.2021.06.001.
 8. **Kindermann I**, Wedegärtner SM, Bernhard B, Ukena J, Lenski D, Karbach J, Schwantke I, Ukena C, Böhm M. Changes in quality of life, depression, general anxiety, and heart-focused anxiety after defibrillator implantation. *ESC Heart Fail*. 2021;8(4):2502-2512. doi: 10.1002/ehf2.13416.
 9. Heliö T, Elliott P, Koskenvuo JW, Gimeno JR, Tavazzi L, Tendera M, Kaski JP, Mansencal N, Bilińska Z, Carr-White G, Damy T, Frustaci A, **Kindermann I**, Ripoll-Vera T, Čelutkienė J, Axelsson A, Lorenzini M, Saad A, Maggioni AP, Laroche C, Caforio ALP, Charron P; EORP Cardiomyopathy Registry Investigators Group: ESCEORP Cardiomyopathy Registry: Real-life practice of genetic counselling and testing in adult cardiomyopathy patients. *ESC Heart Fail*. 2020;7(5):3013-3021. doi: 10.1002/ehf2.12925.
 10. Ferreira VM, Schulz-Menger J, Holmvang G, Kramer CM, Carbone I, Sechtem U, **Kindermann I**, Gutberlet M, Cooper LT, Liu P, Friedrich MG. Cardiovascular Magnetic Resonance in Nonischemic Myocardial Inflammation: Expert Recommendations. *J Am Coll Cardiol*. 2018;72(24):3158-3176. doi: 10.1016/j.jacc.2018.09.072.

Other Information

Trial Experience

Principal Investigator: DepleTTR-CM, TEACH, DIAMOND, PASSION, FAIR-HFpEF, FAIR-HF02, MOOD HF, PARADIGM, FER-CARS-04, EDIFY, EFFICACY, EORP-Registry, REPORT HF Registry

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7.1.15. Univ.-Prof. Dr. med. Rafael Kramann, PhD

Personal Data

Title	Univ.-Prof. Dr. med., PhD
First name	Rafael
Name	Kramann
Current position	Full Professor (W3), Chairman Department of Nephrology and Immunology, Director Institute of Phase Transition in Chronic Disease (ZPCE)
Current institution(s)/site(s), country	Department of Nephrology and Immunology, Uniklinik RWTH Aachen, Germany
Identifiers/ORCID	0000-0003-4048-6351

Qualifications and Career

Stages	Periods and Details
Degree program	2017 Venia legendi for Nephrology and Internal Medicine, RWTH Aachen 2001 – 2007 Medical School RWTH Aachen University, Germany
Doctorate	2019 Doctoral Thesis in Natural Sciences (PhD), Erasmus University, Rotterdam, NL 2008 Doctoral Thesis in Medicine, Department of Cardiology, Uniklinik RWTH Aachen, Germany
Stages of academic/professional career	Since 2023 Chairman Department of Nephrology and Immunology Since 2022 ERC Consolidator Grant (TargetCKD) Since 2022 Adjunct Professor, Mount Desert Island Biology Laboratory and The Jackson Laboratory, Bar Harbor, Maine, USA 2020 – 2023 Chairman and Founding Director Institute of Experimental Medicine and Systems Biology, Uniklinik RWTH Aachen, Germany 2019 Professor (Hon) Centre for Cardiovascular Sciences, University of Edinburgh, UK Since 2018 Adjunct Professor and Group leader, Erasmus Medical Center, Rotterdam, NL; NWO-VIDI Laureate 2018 Specialist for Hypertensive Disorders (DHL) Since 2017 Senior Attending Physician, Department of Nephrology and Immunology, Uniklinik RWTH Aachen, Germany 2017 – 2020 Professor for Nephro-Cardiology (W2), Department of Nephrology and Immunology, Uniklinik RWTH Aachen, Germany 2017 Board certification for internal medicine and nephrology

	2015 – 2017 Principal Investigator & Clinical Fellow, Department of Nephrology and Immunology, Uniklinik RWTH Aachen, Germany 2015 ERC Starting Grant (CureCKDHeart) & Return to NRW Grant 2011 – 2015 Postdoctoral Research Fellow Harvard Medical School, Boston, MA, USA 2008 – 2011 Residency & Fellowship Renal Medicine, Department of Nephrology and Immunology, Uniklinik RWTH Aachen, Germany
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Activities in the Research System

2023	Founder Sequantrix GmbH (RWTH Biotech Spinout for Drug Development in Fibrotic Diseases using Artificial Intelligence)
Since 2022	Scientific Advisory Board of the European Renal Association (ERA)
2022	Director and lead PI of the Funded §91b Building Application Center for Phase Transition of Chronic Diseases (ZPCE), RWTH Aachen, ca 62 Mio €
2013	Co-Founder of MatriTarg Laboratories (Harvard University Biotech Spinout, technology now out licensed)
Since 2012	Member and/or chair, program- and abstract committees of the annual meetings of the European (ERA)-, American (ASN)- and International Society for Nephrology (ISN)

Roles in initiatives

DFG: SFB/TRR 219, Cardio-Renal Cross-talk (PI); SFB-TRR 57, Organ Fibrosis (PI); CRU 5011 (PI), Translational Kidney Research (PI); CRU 304, myelofibrosis (PI)

BMBF: CureFib, Systems biology of Fibrosis (Chair); FibroMap (PI); NUM ORGANOSTRAT (PI)

EU: ERA-CVD Atherosclerosis in Aging and CKD (Chair)

Dutch Kidney Foundation: TASKFORCE (WP lead)

Leducq Foundation: ImmunoFib-HF (PI), COMET (PI)

Teaching

Curricular and extra-curricular teaching for medical doctors

Director of Training, Leducq Transatlantic Network of Excellence: ImmunoFib-HF, Aachen, Hannover, Heidelberg, London, Philadelphia, St. Louis

Supervision of Researchers in Early Career Phases

Supervision of >20 Diploma/ Master/ MD students, > 30 postdocs/ clinician scientists and > 10 PhD students

Scientific Results

Category A

1. Hoeft K, Bleckwehl T, Schumacher D, ... Hayat S, **Kramann R**. Label Free single-cell RNA multiplexing leveraging genetic variability. *Nat Commun*. 2024;5(1):10612. doi: 10.1038/s41467-024-54270-6.

2. Hoeft K*, Koch L*, Ziegler S, Boor P, Mann M, Sengle G, Hayat S, **Kramann R**. ADAMTS12 shapes extracellular matrix composition to control migration and expansion of injury-responsive fibroblasts in fibrosis. *J Clin Invest* 2024;134(18):e170246. doi: 10.1172/JCI170246.
3. Kaesler N, Cheng M, Nagai J, O'Sullivan J, Peisker F, ..., Speer T, Lu TS, Lim K, Floege J, Denby L, Costa I, **Kramann R**. Mapping cardiac remodeling in chronic kidney disease. *Science Adv*, 2023;9(47):eadj4846. doi: 10.1126/sciadv.adj4846.
4. Hoeft K, Schaefer GJL ... **Kramann R**. Platelet-instructed SPP1 macrophages drive myofibroblast activation in fibrosis in a CXCL4-dependent manner. *Cell Rep* 2023; 42(2):112131. doi: 10.1016/j.celrep.2023.112131.
5. Xu Y, Kuppe C, **Kramann R**. Adult human kidney organoids originate from CD24+ cells and represent an advanced model for adult polycystic kidney disease. *Nature Genetics* 2022; 54(11):1690-1701. doi: 10.1038/s41588-022-01202-z.
6. Kuppe C, Ramirez Flores R, Li Z,Milting M*, Costa I*, Saez-Rodriguez J*, **Kramann R***. Spatial multi-omic map of human myocardial infarction. *Nature* 2022;608 (7924):766-777. doi: 10.1038/s41586-022-05060-x.
7. Peisker F, Halder M, ... Costa I*, **Kramann R.*** Mapping the cardiac vascular niche in heart failure. *Nature Commun* 2022;13(1):3027. doi: 10.1038/s41467-022-30682-0.
8. Jansen J, Reimer KC, Nagai JS, Costa IG*, Schneider RK*, Smeets B*, **Kramann R*** SARS-CoV-2 infects the human kidney and drives fibrosis in kidney organoids. *Cell Stem Cell* 2022;29(2): p. 217-231 e8. doi: 10.1016/j.stem.2021.12.010.
9. Kuppe C, Ibrahim MM, Henderson NC, **Kramann R**. Decoding myofibroblast origins in human kidney fibrosis. *Nature* 2021;589(7841):281-286. doi:10.1038/s41586-020-2941-1.
10. Li Z, Kuppe C, ... **Kramann R,*** Costa IG*.Chromatin-accessibility estimation from single-cell ATAC-seq data with scOpen. *Nature Commun* 2021;6386. doi: 10.1038/s41467-021-26530-2.

Category B

1. Patent: ADAMTS12 as a target molecule for the treatment of chronic renal failure and renal fibrosis. DE102022132156A1
2. Patent 2021: Nkd2 as a therapeutic target in kidney fibrosis, DE10 2020 128 677.5, granted
3. Patent 2015: Uses of Gli1 in detecting tissue fibrosis, PCT/US2015/014796, granted
4. Schreiber F, Anslinger M, **Kramann R**. Fibrosis in pathology of heart and kidney: from deep RNA-sequencing to novel molecular targets. *Circ Res* 2023 132(8):1013-1033
5. Schumacher D and **Kramann R**. Multiomic Spatial Mapping of Myocardial Infarction and Implications for Personalized Therapy. *Atheroscler Thromb Vasc Biol* 2023 43(2):192-202
6. **Kramann R**. A map of the human heart after myocardial infarction. *Nature* 2022 doi: 10.1038/d41586-022-02011-4
7. Schreiber F, **Kramann R**. Mapping the human kidney using single cell genomics. *Nature Reviews Nephrology* 2022 18(6):347-360.
8. Hayat S and **Kramann R**. Mapping the border zone in myocardial infarction. *Nature Cardiovasc Res*. 2022 1:978-979
9. Saez-Rodriguez J, Rinschen M, Floege J, **Kramann R**. Big Science and Big Data in *Nephrology Kidney Int* 2019 95(6):1326-1337
10. **Kramann R**, Schneider RK. The identification of fibrosis-driving myofibroblast precursors reveals new therapeutic avenues in myelofibrosis. *Blood* 2018 131(19):2111-2119

Academic Distinctions

Since 2024	Fellow of the European Renal Association (FERA)
Since 2023	Elected member of the American Society of Clinical Investigation
Since 2023	Elected member of the Sigma Xi Society
2022	Willhelm Vaillant Award
2021	Theodor Frerichs Award of the German Society of Internal Medicine
2019	Franz-Volhard Award of the German Renal Society
2017	Desiderius Award of the Erasmus University Rotterdam
2015	Carl Ludwig Award of the German Renal Society
2015	Bern Tersteegen Award of the German Dialysis Association
Since 2014	Fellow of the American Society of Nephrology
2014	Nils Alwall Award for Clinical Research of the German Renal Society
2014	Stanley Shaldon Award of the European Renal Association
2013	Winner of the Harvard University Innovation Challenge

Data protection and consent to the processing of optional data

[X] I expressly consent to the processing of the voluntary (optional) information, including “special categories of personal data” in connection with the DFG’s review and decision-making process regarding my proposal. This also includes forwarding my data to the external reviewers, committee members and, where applicable, foreign partner organisations who are involved in the decision-making process. To the extent that these recipients are located in a third country (outside the European Economic Area), I additionally consent to them being granted access to my data for the above-mentioned purposes, even though a level of data protection comparable to EU law may not be guaranteed. For this reason, compliance with the data protection principles of EU law is not guaranteed in such cases. In this respect, there may be a violation of my fundamental rights and freedoms and resulting damages. This may make it more difficult for me to assert my rights under the General Data Protection Regulation (e.g. information, rectification, erasure, compensation) and, if necessary, to enforce these rights with the help of authorities or in court.

I may **revoke** my consent in whole or in part at any time – with effect for the future, freely and without giving reasons – vis-à-vis the DFG (postmaster@dfg.de). The lawfulness of the processing carried out up to that point remains unaffected. Insofar as I transmit “special categories of personal data” relating to third parties, I confirm that the necessary legitimation under data protection law exists (e.g. based on consent).

I have taken note of the DFG’s Data Protection Notice relating to research funding, which I can access at www.dfg.de/privacy_policy and I will forward it to such persons whose data the DFG processes as a result of being mentioned in this CV.

7.1.16. Univ.-Prof. Dr. med. Nikolaus Marx

Personal Data

Title	Univ.-Prof. Dr. med.
First name	Nikolaus
Name	Marx
Current position	Full Professor of Medicine/Cardiology (W3) and Head of the Department of Internal Medicine I
Current institution(s)/site(s), country	Department of Internal Medicine I, Uniklinik RWTH Aachen, Germany
Identifiers/ORCID	0000-0001-6141-634X

Qualifications and Career

Stages	Periods and Details
Degree program	2002 Venia legendi in Internal Medicine, University of Ulm, Germany 1988 – 1994 Medical School in Mainz, Genf, Switzerland and Düsseldorf, Germany
Doctorate	1994 M.D. at University of Mainz, Germany
Stages of academic/professional career	since 2009 W3 - Full Professor of Medicine / Cardiology and Head of the Department of Internal Medicine I, Uniklinik RWTH Aachen, Germany 2008 – 2009 Chief Attending and Deputy Director, Department of Internal Medicine II, University of Ulm, Germany 2003 – 2008 Attending, Department of Internal Medicine II, University of Ulm, Germany 2002 – 2003 Fellow in Cardiology, Department of Internal Medicine II, University of Ulm, Germany 1999 – 2002 Resident in Internal Medicine, Department of Internal Medicine II, University of Ulm, Germany 1997 – 1999 Postdoctoral Research Fellow, Brigham and Women's Hospital, Harvard Medical School, Boston, MA, USA with Dr. Peter Libby and Dr. Jorge Plutzky 1994 – 1997 Resident in Internal Medicine I Medizinische Klinik und Poliklinik, Technical University, Munich, Germany 1994 State board examination in Medicine, Germany

Activities in the Research System

2021 – 2023	Task force Co-chair of the ESC 2023 Guidelines for the Management of cardiovascular disease in patients with diabetes
since 2020	Elected member of the Deutsche Forschungsgemeinschaft: (Grant panel) Fachkollegium Medizin, Sektion 4 (Kardiologie, Angiologie)
2017 – 2019	Board member of the German Society of Cardiology
2012 – 2015	President of the “Deutsche Gesellschaft für Atheroskleroseforschung”
2009 – 2012	Chairman of the working group „Herz und metabolisches Syndrom“ of the Deutsche Gesellschaft für Kardiologie, Herz- und Kreislaufforschung (DGK)
2007 –2010	Member of the Diabetes Committee of the American Heart Association (AHA)

Supervision of Researchers in Early Career Phases

Over the last 5 years I have successfully supervised 10 Habilitations in the Department of Internal medicine I, RWTH Aachen University

Scientific Results

Category A

1. Marx-Schütt K, Cherney DZI, Jankowski J, Matsushita K, Nardone M, **Marx N**. Cardiovascular disease in chronic kidney disease. *Eur Heart J*. 2025;ehaf167. doi: 10.1093/eurheartj/ehaf167. *Online ahead of print*.
2. **Marx N**, Deanfield JE, Mann JFE, Arechavaleta R, Bain SC, Bajaj HS, Bayer Tanggaard K, Birkenfeld AL, Buse JB, Dvicevic-Elez Z, Desouza C, Emerson SS, Engelmann MDM, Hovingh GK, Inzucchi SE, Jhund PS, Mulvagh SL, Pop-Busui R, Poulter NR, Rasmussen S, Tu ST, McGuire DK; SOUL study group. Oral Semaglutide and Cardiovascular Outcomes in Persons With Type 2 Diabetes, According to SGLT2i Use: Prespecified Analyses of the SOUL Randomized Trial. *Circulation* 2025; 151(23): 1639-1650. doi: 10.1161/CIRCULATIONAHA.125.074545.
3. McGuire DK, **Marx N**, Mulvagh SL, Deanfield JE, Inzucchi SE, Pop-Busui R, Mann JFE, Emerson SS, Poulter NR, Engelmann MDM, Ripa MS, Hovingh GK, Brown-Frandsen K, Bain SC, Cavender MA, Gislum M, David JP, Buse JB; SOUL Study Group. Oral Semaglutide and Cardiovascular Outcomes in High-Risk Type 2 Diabetes. *N Engl J Med*. 2025; 392(20): 2001-2012. doi: 10.1056/NEJMoa2501006.
4. **Marx N**, Kolkailah AA, Rosenstock J, Johansen OE, Cooper ME, Alexander JH, Toto RD, Wanner C, Espeland MA, Mattheus M, Schnaidt S, Perkovic V, Gollop ND, McGuire DK. Hypoglycemia and Cardiovascular Outcomes in the CARMELINA and CAROLINA Trials of Linagliptin: A Secondary Analysis of Randomized Clinical Trials. *JAMA Cardiol*. 2024;9(2):134-143. doi: 10.1001/jamacardio.2023.
5. **Marx N**, Federici M, Schütt K, Müller-Wieland D, Ajjan RA, Antunes MJ, Christodorescu RM, Crawford C, Di Angelantonio E, Eliasson B, Espinola-Klein C, Fauchier L, Halle M, Herrington WG, Kautzky-Willer A, Lambrinou E, Lesiak M, Lettino M, McGuire DK, Mullens W, Rocca B, Sattar N; ESC Scientific Document Group. 2023 ESC Guidelines for the management of cardiovascular disease in patients with diabetes. *Eur Heart J*. 2023;44(39):4043-4140. doi: 10.1093/eurheartj/ehad192.

6. **Marx N**, Husain M, Lehrke M, Verma S, Sattar N. GLP-1 Receptor Agonists for the Reduction of Atherosclerotic Cardiovascular Risk in Patients With Type 2 Diabetes. *Circulation*. 2022;146(24):1882-1894. doi: 10.1161/CIRCULATIONAHA.122.059595.
7. Thiele K, Rau M, Hartmann NK, Möller M, Möllmann J, Jankowski J, Keszei AP, Böhm M, Floege J, **Marx N**, Lehrke M. Empagliflozin reduces markers of acute kidney injury in patients with acute decompensated heart failure. *ESC Heart Fail*. 2022;9(4):2233-2238. doi: 10.1002/ehf2.13955.
8. Jankowski J, Floege J, Fliser D, Böhm M, **Marx N**. Cardiovascular Disease in Chronic Kidney Disease. Pathophysiological Insights and Therapeutic Options. *Circulation*. 2021;143(11):1157-1172. doi: 10.1161/CIRCULATIONAHA.120.050686.
9. Rosenstock J, Kahn SE, Johansen OE, Zinman B, Espeland MA, Woerle HJ, Pfarr E, Keller A, Mattheus M, Baanstra D, Meinicke T, George JT, von Eynatten M, McGuire DK, **Marx N**; CAROLINA Investigators. Effect of Linagliptin vs Glimepiride on Major Adverse Cardiovascular Outcomes in Patients With Type 2 Diabetes: The CAROLINA Randomized Clinical Trial. *JAMA*. 2019;322(12):1155-1166. doi: 10.1001/jama.2019.13772.
10. Kappel BA, Lehrke M, Schütt K, Artati A, Adamski J, Lebherz C, **Marx N**. Effect of Empagliflozin on the Metabolic Signature of Patients With Type 2 Diabetes Mellitus and Cardiovascular Disease. *Circulation*. 2017;5;136(10):969-972. doi: 10.1161/CIRCULATIONAHA.117.029166.

Academic Distinctions

- 2020 Silver Needle of Honour of the German Society of Cardiology
- 2018 Keynote Lecture „State of the Art: Diabetes and Heart” Annual Meeting of the German Society of Cardiology
- 2010 Paul-Morawitz-Preis der Deutschen Gesellschaft für Kardiologie
- 2009 Lehrbonus der Medizinischen Fakultät der Universität Ulm
- 2005 Rising Star Symposium lecture at the 41. Meeting of the European Association for the Study of Diabetes (EASD), Athens
- 2004 Morgagni Young Investigator Award, Merckle-Forschungspreis
- 2002 Posterpreis der Deutschen Diabetes Gesellschaft; Winner of the Poster Award Competition in Epidemiological Science. 75th Meeting of the American Heart Association, Chicago, USA
- 2000 W. H. Hauss - Preis der Deutschen Gesellschaft für Arterioskleroseforschung; Finalist of the Young Investigator Award Competition on Thrombosis at the XXII. Congress of the European Society of Cardiology, Förderpreis der Stiftung Der Herzranke Diabetiker
- 1999 Servier Young Investigators' Award at the First European Meeting on Vascular Biology and Medicine
- 1999 Forschungspreis der Deutschen Stiftung für Herzforschung

Data protection and consent to the processing of optional data

☒ I expressly consent to the processing of the voluntary (optional) information, including “special categories of personal data” in connection with the DFG’s review and decision-making process regarding my proposal. This also includes forwarding my data to the external reviewers, committee members and, where applicable, foreign partner organisations who are involved in the decision-making process. To the extent that these recipients are located in a third

country (outside the European Economic Area), I additionally consent to them being granted access to my data for the above-mentioned purposes, even though a level of data protection comparable to EU law may not be guaranteed. For this reason, compliance with the data protection principles of EU law is not guaranteed in such cases. In this respect, there may be a violation of my fundamental rights and freedoms and resulting damages. This may make it more difficult for me to assert my rights under the General Data Protection Regulation (e.g. information, rectification, erasure, compensation) and, if necessary, to enforce these rights with the help of authorities or in court.

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I have taken note of the DFG’s Data Protection Notice relating to research funding, which I can access at www.dfg.de/privacy_policy and I will forward it to such persons whose data the DFG processes as a result of being mentioned in this CV.

7.1.17. Prof. Dr. med. Katharina Marx-Schütt (née Heß)**Personal Data**

Title	Prof. Dr. med.
First name	Katharina
Name	Marx-Schütt
Current position	Senior Consultant in Cardiology
Current institution(s)/site(s), country	Department of Internal Medicine I, Uniklinik RWTH Aachen, Germany
Identifiers/ORCID	---

Qualifications and Career

Stages	Periods and Details
Degree program	2018 Habilitation and Venia Legendi in Internal Medicine, RWTH Aachen University 1999 – 2006 Medical School, Ulm, Germany
Doctorate	2006 Department of Cardiology, University of Ulm, Germany, Prof. N. Marx, Peroxisome proliferator-activated receptors (PPARs) and lymphocyte migration subject
Stages of academic/professional career	2017 Board-certified Cardiologist Since 2016 Attending at the Department of Internal Medicine I, Uniklinik RWTH Aachen, Germany 2013 Board-certified Internist 2010 – 2016 Resident in Internal Medicine I; Uniklinik RWTH Aachen, Germany, Prof. N. Marx 2008 – 2010 Postdoctoral Research Fellow, University of Leeds, Division of Cardiovascular and Diabetes Research, Leeds Institute of Genetics, Health and Therapeutics with Prof. Peter Grant 2006 – 2008 Resident in Internal Medicine II, University of Ulm, Prof. V. Hombach

Supplementary Career Information

Maternity leave: March 2014 - October 2014

Activities in the Research System

2021 – 2024	Chairman of the working group AG “Herz und Diabetes” Deutsche Gesellschaft für Kardiologie (DGK)
2013 – 2017	Nucleus member of the ESC Young Thrombosis Researchers Group
2011 – 2015	Nucleus member of the working group 38 „German Chapter of Young Cardiologists (ESC)“ Deutsche Gesellschaft für Kardiologie (DGK)
2009 – 2012	Nucleus member of the „Forum junge Hypertensiologie“ Deutsche Hochdruckliga (DHL)

Supervision of Researchers in Early Career Phases

Currently I am supervising 3 ongoing medical dissertations.

Scientific Results

Category A

1. **Marx-Schütt K**, Cherney DZI, Jankowski J, Matsushita K, Nardone M, Marx N. Cardiovascular disease in chronic kidney disease. *Eur Heart J*. 2025;8:ehaf167. doi: 10.1093/eurheartj/ehaf167. Online ahead of print
2. Berger M, März W, Niessner A, Delgado Graciela G, Kleber M, Scharnagl H, Marx N, **Schuett K**. IL-6 and hsCRP predict cardiovascular mortality in patients with heart failure with preserved ejection fraction. *ESC Heart Fail*. 2024;11(6):3607-3615. doi: 10.1002/ehf2.14959.
3. Marx N, Federici M, **Schütt K**, Müller-Wieland D, Ajjan RA, Antunes MJ, Christodorescu RM, Crawford C, Di Angelantonio E, Eliasson B, Espinola-Klein C, Fauchier L, Halle M, Herrington WG, Kautzky-Willer A, Lambrinou E, Lesiak M, Lettino M, McGuire DK, Mullens W, Rocca B, Sattar N; ESC Scientific Document Group. 2023 ESC Guidelines for the management of cardiovascular disease in patients with diabetes. *Eur Heart J*. 2023;44(39):4043-4140. doi: 10.1093/eurheartj/ehad192.10.1093/eurheartj/ehad192.
4. Berger M, Maqua H, Lysaja K, Mause SF, Hindle MS, Naseem K, Dahl E, Speer T, Marx N, **Schütt K**. Platelets from patients with chronic inflammation have a phenotype of chronic IL-1 β release. *Res Pract Thromb Haemost*. 2023;8(1):102261. doi: 10.1016/j.rpth.2023.102261.
5. Kappel BA, Moellmann J, Thiele K, Rau M, Artati A, Adamski J, Ghesquiere B, **Schuett K**, Romeo F, Stoehr R, Marx N, Federici M, Lehrke M. Human and mouse non-targeted metabolomics identify 1,5-anhydroglucitol as SGLT2-dependent glycemic marker. *Clin Transl Med*. 2021;11(6):e470. doi: 10.1002/ctm2.470.
6. King RJ*, **Schuett K***, Tiede C, Jankowski V, John V, Trehan A, Simmons K, Ponnambalam S, Storey RF, Fishwick CWG, MJ, Tomlinson DC, Ajjan RA. Fibrinogen interaction with complement C3: a potential therapeutic target to reduce thrombosis risk. *Haematologica*. 2021;106(6):1616-1623. doi: 10.3324/haematol.2019.239558. ***Shared first authorship.**
7. Berger M, Kleber ME, Delgado GE, März W, Hellstern P, Meinitzer A, Marx N, **Schuett KA**. Research Letter: Trimethylamine N-oxide (TMAO) and ADP-induced platelet reactivity are independent risk factors for all-cause and cardiovascular mortality. *Circ Res* 2020;126(5):660-662. doi: 10.1161/CIRCRESAHA.119.316214.

8. **Schuetz K**, Savvaidis A, Maxeiner S, Lysaja K, Jankowski V, Schirmer SH, Dimkovic N, Boor P, Kaesler N, Dekker FW, Floege J, Marx N, Schlieper G. Clot Structure: A Potent Mortality Risk Factor in Patients on Hemodialysis. *J Am Soc Nephrol*. 2017;28(5):1622-1630. doi: 10.1681/ASN.2016030336.
9. **Schuetz K**, Kleber ME, Scharnagl H, Lorkowski S, März W, Niessner A, Marx N, Meinitzer A. Trimethylamine-N-oxide (TMAO) and heart failure with reduced versus preserved ejection fraction. *J Am Coll Cardiol*. 2017;70(25):3202-3204. doi: 10.1016/j.jacc.2017.10.064.
10. Kappel BA, Lehrke M, **Schütt K**, Artati A, Adamski J, Leberer C, Marx N. Effect of Empagliflozin on the Metabolic Signature of Patients With Type 2 Diabetes Mellitus and Cardiovascular Disease. *Circulation*. 2017;136(10):969-972. doi: 10.1161/CIRCULATIONAHA.117.029166.

Category B

Patent application in preparation within RWTH Aachen University (#2025-0146 EM "Drug Target")

Academic Distinctions

2017	Poster award Deutsche Gesellschaft für Kardiologie (DGK)
2012 – 2016	Habilitationsstipendium RWTH University Aachen
2012	Young investigator award Thrombosis European Society of Cardiology (ESC)
2011 & 2012	Young investigator award Deutschen Hochdruckliga
2011	Young investigator award International Society on Thrombosis and Haemostasis (ISTH)

Other Information

Assistant Editor for "Diabetes and Vascular disease research"

Editorial Board Member "European Journal of Heart Failure"

Data protection and consent to the processing of optional data

☒ I expressly consent to the processing of the voluntary (optional) information, including "special categories of personal data" in connection with the DFG's review and decision-making process regarding my proposal. This also includes forwarding my data to the external reviewers, committee members and, where applicable, foreign partner organisations who are involved in the decision-making process. To the extent that these recipients are located in a third country (outside the European Economic Area), I additionally consent to them being granted access to my data for the above-mentioned purposes, even though a level of data protection comparable to EU law may not be guaranteed. For this reason, compliance with the data protection principles of EU law is not guaranteed in such cases. In this respect, there may be a violation of my fundamental rights and freedoms and resulting damages. This may make it more difficult for me to assert my rights under the General Data Protection Regulation (e.g. information, rectification, erasure, compensation) and, if necessary, to enforce these rights with the help of authorities or in court.

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of personal data” relating to third parties, I confirm that the necessary legitimation under data protection law exists (e.g. based on consent).

I have taken note of the DFG’s Data Protection Notice relating to research funding, which I can access at www.dfg.de/privacy_policy and I will forward it to such persons whose data the DFG processes as a result of being mentioned in this CV.

7.1.18. Univ.-Prof. Barbara A. Niemeyer, PhD

Personal Data

Title	Univ.-Prof. PhD
First name	Barbara A.
Name	Niemeyer
Current position	Professor of Biophysics (permanent)
Current institution(s)/site(s), country	Department of Biophysics, Saarland University – Campus Homburg, Germany
Identifiers/ORCID	0000-0002-6963-0575

Qualifications and Career

Stages	Periods and Details
Degree program	1992 – 1996 Graduate Studies, University of California, San Diego (UCSD), Neurosciences 1984 – 1990 Biology (Diploma), RWTH Aachen University
Doctorate	1996 PhD in Neurosciences, HHMI, UCSD Department of Neuroscience, University of California San Diego, U.S.A. Prof. C. S. Zuker
Stages of academic/professional career	Since 2014 Full Professor (W2), for Molecular Biophysics, Saarland University 2008 – 2014 Independent Group leader, Biophysics, Saarland University. 1999 – 2007 Group leader (C1), Saarland University, Pharmacology, Teaching in Pharmacology 1997 – 1999 Postdoc (NIH fellow), Department of Molecular and Cellular Physiology, Stanford University, USA (Prof. T. L. Schwarz) 1991 – 1992 Visiting scientist, UCSD, DAAD fellow; “Gottlieb-Daimler und Karl-Benz Stiftung” fellow

Supplementary Career Information

2 children, maternity leave: 04/2001 - 12/2001 and 08/2003-10/2003,
part-time work: 2003 - 2006

Activities in the Research System

2025 Chair and Organizer ECS Symposium, Hamburg, Germany
2025 Session Chair FASEB Calcium Conference, Winnipeg, Canada
Since 2025 Co-Editor in Chief: *Cell Calcium*
Since 2024 Vice Dean for Theoretical Medicine and Biosciences, UdS
2022 Discussion leader Gordon Research Conference, Venture, USA
2021 Chair FASEB meeting on Calcium and Cell function, online conference
2020 Symposium Organizer and Speaker NWG Göttingen
Since 2020 Board member of the European Calcium Society

2020 - 2024	Ombudsperson of Saarland University
Since 2020	Adjunct member of KEF (commission for ethical questions)
2019	Speaker, proposal for Graduate school: "Interconnectivity" – not granted
Since 2018	Project leader SFB/TRR219, co-speaker IRTG TRR219
2018	Co-Chair FASEB meeting on Calcium and Cell function.
2017 - 2021	Co-speaker and project leader IRTG1830
2015 - 2019	MC and STMS administrator COST action BM1406 "ionchannel-immun"
2015 - 2018	Project leader, FOR2289
2013 - 2017	Co-Coordinator for Junior researcher of the SFB1027
2013 - 2024	Project leader SFB 1027, project C4
2012 - 2016	Co-speaker and project leader GK1326
2011 - 2022	Project leader SFB 894, project A2

Supervision of Researchers in Early Career Phases

Supervision of habilitation (2022) of group member Dr. rer. nat. Dalia Alansary.

Supervisions of 1 MD student with magna cum laude and 6 PhD students (2 with summa cum laude, 4 with magna cum laude), 5 Bachelor theses, 3 Master theses

Currently ongoing supervision of 4 PhD students, 2 Master students, 2 MD students.

Scientific Results

Category A

1. Amini M, Sarakpi T, Frisch J, Jost P, Engel J, Noels H, Maack C, Schunk S, Roma LP, **Niemeyer BA**, Speer T, Alansary D. P2X7 regulates IL-1 α mediated inflammation in chronic kidney disease in a ROS dependent manner. *Kidney International* 2024;S0085-2538(24)00798-1. doi: 10.1016/j.kint.2024.10.024.
2. García Casas P, Rossini M, Pávénus L, Saeed M, Arnst N, Sonda S, Fernandes T, D'Arsiè I, Bruzzzone M, Berno V, Raimondi A, Sassano ML, Naia L, Barbieri E, Sigismund S, Agostinis P, Sturlese M, **Niemeyer BA**, Brismar H, Ankarcrona M, Gautier A, Pizzo P, Filadi R. Simultaneous detection of membrane contact dynamics and associated Ca²⁺ signals by reversible chemogenetic reporters. *Nat Commun.* 2024;12;15(1):9775. doi: 10.1038/s41467-024-52985-0.
3. Knapp, ML, Alansary D, Poth V, Förderer K, Sommer F, Zimmer D, Schwarz Y, Künzel N, Kless A, Machaca K, Helms V, Mühlhaus T, Schroda M, Lis A, **Niemeyer BA**. A longer isoform of Stim1 is a negative SOCE regulator but increases cAMP modulated NFAT signaling, *EMBO Rep.*, 2022;23: e53135. doi: 10.15252/embr.202153135.
4. Schunk SJ, Triem S, Schmit D, Zewinger S, Sarakpi T, Becker E, Hütter G, Wrublewsky S, Küting F, Hohl M, Alansary D, Prates Roma L, Lipp P, Möllmann J, Lehrke M, Laschke MW, Menger MD, Kramann R, Boor P, Jahnke-Dechent W, März W, Böhm M, Laufs U, **Niemeyer BA**, Fliser D, Ampofo E, Speer T.: Interleukin-1 α (IL-1 α) is a Central Regulator of Leukocyte-Endothelial Adhesion in Myocardial Infarction and in Chronic Kidney Disease. *Circulation* 2021;144, 893-908. doi: 10.1161/CIRCULATIONAHA.121.053547.
5. Ramesh G, Jarzembowski L, Schwarz Y, Konrad M, Poth V, Schwär G, Lauer AA, Grimm MOW, Alansary D, Bruns D, **Niemeyer BA**. Short novel STIM1B uncovers a mechanism of synaptic enhancement. *Cell Reports* 2021;34:108844. doi: 10.1016/j.celrep.2021.108844.

6. Zewinger S, Reiser J, Jankowski V, Alansary D, Hahm E, Triem S, Klug M, Schunk SJ, Schmit D, Kramann R, Körbel C, Ampofo E, Laschke MW, Selejan SR, Paschen A, Herter T, Schuster S, Silbernagel G, Sester M, Sester U, Aßmann G, Bals R, Kostner G, Jahnchen-Dechent W, Menger MD, Rohrer L, März W, Böhm M, Jankowski J, Kopf M, Latz E, **Niemeyer BA**, Fliser D, Laufs U, Speer T. Apolipoprotein C3 induces systemic inflammation and organ damage by alternative inflammasome activation. *Nature Immunol.* 2020;1, 30-41. doi: 10.1038/s41590-019-0548-1.
7. Alansary D, Schmidt B, Dörr K, Bogeski I, Rieger H, Kless A, **Niemeyer BA**. Thiol dependent intramolecular locking of Orai1 channels. *Sci Rep* 2016;6, 33347. doi: 10.1038/srep33347.
8. Miederer AM, Alansary D, Schwär G, Lee PH, Jung M, Helms V, **Niemeyer BA**. A STIM2 splice variant negatively regulates store-operated calcium entry. *Nat Commun.* 2015;6, 6899. doi: 10.1038/ncomms7899.
9. Bogeski I, Kummerow C, Al-Ansary D, Schwarz EC, Koehler R, Kozai D, Takahashi N, Peinelt C, Griesemer D, Bozem M, Mori Y, Hoth M, **Niemeyer BA**. Differential redox regulation of ORAI ion channels: a mechanism to tune cellular calcium signalling. *Sci Signal* 2010; 3(115):ra24. doi: 10.1126/Scisignal.2000672.
10. Erler I, Hirnet D, Wissenbach U, Flockerzi V, **Niemeyer BA**. Ca²⁺-selective transient receptor potential V channel architecture and function require a specific ankyrin repeat. *J Biol Chem* 2004;279, 34456-34463 doi: 10.1074/jbc.M404778200.

Category B

1. Poth V, Do HTT, Foerderer K, Tschernig T, Alansary D, Helms V, **Niemeyer BA**. A better brain? Alternative spliced STIM2 in hominoids arises with synapse formation and creates a gain-of-function variant. *bioRxiv*, 2023. 01.27.525873. DOI: 10.1101/2023.01.27.525873.
2. RNA-Seq datasets of Knock-out cells deposited into the ArrayExpress collection at EMBL-EBI under the accession number E-MTAB-12747.
3. Proteome data sets: ProteomeXchange Consortium partner repository, PRIDE with dataset identifier PXD028974 (<http://www.ebi.ac.uk/pride/archive/projects/PXD028974>).
4. Wissenbach U, **Niemeyer BA**: TRPV6, Handbook of Experimental Pharmacology HEP. 2006; 179:221-236.
5. **Niemeyer B**, Fanger CM, Hoth S, Hoth M. Diversity of calcium entry mechanisms and their roles in cell signaling. *Futura* 1997; 12 (1), 11-19.

Academic Distinctions

2002	Calogero-Pagliarello Research Award
2001	Offered a Professorship for Biomedical Sciences, Cornell University, USA
1997 - 1999	National Research Service Award (NRSA), Fellowship
1997 - 1998	Stanford University Dean's Fellowship
1992 - 1995	Fellowship „Gottlieb-Daimler und Karl-Benz-Stiftung“
1991 - 1992	Fellowship DAAD

Other Information

Dual Career track with my husband, Prof. Dr. Markus Hoth, partially limiting geographic relocation.

Data protection and consent to the processing of optional data

☒ I expressly consent to the processing of the voluntary (optional) information, including “special categories of personal data” in connection with the DFG’s review and decision-making process regarding my proposal. This also includes forwarding my data to the external reviewers, committee members and, where applicable, foreign partner organisations who are involved in the decision-making process. To the extent that these recipients are located in a third country (outside the European Economic Area), I additionally consent to them being granted access to my data for the above-mentioned purposes, even though a level of data protection comparable to EU law may not be guaranteed. For this reason, compliance with the data protection principles of EU law is not guaranteed in such cases. In this respect, there may be a violation of my fundamental rights and freedoms and resulting damages. This may make it more difficult for me to assert my rights under the General Data Protection Regulation (e.g. information, rectification, erasure, compensation) and, if necessary, to enforce these rights with the help of authorities or in court.

I may **revoke** my consent in whole or in part at any time – with effect for the future, freely and without giving reasons – vis-à-vis the DFG (postmaster@dfg.de). The lawfulness of the processing carried out up to that point remains unaffected. Insofar as I transmit “special categories of personal data” relating to third parties, I confirm that the necessary legitimization under data protection law exists (e.g. based on consent).

I have taken note of the DFG’s Data Protection Notice relating to research funding, which I can access at www.dfg.de/privacy_policy and I will forward it to such persons whose data the DFG processes as a result of being mentioned in this CV.

7.1.19. Priv.-Doz. Heidi Noels, PhD

Personal data

Title	Priv.-Doz. PhD
First name	Heidi
Name	Noels
Current position	Research group leader (permanent position)
Current institution(s)/site(s), country	Institute for Molecular Cardiovascular Research, Uniklinik RWTH Aachen, Germany
Identifiers/ORCID	0000-0003-3053-6984

Qualification and career

Stages	Periods and Details
Degree program	2021 Venia Legendi for Experimental Cardiovascular Medicine, RWTH Aachen University, Germany 2002 – 2003 Training courses in Biomedical Sciences, University of Leuven, Belgium 1998 – 2003 study of Civil Chemical Engineer, University of Leuven, Belgium
Doctorate	2008 PhD in Medical Sciences, Prof. Dr. P. Marynen /Prof. Dr. M. Baens, Faculty of Medicine, University of Leuven, Belgium
Stages of academic/professional career	2017 Certificate "Medical Didactics NRW" of the State Academy for Medical Education (LAMA)-NRW 2016 Certificate "Leadership", Management Development Program, RWTH Aachen University, Germany 2016 Certificate "Teaching and Research", Management Development Program, RWTH Aachen University, Germany Since 2014 Research Group Leader at the Institute for Molecular Cardiovascular Research, RWTH Aachen University, Germany 2011 – 2013 Junior Research Group Leader at the Institute for Molecular Cardiovascular Research, RWTH Aachen University, Germany 2008 – 2010 Alexander von Humboldt Postdoctoral Fellow, Institute of Molecular Cardiovascular Research, RWTH Aachen University, Germany

Supplementary Career Information

3 children (2009, 2011, 2012), Maternity leave for 15 weeks each

Activities in the Research System

Scientific coordination and management:

Coordinator and PI of the Horizon Europe Marie Skłodowska-Curie International Training Network LipiBRIGHT (2026 - 2031)

Managing Director of SFB/TRR219 (2018 - 2025)

Co-coordinator, Program Director and PI of the H2020 Marie Skłodowska-Curie International Training Network CaReSyAn (2018 - 2021)

Science teaching and mentoring:

Initiator and Head of the Qualification Profile "Comorbidities", Faculty of Medicine, RWTH Aachen University (Silver Medal in 2024; Gold Medal in 2025)

Initiator and organizer of an international Master Class on "Lipids in Health and Disease" in Germany (RWTH Aachen) and Belgium (University of Leuven, University of Hasselt)

Organisation of an annual international Cardiorenal Winter School (2019 / 2020 / 2021 / 2022)

Organisation of a national Convent of 18 DFG-funded SFB consortia on cardiovascular and kidney disease (Frankfurt, 2024)

Other scientific activities:

Head of the Biomedical Graduate School – Cardiorenal segment, Medical Faculty, RWTH Aachen (since 2024)

Member of the working group "START" providing funding for early-stage researchers, Medical Faculty, RWTH Aachen (since 2024)

Member of the German Society for Atherosclerosis Research (since 2017)

Member of the German Society of Cardiology (since 2021, member of AG4)

Member of the Editorial Board of *Circulation Research* (since 2023)

Member of the Editorial Board of *Arterioscler Thromb Vasc Biol* (2014-2023)

Guest editor of a thematic review series for *Circulation Research* (2023), *Advanced Drug Delivery Reviews* (2020), *Toxins* (2020), and *Frontiers in Immunology* (2016)

Frequent reviewer for scientific journals (e.g. *Kidney Int.*, *Arterioscler. Thromb. Vasc. Biol.*, *Nat. Commun.*, *J. Cell. Mol. Med.*) as well as for scientific organizations (e.g., ZonMW, Alexander von Humboldt Foundation, Dutch Heart Foundation)

Member of international PhD committees (Maastricht, Leuven, Antwerp, Toulouse, Liège, Bern)

Supervision of Researchers in Early Career Phases

Since 2008, supervision of 12 PhD students and 10 Master students. Since 2021, official promoter/co-promoter of 7 PhD students, promoter of 9 medical students (MD) and 5 master students in biology/biotechnology.

Since 2019, official host of 3 Alexander von Humboldt fellows (early research fellows) after being selected as Scout in the Alexander von Humboldt Henriette Scouting Program

Furthermore, coordinator of the research and training program of the European Marie-Curie International Training Network (ITN) CaReSyAn (H2020; 2018 - 2022, with 11 early-stage researchers; as well as of ITN LipiBRIGHT (Europe Horizon; 2026 - 2031, with 10 early-stage researchers). Also integrated in the European Marie-Curie ITN Strategy-CKD (H2020; 2020 - 2023), contributing to the training and mentoring of the early-stage researchers.

Scientific Results

Category A

1. Lauxen J, Vondenhoff S, Junho CVC, Martin P, Fleig S, Schütt K, Schulze-Späte U, Prates Roma L, Döring Y, Baaten CCFMJ, **Noels H**. Neutrophil function in patients with chronic

- kidney disease: a systematic review and meta-analysis. *Acta Physiologica*. 2025; 241:e70057. doi: 10.1111/apha.70057.
2. **Noels H**, Jankowski V, Schunk SJ, Vanholder R, Kalim S, Jankowski J. Post-translational modifications in kidney diseases and associated cardiovascular risk. *Nat Rev Nephrol*. 2024;20:495-512. doi: 10.1038/s41581-024-00837.
 3. Soppert J, Frisch J, Wirth J, Hemmers C, Boor P, Kramann R, Vondenhoff S, Moellmann J, Lehrke M, Hohl M, van der Vorst EPC, Werner C, Speer T, Maack C, Marx N, Jankowski J, Roma LP, **Noels H**. A systematic review and meta-analysis of murine models of uremic cardiomyopathy. *Kidney international* 2022;101, 256-273. doi: 10.1016/j.kint.2021.10.025.
 4. Wollenhaupt J, Frisch J, Harlacher E, Wong DWL, Jin H, Schulte C, Vondenhoff S, Moellmann J, Klinkhammer BM, Zhang L, Baleanu-Cura, A, Liehn, EA, Speer T, Kazakov A, Werner C, van der Vorst EPC, Selejan SR, Hohl M, Böhm M, Kramann R, Biessen EAL, Lehrke M, Marx N, Jankowski J, Maack C, Boor P, Prates Roma L, **Noels H**. Pro-oxidative priming but maintained cardiac function in a broad spectrum of murine models of chronic kidney disease. *Redox biology* 2022;56, 102459. doi: 10.1016/j.redox.2022.102459.
 5. Hemmers C, Schulte C, Wollenhaupt J, Wong DWL, Harlacher E, Orth-Alampour S, Klinkhammer BM, Schirmer SH, Böhm M, Marx N, Speer T, Boor P, Jankowski J, **Noels H**. Chemokine CCL9 Is Upregulated Early in Chronic Kidney Disease and Counteracts Kidney Inflammation and Fibrosis. *Biomedicines* 2022;10(2):420. doi: 10.3390/biomedicines10020420.
 6. Baaten CCFMJ, Schröer JR, Floege J, Marx N, Jankowski J, Berger M, **Noels H**. Platelet Abnormalities in CKD and Their Implications for Antiplatelet Therapy. *Clin J Am Soc Nephrol*. 2022;17(1):155-170. doi: 10.2215/CJN.04100321.
 7. Baaten CCFMJ, Sternkopf M, Henning T, Marx N, Jankowski J, **Noels H**. Platelet Function in CKD: A Systematic Review and Meta-Analysis. *J Am Soc Nephrol*. 2021;32(7):1583-98. doi: 10.1681/ASN.2020101440.
 8. Sternkopf M, Nagy M, Baaten CCJM, Kuijpers MJR, Tullemans BME, Wirth J, Theelen W, Mastenbroek TG, Lehrke M, Winnerling B, Baerts L, Marx N, ..., Jankowski J, Heemskerk JWM, **Noels H**. Native, Intact Glucagon-Like Peptide-1 Is a Natural Suppressor of Thrombus Growth Under Physiological Flow Conditions. *Arterioscler Thromb Vasc Biol*. 2020;40:e65-e77. doi: 10.1161/ATVBAHA.119.313645.
 9. Tilstam PV, Soppert J, Hemmers C, Harlacher E, Döring Y, van der Vorst EPC, Schulte C, Alampour-Rajabi S, Theelen W, Asare Y, de Winther MPJ, Lawrence T, Bernhagen J, Schober A, Zerneck A, Jankowski J, Weber C, **Noels H**. Non-activatable mutant of inhibitor of kappa B kinase α (IKK α) exerts vascular site-specific effects on atherosclerosis in Apoe-deficient mice. *Atherosclerosis*. 2020;292:23-30. doi: 10.1016/j.atherosclerosis.2019.10.023.
 10. Döring Y*, **Noels H***, van der Vorst EPC, Egea V, Drechsler M, Mandl M, Neideck C, Pawig L, Jansen Y, Schröder K, Bidzhekov K, Megens RTA, Theelen W, Klinkhammer BM, Boor P, Schurgers L, van Gorp R, Ries C, Kusters PJH, van der Wal A, Hackeng T, Gäbel G, Brandes RP, Soehnlein O, Lutgens E, Vestweber D, Teupser T, Holdt LM, Rader DJ, Saleheen D, Weber W. Vascular CXCR4 limits atherosclerosis by maintaining arterial integrity: evidence from mouse and human studies. *Circulation*. 2017;136:388-403. doi: 10.1161/CIRCULATIONAHA.117.027646. ***Equal contribution.**

Category B

Infrastructure: Co-founder of the international research institute AMICARE between the universities RWTH Aachen and Maastricht University (www.eu-amicare.eu)

Science Communication:

Vondenhoff, Baaten, **Noels**. Dysfunktion der Endothelzellen bei chronischer Nierenerkrankung und ein erhöhtes kardiovaskuläres Risiko: Einfluss von urämischen Toxinen? *Nephronews* 2023. <https://medicom.cc/de/publikationen/nephro-news/202302>.

Frisch, **Noels**, Kramann, Kaesler. Kardiales Remodeling bei chronischer Nierenkrankheit. *Nephronews* 2023. <https://medicom.cc/de/publikationen/nephro-news/202306>.

Baaten C.C.F.M.J., Berger M., Schütt K., Floege J., **Noels H**. Is platelet function in chronic renal failure impaired? *Nephronews* 2021.

Co-organizer of a research day for undergraduate scholars (Sept 2023; >60 scholars)

Organizer of a public event on cardiorenal research in the IMCAR institute in the context of "Türen auf mit der Maus" (October 2025)

Academic Distinctions

2022 Nominated by the Alexander von Humboldt Foundation and integrated as member on AcademiaNet, the SNSF online Portal to Excellent Women Academics (www.academia-net.org)

2021 Selected as Scout in the Alexander von Humboldt Henriette Scouting Program

2020 Honorary affiliation in the Dpt. of Biochemistry, Faculty of Health, Medicine and Life Sciences, Maastricht University

2018 W.H. Hauss Award of the German Atherosclerosis Society (DGAF)

2015 Finalist Young Investigator Award of the German Society of Atherosclerosis

2015 International Werner Risau Award in Vascular Biology (ATVB Journal Award)

Data protection and consent to the processing of optional data

[X] I expressly consent to the processing of the voluntary (optional) information, including "special categories of personal data" in connection with the DFG's review and decision-making process regarding my proposal. This also includes forwarding my data to the external reviewers, committee members and, where applicable, foreign partner organisations who are involved in the decision-making process. To the extent that these recipients are located in a third country (outside the European Economic Area), I additionally consent to them being granted access to my data for the above-mentioned purposes, even though a level of data protection comparable to EU law may not be guaranteed. For this reason, compliance with the data protection principles of EU law is not guaranteed in such cases. In this respect, there may be a violation of my fundamental rights and freedoms and resulting damages. This may make it more difficult for me to assert my rights under the General Data Protection Regulation (e.g. information, rectification, erasure, compensation) and, if necessary, to enforce these rights with the help of authorities or in court.

I may **revoke** my consent in whole or in part at any time – with effect for the future, freely and without giving reasons – vis-à-vis the DFG (postmaster@dfg.de). The lawfulness of the processing carried out up to that point remains unaffected. Insofar as I transmit "special categories of personal data" relating to third parties, I confirm that the necessary legitimation under data protection law exists (e.g. based on consent).

I have taken note of the DFG's Data Protection Notice relating to research funding, which I can access at www.dfg.de/privacy_policy and I will forward it to such persons whose data the DFG processes as a result of being mentioned in this CV.

7.1.20. Univ.-Prof. Leticia Prates Roma, PhD

Personal Data

Title	Univ.-Prof. PhD
First name	Leticia
Name	Prates Roma
Current position	Professor, W2 for Biophysics
Current institution(s)/site(s), country	Department of Biophysics, Saarland University – Campus Homburg, Germany
Identifiers/ORCID	0000-0001-9527-0529

Qualifications and Career

Stages	Periods and Details
Degree program	2004 – 2006 Master study at the University of Campinas, Brazil 2000 – 2003 Studies of Pharmacy, State University of Parana, Brazil
Doctorate	2006 – 2009 PhD Molecular Biology/Physiology at the University of Campinas, (Prof. Kleber Araujo De Souza), Campinas, Brazil
Stages of academic/professional career	Since 2023 Professor for Biophysics (W2), Saarland University, Germany 2017 – 2023 Jun.-Professor for Biophysics, Saarland University, Homburg, Germany 2016 – 2017 Post-doc at the Cardiology Department, Saarland University, Germany (Prof. C. Maack) 2014 – 2016 Post-doc at the Cancer Research Center, DKFZ, Heidelberg, Germany 2012 – 2014 Post-doc at the University of Sao Paulo, Brazil 2009 – 2011 Post-doc at the Catholic University of Louvain, Brussels, Belgium

Supplementary Career Information

2 children – maternity leave: 06/2017- 12/2017 and 04/2021- 12/2021

Activities in the Research System

Since 2024	Member of the Center for Gender-specific Biology and Medicine, Saarland University
Since 2018	Member of the Center for Human and Molecular Biology (ZHMB), Saarland University
Since 2018	Member of several Habilitation, PhD, MD and Bachelor thesis committees
2018 - 2025	Project leader in TRR219 Aachen-Homburg (first and second funding period)
2019 - 2022	Project leader in SFB894 (third funding period)

Conference/meetings as invited Speaker/Chair (selected)

- 2024 Sino-German Symposium
- 2023 Redox Rheinland Meeting, Seminar series Helmholtz Zentrum München, FESBE (Chair)
- 2021 Sino-German Symposium
- 2019 ERA/EDTA
- 2016 GRC/GRS

Reviewer Activity

Ad-hoc reviewer grant proposals: National Institute of Health, Czech Science Foundation

Ad-hoc reviewer for research articles: *Diabetologia*, *Redox Biology*, *Free Radical Biology and Medicine*, *AJP-Cell Physiology*, *Antioxidants*, *Diabetes*, etc.

Teaching

Saarland University, Theoretical and Practical courses, module: "Structural Biology and Biophysics" (B.Sc. Biology/Human & Mol. Biology); theoretical courses: Advanced Module "Glucose Homeostasis" (M.Sc. Human & Mol. Biology)

Supervision of Researchers in Early Career Phases

2018 - 2025: Supervision of 1 post-doc (ongoing), 3 PhD students (1 finished, 1 ongoing, 1 co-supervision finished), 3 Medical theses (ongoing), 5 Master theses (3 finished 2 ongoing) and 15 Bachelor theses (3 ongoing, 12 finished); Others: 13 exchange students/scientific visits.

Scientific Results

Category A

1. Scherschel M, Niemeier JO, Jacobs LJHC, Hoffmann MDA, Diederich A, Bell C, Höhne P, Raetz S, Kroll JB, Steinbeck J, Lichtenauer S, Multhoff J, Zimmermann J, Sadhanasatish T, Rothemann RA, Grashoff C, Messens J, Ampofo E, Laschke MW, Riemer J, **Roma LP**, Schwarzländer M, Morgan B. A family of NADPH/NADP⁺ biosensors reveals in vivo dynamics of central redox metabolism across eukaryotes. *Nat Commun.* 2024;19;15(1):10704. doi: 10.1038/s41467-024-55302-x
2. Amini M, Sarakpi T, Frisch J, Jost P, Engel J, Noels H, Maack C, Schunk S, **Roma LP**, Niemeyer BA, Speer T, Alansary D. P2X7 regulates IL-1 α mediated inflammation in chronic kidney disease in a ROS dependent manner. *Kidney International*, 2024;S0085-2538(24)00798-1. doi: 10.1016/j.kint.2024.10.024
3. Lin H, Suzuki K, Smith N, Li X, Nalbach L, Fuentes S, Spigelman AF, Dai XQ, Bautista A, Ferdaoussi M, Aggarwal S, Pepper AR, **Roma LP**, Ampofo E, Li WH, MacDonald PE. A role and mechanism for redox sensing by SENP1 in β -cell responses to high fat feeding. *Nat. Commun.* 2024; 15(1):334. DOI: 10.1038/s41467-023-44589-x.
4. Wollenhaupt J[§], Frisch J[§], Harlacher E, Wong DWL, Jin H, Schulte C, Vondenhoff S, Moellmann J, Klinkhammer BM, Zhang L, Baleanu-Curaj A, Liehn EA, Speer T, Kazakov A, Werner C, van der Vorst EPC, Selejan SR, Hohl M, Böhm M, Kramann R, Biessen EAL, Lehrke M, Marx N, Jankowski J, Maack C, Boor P, **Prates Roma L***, Noels H*. Pro-oxidative priming but maintained cardiac function in a broad spectrum of murine models of chronic

- kidney disease. *Redox Biol.* 2022;56:102459. doi: 10.1016/j.redox.2022.102459. §, ***Equal contribution.**
5. Wrublewsky S, Glas J, Carlein C, Nalbach L, Hoffmann MDA, Pack M, Vilas-Boas EA, Ribot N, Kappl R, Menger MD, Laschke MW, Ampofo E, **Roma LP**. The loss of pancreatic islet NADPH oxidase (NOX)2 improves islet transplantation. *Redox Biol.* 2022;55:102419. doi: 10.1016/j.redox.2022.102419.
 6. Bertero E, Nickel A, Kohlhaas M, Hohl M,, **Prates Roma L**, Maack C. Loss of Mitochondrial Ca²⁺ Uniporter Limits Inotropic Reserve and Provides Trigger and Substrate for Arrhythmias in Barth Syndrome Cardiomyopathy. *Circulation* 2021;21:1694-1713. doi: 10.1161/CIRCULATIONAHA.121.053755.
 7. Vilas-Boas E, Nalbach L, Ampofo E, Lucena CF, Ortis F, Carpinelli AR, Morgan B, **Roma LP**. Transient NADPH oxidase 2-dependent H₂O₂ production drives early palmitate-induced lipotoxicity in pancreatic islets. *Free Radic Biol Med.* 2021;162:1-13. doi: 10.1016/j.freeradbiomed.2020.11.023.
 8. **Roma LP**, Jonas JC. Nutrient Metabolism, Subcellular Redox State, and Oxidative Stress in Pancreatic Islets and β -Cells. *J Mol Biol.* 2019;(19) 30608-4. doi: 10.1016/j.jmb.2019.10.012.
 9. Cabezas-Wallscheid N, Buettner F, Sommerkamp P, Klimmeck D, Ladel L, Thalheimer FB, Pastor-Flores D, **Roma LP**, Renders S, Zeisberger P, Przybylla A, Schonberger K, Scognamiglio R, Altamura S, Florian CM, Fawaz M, Vonficht D, Tesio M, Collier P, Pavlinic D, Geiger H, Schroeder T, Benes V, Dick TP, Rieger MA, Stegle O, Trumpp A. Vitamin A-Retinoic Acid Signaling Regulates Hematopoietic Stem Cell Dormancy. *Cell.* 2017;169, 807-823. doi: 10.1016/j.cell.2017.04.018.
 10. Fujikawa Y*, **Roma LP***, Sobotta MC, Rose AJ, Diaz MB, Locatelli G, Breckwoldt M, Misgeld T, Kerchensteimer M, Herzig S, Muller-Decker K, Dick TP. Mouse redox histology using genetically encoded biosensors. *Science Signaling.* 2016;9, 419. doi: 10.1126/scisignal.aad3895. ***Equal contribution.**

Category B

Book Chapter: Nutritional Intervention in Metabolic Syndrome. Chapter 3: Pathophysiology of Metabolic Syndrome. Part II- Influence of Inflammatory Status and Oxidative Stress. Hilton Kenji Takahashi, **Leticia Prates Roma** and Mauricio da Silva Krause. 2015. Taylor & Francis Group

Academic Distinctions

- 2025 Technology of the month, from Trends Biochem Sci. Monitoring subcellular NADP redox state with NAPstar biosensors. doi: 10.1016/j.tibs.2025.03.013.
- 2016 Waldemar e Rubens Belfort Award. Best research article published in 2015 in the Journal Arquivos Brasileiros de Oftalmologia; Cover photo of Science Signaling
- 2015 DKFZ Visiting Scientist Fellowship, Travel award: Gordon Research Seminar and Conference. Oxidative Stress and Disease
- 2013 Travel Award EASD- ISG, Islet study group, Research Internships Abroad (BEPE) from FAPESP- Brazil
- 2012 Albert Renold Travel Fellowship: European Foundation for the Study of Diabetes (EFSD), Universal Grant- MCTI/ CNPq n° 14/2012 (Brazil), Travel Award EASD- ISG, Islet study group

- 2011 Travel Award EASD- European Association for the Study of Diabetes
- 2007 Travel Award EASD- ISG, Islet study group, Bravo Award – XXII Reunião Anual da Federação de Sociedades de Biologia Experimental
- 2005 Research in Endocrinology Award of the ‘Sociedade Brasileira de Endocrinologia and Metabologia’

Other Information

Further Qualifications:

EMBO Laboratory Leadership course for Group Leaders, 3R animal handling courses

Memberships:

European Association for the Study of Diabetes (EASD), Society of Free Radical Research (SFRR), The Physiological Society, Society for Biochemistry and Molecular Biology (GBM)

Data protection and consent to the processing of optional data

☒ I expressly consent to the processing of the voluntary (optional) information, including “special categories of personal data” in connection with the DFG’s review and decision-making process regarding my proposal. This also includes forwarding my data to the external reviewers, committee members and, where applicable, foreign partner organisations who are involved in the decision-making process. To the extent that these recipients are located in a third country (outside the European Economic Area), I additionally consent to them being granted access to my data for the above-mentioned purposes, even though a level of data protection comparable to EU law may not be guaranteed. For this reason, compliance with the data protection principles of EU law is not guaranteed in such cases. In this respect, there may be a violation of my fundamental rights and freedoms and resulting damages. This may make it more difficult for me to assert my rights under the General Data Protection Regulation (e.g. information, rectification, erasure, compensation) and, if necessary, to enforce these rights with the help of authorities or in court.

I may **revoke** my consent in whole or in part at any time – with effect for the future, freely and without giving reasons – vis-à-vis the DFG (postmaster@dfg.de). The lawfulness of the processing carried out up to that point remains unaffected. Insofar as I transmit “special categories of personal data” relating to third parties, I confirm that the necessary legitimation under data protection law exists (e.g. based on consent).

I have taken note of the DFG’s Data Protection Notice relating to research funding, which I can access at www.dfg.de/privacy_policy and I will forward it to such persons whose data the DFG processes as a result of being mentioned in this CV.

7.1.21. Jun.-Prof. Dr. med. Carolin Schneider (née Heimes)

Personal Data

Title	Jun.-Prof. Dr. med.
First name	Carolin
Name	Schneider
Current position	Medical doctor and research group leader (W1)
Current institution(s)/site(s), country	Department of Internal Medicine III, Uniklinik RWTH Aachen, Germany
Identifiers/ORCID	0000-0002-6728-9246

Qualifications and Career

Stages	Periods and Details
Degree program	2013 – 2019 Medical School RWTH Aachen University, Germany
Doctorate	2016 – 2020 Medical Doctoral Thesis (summa cum laude), RWTH Aachen University
Stages of academic/professional career	Since 2023 Adjunct Assistant Professor of Translational Medicine, University of Pennsylvania, USA Since 2023 Junior-Professor of Prevention and Genetics of Metabolic Diseases of the Liver at the RWTH Aachen University Since 2022 Senior Attending Physician and research group leader, Department of Internal Medicine III, Uniklinik RWTH Aachen, Germany 2019 – 2022 Postdoctoral Research Fellowship funded by Walter Benjamin Fellowship of the DFG, University of Pennsylvania, Philadelphia, USA (Prof. D.J. Rader) 2019 Board certification

Supplementary Career Information

2025 Part of the BMBF-funded DECIPHER consortium for metastasis detection

2025 Invited lecture Dife Potsdam

2024 Invited lecture Munich, LMU, Nfse, Germany

2024 Invited lecture Bern, Inselspital, Switzerland

2023 NRW Return to NRW grant

2022 Invited talk Gordon Conference Lipoprotein Metabolism

2019 Invited talk at GASL, Heidelberg, Germany

2018 Invited talk at AASLD, San Francisco, USA

2018 – 2019 DGIM Peter Scriba PhD scholarship

2013 – 2019 Scholarship of the German National Academic Foundation

Activities in the Research System

Since 2025 Scientific committee of the United European Gastroenterology

Since 2024 Member of the Editorial Board of *JHEP Reports* and *Journal of Hepatology*, reviews for *Journal of Hepatology*, *Clinical Gastroenterology and Hepatology*, *Nature Communications*, *American Journal of Gastroenterology*, *Gut* among others

Teaching

- 2024 Founding member of the lecture series Sex, Gender and Diversity
- 2023 - 2025 Responsible for the course "Podcast 5 Minutes Gastroenterology"
- 2022 - 2025 Implementation of gastroenterology lessons for students in the practical year
- Since 2020 "A clinician's guide to biomedical statistics using large, population-based data sets" (English Semester in Aachen - SEMERA); Lecture in Nutritional Medicine; Instructor: How do I read a scientific paper? and How do I write a scientific paper?
- 2020 LAMA Certification: Certificate in Medical Didactics NRW
- Since 2019 Internship training and "skills lab" in internal medicine (bedside teaching events), Anamnesis training with simulated patients in gastroenterology

Supervision of Researchers in Early Career Phases

During my time as a postdoc and now as a working group leader, I supervised 8 medical students and 4 PhD students for their doctoral thesis with great commitment and publications in high-ranked journals (*JAMA Network Open and Hepatology Communication*, *Alimentary Pharmacology and Therapeutics*, *United Journal of Gastroenterology*, *MED*, *Liver International*)

Scientific Results

Category A

1. **Schneider CV**, Schneider KM, Teumer A, Rudolph KL, Rader DJ, Strnad P. Association of Telomere Length with Risk of Disease and Mortality, *JAMA Int. Med.* 2022;182(3):291-300. doi: 10.1001/jamainternmed.2021.7804.
2. Fromme M*, **Schneider CV***, Pereira V, Hamesch K, Pons M, Reichert MC, Benini F, Ellis P, H Thorhauge K, Mandorfer M, Burbaum B, Woditsch V, Chorostowska-Wynimko J, Verbeek J, Nevens F, Genesca J, Miravittles M, Nuñez A, Schaefer B, Zoller H, Janciauskiene S, Abreu N, Jasmins L, Gaspar R, Gomes C, Schneider KM, Trauner M, Krag A, Gooptu B, Thorburn D, Marshall A, Hurst JR, Lomas DA, Lammert F, Gaisa NT, Clark V, Griffiths W, Trautwein C, Turner AM, McElvaney NG, Strnad P. Hepatobiliary phenotypes of adults with alpha-1 antitrypsin deficiency. *Gut.* 2022;71(2):415-423. doi: 10.1136/gutjnl-2020-323729.
3. Schneider ARP*, **Schneider CV***, Schneider KM, Baier V, Schaper S, Diedrich C, Coboeken K, Mayer H, Gu W, Trebicka J, Blank LM, Burghaus R, Lippert J, Rader DJ, Thaiss CA, Schlender J, Trautwein C, Kuepfer L; Early prediction of decompensation (EPOD) Score – non-invasive determination of liver cirrhosis decompensation risk; *Liver international.* 2022;42(3):640-650. doi: 10.1111/liv.15161.
4. Kleinjans M*, **Schneider CV***, Bruns T, Strnad P. Phenome of coeliac disease vs. inflammatory bowel disease. *Sci Rep.* 2022;12(1):14572. doi: 10.1038/s41598-022-18593-y.
5. Scorletti E*, Creasy KT*, Vujkovic M, Vell M, Zandvakili I, Rader DJ, Schneider KM,

- Schneider CV.** Dietary Vitamin E intake is associated with a reduced risk of developing digestive diseases and NAFLD. *Am J Gastroenterol.* 2022;117(6):927-930. doi: 10.14309/ajg.0000000000001726.
6. **Schneider CV,** Kleinjans M, Fromme M, Schneider KM, Strnad P. Phenome-wide association study in adult coeliac disease. *Aliment Pharmacol Ther.* 2021;53(4):510-518. doi: 10.1111/apt.16206.
 7. Voss J*, **Schneider CV***, Kleinjans M, Bruns T, Trautwein C , Strnad P. Hepatobiliary Phenotype of Individuals with Chronic Intestinal Disorders, *Sci Rep.* 2021;11(1):19954. doi: 10.1038/s41598-021-98843-7.
 8. **Schneider CV***, Schneider KM*, Conlon DM, Park J, Vujkovic M, Zandvakili I, Ko YA, Trautwein C, Center R, Carr RM, Strnad P, Thaïss CA, Rader DJ. A genome-first approach to mortality and metabolic phenotypes in MTARC1 p.Ala165Thr (rs2642438) heterozygotes and homozygotes. *Med (cell press).* 2021;2(7):851-863.e3. doi: 10.1016/j.medj.2021.04.011.
 9. **Schneider CV,** Zandvakili I, Thaïss CA, Schneider KM. Physical activity is associated with reduced risk of liver disease in the prospective UK Biobank cohort. *JHEP Rep.* 2021;3(3):100263. doi: 10.1016/j.jhepr.2021.100263.
 10. **Schneider CV***, Hamesch K*, Gross A, Mandorfer M, Moeller LS, Pereira V, Pons M, Kuca, P , Reichert MC, Benini F, Burbaum B, Voss J, Gutberlet M, Woditsch V, Lindhauer C, ..., Trautwein C, Aigner E, Strnad P, # On behalf of European Alpha- Liver Study Group. Liver Phenotypes of European Adults Heterozygous or Homozygous for Pi*Z Variant of alpha-1 antitrypsin (Pi*MZ vs Pi*ZZ genotype) and Non-carriers. *Gastroenterology.* 2020;159(2):534-548.e11. doi: 10.1053/j.gastro.2020.04.058.

Academic Distinctions

- 2025 Rising Star of the UEG
- 2024 Forbes 30 under 30 "Science and Healthcare"; ZIA Fellowship of ZEIT for visible women in science; Life Science Bridge Award of the Aventis Foundation; Member of the EASL Young Investigator Taskforce; Liver Cancer Award of the DGVS; Friedmund Neumann Prize of Schering Foundation
- 2023 Young scientist of the year 2023, Admission to the Junges Kolleg
- 2020 Borchers Medal for RWTH Thesis
- 2020 C. A. Ewald Prize, DGVS; Postdoctoral Research Fellowship, University Pennsylvania
- 2019 Young Investigator Award DGIM, Wiesbaden; Young Investigator Award EASL ILC, Vienna, Austria
- 2018 Best Abstract EASL ILC, Paris, France
- 2017 Tour Price DDG, Berlin, Germany; AASLD, Washington DC, USA

Data protection and consent to the processing of optional data

[X] I expressly consent to the processing of the voluntary (optional) information, including "special categories of personal data" in connection with the DFG's review and decision-making process regarding my proposal. This also includes forwarding my data to the external reviewers, committee members and, where applicable, foreign partner organisations who are involved in the decision-making process. To the extent that these recipients are located in a third country (outside the European Economic Area), I additionally consent to them being granted access to my data for the above-mentioned purposes, even though a level of data protection comparable to EU law may not be guaranteed. For this reason, compliance with the data protection principles of EU law is not guaranteed in such cases. In this respect, there may be a

violation of my fundamental rights and freedoms and resulting damages. This may make it more difficult for me to assert my rights under the General Data Protection Regulation (e.g. information, rectification, erasure, compensation) and, if necessary, to enforce these rights with the help of authorities or in court.

I may **revoke** my consent in whole or in part at any time – with effect for the future, freely and without giving reasons – vis-à-vis the DFG (postmaster@dfg.de). The lawfulness of the processing carried out up to that point remains unaffected. Insofar as I transmit “special categories of personal data” relating to third parties, I confirm that the necessary legitimation under data protection law exists (e.g. based on consent).

I have taken note of the DFG’s Data Protection Notice relating to research funding, which I can access at www.dfg.de/privacy_policy and I will forward it to such persons whose data the DFG processes as a result of being mentioned in this CV.

7.1.22. Univ.-Prof. Dr. med. Thimoteus Speer, PhD

Personal Data

Title	Univ.-Prof. Dr. med., PhD
First name	Thimoteus
Name	Speer
Current position	Full professor of Internal Medicine and Department Chair
Current institution(s)/site(s), country	Department of Internal Medicine 4, Nephrology, University Hospital Frankfurt/Main, Germany
Identifiers/ORCID	0000-0002-2491-6393

Qualifications and Career

Stages	Periods and Details
Degree program	2010 – 2013 Science in Medical Biology, University and ETH Zurich, Switzerland 2001 – 2008 Studies in Medicine, Saarland University
Doctorate	2014 PhD University Zurich (Prof. O. Devuyst) 2008 MD Saarland University (Prof. U. Seyfert)
Stages of academic/professional career	Since 2022 Full Professor (W3) for Internal Medicine, Goethe-University, Frankfurt/Main Since 2022 Head of Else Kröner-Fresenius Center for Nephrological Research, Goethe-University, Frankfurt/Main Since 2022 Director of Department of Internal Medicine 4, Nephrology, University Hospital, Frankfurt/Main 2020 – 2022 Full Professor (W2) for Translational Cardio-Renal Medicine, Saarland University 2020 – 2022 Deputy Director and Chief Senior Physician, Department of Internal Medicine IV, Saarland University Medical Centre, Homburg/Saar, Germany 2016 – 2020 Senior Physician, Research Group Leader and Laboratory Head Department of Internal Medicine IV, Saarland University Medical Centre 2012 – 2016 Resident Physician and Research Group Leader, Department of Internal Medicine IV, Saarland University Medical Centre 2010 – 2012 Postdoctoral Research Fellow, University Hospital Zurich, Department of Cardiology (Scholarship from DFG) 2008 – 2009 Resident Physician Department of Internal Medicine IV, Saarland University Medical Centre

Activities in the Research System

Memberships

Deutsche Gesellschaft für Innere Medizin (DGIM), Deutsche Gesellschaft für Nephrologie (DGfN), Deutsche Transplantationsgesellschaft (DTG), Deutsche Hochdruckliga (DHL), European Renal Association (ERA), American Society of Nephrology

Teaching

Regular teaching activities at the Goethe-University, including lectures and seminars

Supervision of Researchers in Early Career Phases

Supervision of 14 MD and 3 PhD students at Saarland University and Goethe-University, currently supervising 3 students.

Scientific Results

Category A

1. Weyrich M, Zewinger S, Sarakpi T, Rasper T, Kleber ME, Cremer S, Zanders L, Fleck F, Siegbahn A, Wallentin L, Abplanalp WT, Nerbas L, Fay S, Eberle A, Dimmeler S, März M, Zeiher AM, **Speer T**. Mosaic loss of Y chromosome (LOY) predicts mortality in patients undergoing coronary angiography. *Eur Heart Journal*. 2025;12:ehaf035. doi: 10.1093/eurheartj/ehaf035.
2. Weyrich M, Cremer S, Gerster M, Sarakpi T, Rasper T, Zewinger S, Patyna SR, Leistner DM, Heine GH, Wanner C, März W, Fliser D, Dimmeler S, Zeiher AM, **Speer T**. Loss of Y Chromosome and Cardiovascular Events in Chronic Kidney Disease. *Circulation*. 2024;150:746-757. doi: 10.1161/CIRCULATIONAHA.124.069139.
3. **Speer T**, Schunk SJ, Sarakpi T, Schmit D, Wagner M, Arnold L, Zewinger S, Azukaitis K, Bayazit A, Obrycki L, Kaplan Bulut I, Duzova A, Doyon A, Ranchin B, Caliskan S, Harambat J, Yilmaz A, Alpay H, Lugani F, Balat A, Arbeiter K, Longo G, Melk A, Querfled U, Wühl E, Mehls O, Fliser D, Schaefer F; 4C Study Investigators, ESCAPE trial Investigators. Urinary DKK3 as a biomarker for short-term kidney function decline in children with chronic kidney disease: an observational cohort study. *Lancet Child Adolesc Health*. 2023;7:405-414. doi: 10.1016/S2352-4642(23)00049-4.
4. **Speer T**, Dimmeler S, Schunk SJ, Fliser D, Ridker PM. Targeting innate immunity-driven inflammation in CKD and cardiovascular disease. *Nat Rev Nephrol*. 2022;18:762-778. doi: 10.1038/s41581-022-00621-9.
5. Schunk SJ, Triem S, Schmit D, Zewinger S, Sarakpi T, Becker E, Hütter G, Wrublewsky S, Küting F, Hohl M, Alansary D, Prates Roma L, Lipp P, Möllmann J, Lehrke M, Laschke MW, Menger MD, Kramann R, Boor P, Jahnke-Dechent W, März W, Böhm M, Laufs U, Niemeyer BA, Fliser D, Ampofo E, **Speer T**. Interleukin-1 α Is a Central Regulator of Leukocyte-Endothelial Adhesion in Myocardial Infarction and in Chronic Kidney Disease. *Circulation*. 2021;144:893-908. doi: 10.1161/CIRCULATIONAHA.121.053547.
6. Schunk SJ, Kleber MK, März W, Pang S, Zewinger S, Triem S, Ege P, Reichert MC, Krawczyk K, Weber SN, Jaumann I, Schmit D, Sarakpi T, Wagenpfeil S, Kramann R, Boerwinkle E, Ballantyne CM, Grove-Gaona ML, Tragante V, Pilbrow AP, Richards AM, Cameron VA, Doughty RN, Dubé MP, Tardif JC, Feroz-Zada Y, Sun M, Liu C, Ko YA, Quyyumi AA, Hartiala JA, Tang WHW, Hazen SL, Allayee HA, McDonough CW, Gong Y,

- Cooper-DeHoff RM, Johnson JA, Scholz M, Teren A, Burkhardt R, Martinsson A, Smith JG, Wallentin L, James AK, Eriksson N, White H, Held C, Waterworth D, Trompet S, Jukema JW, Ford I, Stott DJ, Sattar N, Cresci S, Spertus JA, Campbell H, eQTLGen consortium, BIOS consortium, Tierling S, Walter J, Ampofo E, Niemeyer BA, Lipp P, Schunkert H, Böhm M, Lammert L, Koenig W, Fliser D, Laufs U, **Speer T**. Genetically-determined NLRP3 inflammasome activation associates with systemic inflammation and cardiovascular mortality. *Eur Heart J*. 2021;7:1742-1756. doi: 10.1093/eurheartj/ehab107.
7. **Speer T**, Ridker PM, von Eckardstein A, Schunk SJ, Fliser D. Lipoproteins in chronic kidney disease: From bench to bedside. *Eur Heart J* 2021;42(22):2170-2185. doi:10.1093/eurheartj/ehaa1050.
 8. Schunk SJ, Flöge J, Fliser D, **Speer T**. Wnt/b-catenin signaling – a versatile player in kidney injury and repair. *Nature Reviews Nephrology*. 2021;17:172-184. doi: 10.1038/s41581-020-00343-w.
 9. Zewinger S, Reiser J, Jankowski V, Alansary D, Hahm E, Triem S, Klug M, Schunk SJ, Schmit D, Kramann R, Körbel C, Ampofo E, Laschke MW, Selejan SR, Paschen A, Herter T, Schuster S, Silbernagel G, Sester M, Sester U, Aßmann G, Bals R, Kostner G, Jahn-Dechent W, Menger MD, Rohrer L, März W, Böhm M, Jankowski J, Kopf M, Latz E, Niemeyer BA, Fliser D, Laufs U, **Speer T**. Apolipoprotein C3 induces inflammation and organ damage by alternative inflammasome activation. *Nat Immunol*. 2020;21:30-41. doi: 10.1038/s41590-019-0548-1.
 10. Schunk SJ, Zarbock A, Meersch M, Küllmar M, Kellum JA, Schmit D, Wagner M, Triem S, Wagenpfeil S, Gröne HJ, Schäfers HJ, Fliser D, Zewinger S*, **Speer T***. Association between urinary dickkopf-3, acute kidney injury, and subsequent loss of kidney function in patients undergoing cardiac surgery: an observational cohort study. *Lancet*. 2019;394:488-496. doi: 10.1016/S0140-6736(19)30769-X. ***Shared last authorship.**

Category B

Patent: Symmetric dimethylarginine (SDMA) modifies high density lipoprotein (HDL) to induce endothelial dysfunction (WO 2013124478 A1)

Academic Distinctions

- 2021 Stanley Shaldon Award, European Renal Association/European Dialysis Transplantation Association (ERA-EDTA)
- 2020 Franz-Volhard-Award, Deutsche Gesellschaft für Nephrologie (DGfN)
- 2019 Sonderauszeichnung, Verband Deutscher Nierenzentren
- 2019 Heinz Maier-Leibnitz Award, Deutsche Forschungsgemeinschaft (DFG) and Bundesministerium für Bildung und Forschung (BMBF)
- 2014 Award Universität Zürich für Dissertation der Mathematisch-Naturwissenschaftlichen Fakultät in 2013 (equivalent to ‚summa cum laude‘)
- 2013 Research award Freunde des Universitätsklinikums Homburg e.V.
- 2013 Carl-Ludwig-Award Deutschen Gesellschaft für Nephrologie
- 2012 Research Scholarship, Deutschen Hochdruckliga
- 2012 Young Investigator Award, Deutsche Hochdruckliga

Data protection and consent to the processing of optional data

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I have taken note of the DFG’s Data Protection Notice relating to research funding, which I can access at www.dfg.de/privacy_policy and I will forward it to such persons whose data the DFG processes as a result of being mentioned in this CV.

7.1.23. Priv.-Doz. Emiel P.C. van der Vorst, PhD

Personal Data

Title	Priv.-Doz. PhD
First name	Emiel
Name	Van der Vorst
Current position	Group-Leader
Current institution(s)/site(s), country	Department of Internal Medicine I, Uniklinik RWTH Aachen, Germany.
Identifiers/ORCID	0000-0001-5771-6278

Qualifications and Career

Stages	Periods and Details
Degree program	2023 Venia legendi in Medicine (Molecular Cardiovascular Research), RWTH Aachen, Germany 2008 – 2010 Master Cardiovascular Biology and Medicine, Maastricht University, The Netherlands 2005 – 2008 Bachelor Molecular Life Sciences, Maastricht University, The Netherlands
Doctorate	2010 – 2015 PhD study at Maastricht University, The Netherlands, Supervisors: Prof. E. Biessen, Prof. M. de Winther, Prof. J. Glatz and Dr. M. Donners, Subject: Modulation of vascular inflammation, cell-type specific effects of ADAMs and HDL
Stages of academic/professional career	Since 2024 Research group leader at the Department of Internal Medicine I, Uniklinik RWTH Aachen, Germany (permanent position) Since 2019 Research group leader at the Institute for Cardiovascular Prevention (IPEK) in part-time position, Ludwig-Maximilians-University, Munich, Germany 2019 – 2024 Research group leader at the Institute for Molecular Cardiovascular Research, Uniklinik RWTH Aachen, Germany 2015 – 2019 Postdoctoral Research Fellow at the Institute for Cardiovascular Prevention (IPEK), Ludwig-Maximilians-University, Munich, Germany

Supplementary Career Information

First-generation academics

02/2024 – 08/2024: 50% absence due to childcare responsibilities

Activities in the Research System

Professional Memberships

Member of the European Vascular Biology Organisation (EVBO), European Atherosclerosis Society (EAS), European Society of Cardiology (ESC) and the Deutsches Zentrum für Herz-Kreislauf-Forschung (DZHK)

Reviewer & Editorial positions

- Since 2024 Evaluator/reviewer for the Fonds de la Recherche Scientifique (FNRS), the European Society of Cardiology (ESC) and the Swiss National Science Foundation (SNSF)
- Since 2022 Evaluator/reviewer for the French National Research Agency (ANR)
- Since 2021 Editorial Board member *Current Issues in Molecular Biology*
Topic Advisory Panel member *International Journal of Molecular Sciences*
Associate Editor *Frontiers in Cardiovascular Medicine*
- Since 2019 Editorial Board member *Atherosclerosis*

Additional experience

- Since 2023 Coordinator teaching programme: "Sex/gender in the heart and kidney"
- Since 2023 Member of Expert Pool Flanders Research Foundation
- Since 2022 Nucleus Member Scientists of Tomorrow (ESC)
- 2022 – 2024 EAS Young Fellow programme participant
- 2015 Organizer international symposium "Lipoprotein dependent modulation of inflammation in the metabolic syndrome" (*Maastricht, NL*)
- 2010 – 2015 PhD-representative for CARIM (*Maastricht, NL*)

Supervision of Researchers in Early Career Phases

Supervision of 3 PhD students, currently ongoing supervision of 4 PhD students and 3 MD students, 4 Postdoctoral Research Fellows (2 Alexander von Humboldt scholarship fellows)

Scientific Results

Category A

1. Bonnin-Marquez A*, Jankowski J*, Maas SL, Hermann J, Kahles F, Lellig M, Fliser D, Schunk S, Stamellou E, Berger M, Speer T, Kalim S, Leong Wong DW, **van der Vorst EPC***, Jankowski V*. Guanidinylation compromises the anti-inflammatory and anti-oxidative properties of apolipoprotein A-I in chronic kidney disease progression. *Kidney Int.* 2025;107(5):916-929. doi: 10.1016/j.kint.2025.02.010.
2. Doring Y*, **van der Vorst EPC***, Yan Y*, Neideck C*, Blanchet X, Jansen Y, Kemmerich M, Bayasgalan S, Peters LJF, Hristov M, Bidzhekov K, Yin C, Zhang X, Leberzammer J, Li Y, Park I, Kral M, Nitz K, Parma L, Gencer S, Habenicht A, Faussner A, Teupser D, Monaco C, Holdt L, Megens RTA, Atzler D, Santovito D, von Hundelshausen P, Weber C. Identification of a non-canonical chemokine-receptor pathway suppressing regulatory T cells to drive atherosclerosis. *Nat Cardiovasc Res.* 2024;3:221-242. doi: 10.1038/s44161-023-00413-9
3. Doring Y*, **van der Vorst EPC***, Weber C. Targeting immune cell recruitment in atherosclerosis. *Nat Rev Cardiol.* 2024;21:824-840. doi: 10.1038/s41569-024-01023-z.
4. Adam S*, Maas SL*, Huchzermeier R, Rakateli L, Abschlag K, Hohl M, Liao L, Bartneck M, Teunissen M, Wouters K, Santovito D, Jankowski J, Biessen EAL, **van der Vorst EPC**. The

- calcium-sensing-receptor (CaSR) in adipocytes contributes to sex-differences in the susceptibility to high fat diet induced obesity and atherosclerosis. *EBioMedicine*. 2024;107:105293. doi: 10.1016/j.ebiom.2024.105293
5. Gencer S*, Doring Y*, Jansen Y, Bayasgalan S, Yan Y, Bianchini M, Cimen I, Muller M, Peters LJF, Megens RTA, von Hundelshausen P, Duchene J, Lemnitzer P, Soehnlein O, Weber C, **van der Vorst EPC**. Endothelial ACKR3 drives atherosclerosis by promoting immune cell adhesion to vascular endothelium. *Basic Res Cardiol*. 2022;117:30. doi: 10.1007/s00395-022-00937-4
 6. Nazir S, Jankowski V, Bender G, Zewinger S, Rye K A, **van der Vorst E P C**. Interaction between high-density lipoproteins and inflammation: Function matters more than concentration! *Adv Drug Deliv Rev*. 2020;159, 94-119, doi:10.1016/j.addr.2020.10.006.
 7. Doring Y, Jansen Y, Cimen I, Aslani M, Gencer S, Peters LJF, Duchene J, Weber C*, **van der Vorst EPC***. B-Cell-Specific CXCR4 Protects Against Atherosclerosis Development and Increases Plasma IgM Levels. *Circ Res*. 2020;126:787-788. doi: 10.1161/CIRCRESAHA.119.316142.
 8. **van der Vorst EPC***, Mandl M*, Muller M, Neideck C, Jansen Y, Hristov M, Gencer S, Peters LJF, Meiler S, Feld M, Geiselhoringer AL, de Jong RJ, Ohnmacht C, Noels H, Soehnlein O, Drechsler M, Weber C, Doring Y. Hematopoietic ChemR23 (Chemerin Receptor 23) Fuels Atherosclerosis by Sustaining an M1 Macrophage-Phenotype and Guidance of Plasmacytoid Dendritic Cells to Murine Lesions-Brief Report. *Arterioscler Thromb Vasc Biol*. 2019;39:685-693. doi: 10.1161/ATVBAHA.119.312386.
 9. Doring Y*, **van der Vorst EPC***, Duchene J, Jansen Y, Gencer S, Bidzhekov K, Atzler D, Santovito D, Rader DJ, Saleheen D, Weber C. CXCL12 Derived From Endothelial Cells Promotes Atherosclerosis to Drive Coronary Artery Disease. *Circulation*. 2019;139:1338-1340. doi: 10.1161/CIRCULATIONAHA.118.037953.
 10. **van der Vorst EPC***, Theodorou K*, Wu Y, Hoeksema MA, Goossens P, Bursill CA, Aliyev T, Huitema LFA, Tas SW, Wolfs IMJ, Kuijpers MJE, Gijbels MJ, Schalkwijk CG, Koonen DPY, Abdollahi-Roodsaz S, McDaniels K, Wang CC, Leitges M, Lawrence T, Plat J, Van Eck M, Rye KA, Touqui L, de Winther MPJ, Biessen EAL, Donners M. High-Density Lipoproteins Exert Pro-inflammatory Effects on Macrophages via Passive Cholesterol Depletion and PKC-NF-kappaB/STAT1-IRF1 Signaling. *Cell Metab*. 2017;25:197-207. doi: 10.1016/j.cmet.2016.10.013.

Academic Distinctions

- 2022 Young Investigator Award, European Atherosclerosis Society
- 2021 Corona Stiftung grant
- 2021 Appointed as Henriette-Herz Scout
- 2020 Fritz-Thyssen Stiftung grant
- 2020 Young Investigator Award, European Atherosclerosis Society
- 2019 Else-Kröner Fresenius Stiftung grant
- 2019 Aachen Interdisciplinary Centre for Clinical Research (IZKF) grant
- 2019 NWO-ZonMw Veni grant
- 2017 Bernd R. Binder Publication Prize
- 2017 Paper of the year award, Scandinavian Society of Atherosclerosis Research
- 2017 Young Investigator Award, European Atherosclerosis Society
- 2016 Young Investigator Award, European Atherosclerosis Society
- 2015 Young Investigator Award, European Society of Cardiology

- 2015 Poster presentation award, Dutch-German joint meeting of Mol. Cardiology
- 2014 Oral presentation award, Cardiovascular Conference
- 2013 Poster presentation award, Cardiovascular Conference
- 2010 Young Investigator Abstract Award, Vascular Disease joint meeting

Data protection and consent to the processing of optional data

☒ I expressly consent to the processing of the voluntary (optional) information, including “special categories of personal data” in connection with the DFG’s review and decision-making process regarding my proposal. This also includes forwarding my data to the external reviewers, committee members and, where applicable, foreign partner organisations who are involved in the decision-making process. To the extent that these recipients are located in a third country (outside the European Economic Area), I additionally consent to them being granted access to my data for the above-mentioned purposes, even though a level of data protection comparable to EU law may not be guaranteed. For this reason, compliance with the data protection principles of EU law is not guaranteed in such cases. In this respect, there may be a violation of my fundamental rights and freedoms and resulting damages. This may make it more difficult for me to assert my rights under the General Data Protection Regulation (e.g. information, rectification, erasure, compensation) and, if necessary, to enforce these rights with the help of authorities or in court.

I may **revoke** my consent in whole or in part at any time – with effect for the future, freely and without giving reasons – vis-à-vis the DFG (postmaster@dfg.de). The lawfulness of the processing carried out up to that point remains unaffected. Insofar as I transmit “special categories of personal data” relating to third parties, I confirm that the necessary legitimization under data protection law exists (e.g. based on consent).

I have taken note of the DFG’s Data Protection Notice relating to research funding, which I can access at www.dfg.de/privacy_policy and I will forward it to such persons whose data the DFG processes as a result of being mentioned in this CV.

7.2 Joint publications of the SFB/TRR219 in the 2nd funding period

Listed are PubMed-Listed publications from 01/2022 – 03/2025.

Accepted manuscripts in between 04/2025 – 05/2025 (from reference nr. 210 on) are not included in the statistics of joint publications in Chapter 1 of our application.

Acceptance letters of manuscripts that are not yet online, are available in the Appendix §7.3.

PIs of the SFB/TRR219 in the 2nd funding period are marked in bold.

1. Abdin A, Schulz M, Riemer U, Hadëri B, Wachter R, Laufs U, Bauersachs J, **Kindermann I**, Vukadinović D, **Böhm M**. Sacubitril/valsartan in heart failure: efficacy and safety in and outside clinical trials. *ESC Heart Fail.* 2022;9:3737-3750. doi: 10.1002/ehf2.14097
2. Al Ghorani H, Götzinger F, **Böhm M**, **Mahfoud F**. Arterial hypertension - Clinical trials update 2021. *Nutr Metab Cardiovasc Dis.* 2022;32:21-31. doi: 10.1016/j.numecd.2021.09.007.
3. Baaten C, Schröer JR, **Floege J**, **Marx N**, **Jankowski J**, Berger M, **Noels H**. Platelet Abnormalities in CKD and Their Implications for Antiplatelet Therapy. *Clin J Am Soc Nephrol.* 2022;17:155-170. doi: 10.2215/cjn.04100321.
4. Berger M, Baaten C, **Noels H**, **Marx N**, **Schütt K**. [Heart and diabetes : Platelet function and antiplatelet therapy in chronic kidney disease]. *Herz.* 2022;47:426-433. doi: 10.1007/s00059-022-05129-3.
5. Bewarder Y, Lauder L, Kulenthiran S, Schäfer O, Ukena C, Percy Marshall R, Hepp P, Laufs U, Stöbe S, Hagendorff A, **Böhm M**, **Mahfoud F**, Ewen S. Global longitudinal strain differentiates physiological hypertrophy from maladaptive remodeling. *Int J Cardiol Heart Vasc.* 2022;40:101044. doi: 10.1016/j.ijcha.2022.101044.
6. Bhargava S, Merckelbach E, **Noels H**, Vohra A, **Jankowski J**. Homeostasis in the Gut Microbiota in Chronic Kidney Disease. *Toxins (Basel).* 2022;14. doi: 10.3390/toxins14100648.
7. **Böhm M**, Butler J, Filippatos G, Ferreira JP, Pocock SJ, Abdin A, **Mahfoud F**, Brueckmann M, Gollop ND, Iwata T, Ponikowski P, Wanner C, Zannad F, Packer M, Anker SD. Empagliflozin Improves Outcomes in Patients With Heart Failure and Preserved Ejection Fraction Irrespective of Age. *J Am Coll Cardiol.* 2022;80:1-18. doi: 10.1016/j.jacc.2022.04.040.
8. **Böhm M**, Butler J, **Mahfoud F**, Filippatos G, Ferreira JP, Pocock SJ, Slawik J, Brueckmann M, Linetzky B, Schöler E, Wanner C, Zannad F, Packer M, Anker SD. Heart failure outcomes according to heart rate and effects of empagliflozin in patients of the EMPEROR-Preserved trial. *Eur J Heart Fail.* 2022;24:1883-1891. doi: 10.1002/ejhf.2677.
9. **Böhm M**, Schumacher H, Werner C, Teo KK, Lonn EM, **Mahfoud F**, **Speer T**, Mancía G, Redon J, Schmieder RE, Sliwa K, **Marx N**, Weber MA, Laufs U, Williams B, Yusuf S, Mann JFE. Association between exercise frequency with renal and cardiovascular outcomes in diabetic and non-diabetic individuals at high cardiovascular risk. *Cardiovasc Diabetol.* 2022;21:12. doi: 10.1186/s12933-021-01429-w.
10. Buder F, Selejan SR, **Hohl M**, Kindermann M, Herr C, Lepper PM, Bals R, Salzberger B, **Mahfoud F**, **Böhm M**. Glycyrrhizin through liquorice intake modulates ACE2 and HMGB1 levels-A pilot study in healthy individuals with implications for COVID-19 and ARDS. *PLoS One.* 2022;17:e0275181. doi: 10.1371/journal.pone.0275181.
11. Egger F, Blumenauer D, Fischer P, Venhorst A, Kulenthiran S, Bewarder Y, Zimmer A, **Böhm M**, Meyer T, **Mahfoud F**. Effects of face masks on performance and cardiorespiratory response in well-trained athletes. *Clin Res Cardiol.* 2022;111:264-271. doi: 10.1007/s00392-021-01877-0.

12. Emrich IE, Scheuer AL, Rogacev KS, **Mahfoud F, Wagenpfeil S, Fliser D**, Schirmer SH, **Böhm M**, Heine GH. Plasma biomarkers outperform echocardiographic measurements for cardiovascular risk prediction in kidney transplant recipients: results of the HOME ALONE study. *Clin Kidney J*. 2022;15:693-702. doi: 10.1093/ckj/sfab216.
13. Fischer P, Blumenauer D, Egger F, Fikenzer S, Zimmer A, Kulenthiran S, Laufs U, Bewarder Y, **Böhm M, Mahfoud F**. Effects of Medical Face Masks on Physical Performance in Patients With Coronary Artery Disease or Hypertension. *Am J Cardiol*. 2022;173:1-7. doi: 10.1016/j.amjcard.2022.02.056.
14. Frick M, **Schütt K**, Kerst G, **Marx N**, Lebherz C. Rare Case of an Adult With Double-Chambered Left Ventricle. *CJC Pediatr Congenit Heart Dis*. 2022;1:37-39. doi: 10.1016/j.cjpcp.2021.10.001.
15. Ganesh N, **van der Vorst EPC**, Spiesshöfer J, He S, Burgmaier M, Findeisen H, **Lehrke M**, Swirski FK, **Marx N, Kahles F**. Gut immune cells-A novel therapeutical target for cardiovascular disease? *Front Cardiovasc Med*. 2022;9:943214. doi: 10.3389/fcvm.2022.943214.
16. Götzinger F, Kunz M, Lauder L, **Böhm M, Mahfoud F**. Arterial hypertension - clinical trials update 2022. *Hypertens Res*. 2022;45:1140-1146. doi: 10.1038/s41440-022-00931-2.
17. Götzinger F, Reichrath J, Millenaar D, Lauder L, Meyer MR, **Böhm M, Mahfoud F**. Photoinduced skin reactions of cardiovascular drugs-a systematic review. *Eur Heart J Cardiovasc Pharmacother*. 2022;8:420-430. doi: 10.1093/ehjcvp/pvac017.
18. Gross A, Zhou B, Bewersdorf L, Schwarz N, Schacht GM, **Boor P, Hoefft K**, Hoffmann B, Fuchs E, **Kramann R**, Merkel R, Leube RE, Strnad P. Desmoplakin Maintains Transcellular Keratin Scaffolding and Protects From Intestinal Injury. *Cell Mol Gastroenterol Hepatol*. 2022;13:1181-1200. doi: 10.1016/j.jcmgh.2021.12.009.
19. Hemmers C, Schulte C, Wollenhaupt J, Wong DWL, Harlacher E, Orth-Alampour S, Klinkhammer BM, Schirmer SH, **Böhm M, Marx N, Speer T, Boor P, Jankowski J, Noels H**. Chemokine CCL9 Is Upregulated Early in Chronic Kidney Disease and Counteracts Kidney Inflammation and Fibrosis. *Biomedicines*. 2022;10. doi: 10.3390/biomedicines10020420.
20. Heradien M, **Mahfoud F**, Greyling C, Lauder L, van der Bijl P, Hettrick DA, Stilwaney W, Sibeko S, Jansen van Rensburg R, Peterson D, Khwinani B, Goosen A, Saaïman JA, Ukena C, **Böhm M**, Brink PA. Renal denervation prevents subclinical atrial fibrillation in patients with hypertensive heart disease: Randomized, sham-controlled trial. *Heart Rhythm*. 2022;19:1765-1773. doi: 10.1016/j.hrthm.2022.06.031.
21. Heuschkel MA, Babler A, Heyn J, **van der Vorst EPC**, Steenman M, Gesper M, Kappel BA, Magne D, Gouëffic Y, **Kramann R, Jahnén-Dechent W, Marx N**, Quillard T, **Goettsch C**. Distinct role of mitochondrial function and protein kinase C in intimal and medial calcification in vitro. *Front Cardiovasc Med*. 2022;9:959457. doi: 10.3389/fcvm.2022.959457.
22. **Hohl M**, Selejan SR, Wintrich J, Lehnert U, **Speer T**, Schneider C, Mauz M, Markwirth P, Wong DWL, **Boor P**, Kazakov A, Mollenhauer M, Linz B, Klinkhammer BM, Hübner U, Ukena C, Moellmann J, **Lehrke M, Wagenpfeil S**, Werner C, Linz D, **Mahfoud F, Böhm M**. Renal Denervation Prevents Atrial Arrhythmogenic Substrate Development in CKD. *Circ Res*. 2022;130:814-828. doi: 10.1161/circresaha.121.320104.
23. **Jankowski V**, Saritas T, Kjolby M, Hermann J, **Speer T**, Himmelsbach A, Mahr K, Heuschkel MA, **Schunk SJ**, Thirup S, Winther S, Bottcher M, Nyegard M, Nykjaer A, **Kramann R, Kaesler N, Jankowski J, Floege J, Marx N, Goettsch C**. Carbamylated sortilin associates with cardiovascular calcification in patients with chronic kidney disease. *Kidney Int*. 2022;101:574-584. doi: 10.1016/j.kint.2021.10.018.
24. Jansen J, Reimer KC, Nagai JS, Varghese FS, Overheul GJ, de Beer M, Rovers R, Daviran D, Fermin LAS, Willemsen B, Beukenboom M, Djudjaj S, von Stillfried S, van Eijk LE, Mastik M, Bulthuis M, Dunnen WD, van Goor H, Hillebrands JL, Triana SH, Alexandrov T, Timm

- MC, van den Berge BT, van den Broek M, Nlandu Q, Heijnert J, Bindels EMJ, Hoogenboezem RM, Mooren F, Kuppe C, Miesen P, Grünberg K, Ijzermans T, Steenbergen EJ, Czogalla J, Schreuder MF, Sommerdijk N, Akiva A, **Boor P**, Puelles VG, **Floege J**, Huber TB, van Rij RP, Costa IG, Schneider RK, Smeets B, **Kramann R**. SARS-CoV-2 infects the human kidney and drives fibrosis in kidney organoids. *Cell Stem Cell*. 2022;29:217-231.e218. doi: 10.1016/j.stem.2021.12.010.
25. Jiang T, Samapati R, Klassen S, Lei D, Erfinanda L, **Jankowski V**, Simmons S, Yin J, Arenz C, Dietrich A, Gudermann T, Adam D, Schaefer M, **Jankowski J**, Flockerzi V, Nüsing R, Uhlig S, Kuebler WM. Stimulation of the EP(3) receptor causes lung oedema by activation of TRPC6 in pulmonary endothelial cells. *Eur Respir J*. 2022;60. doi: 10.1183/13993003.02635-2021.
26. **Kaesler N**, Schreibing F, **Speer T**, Puente-Secades S, Rapp N, Drechsler C, Kabgani N, Kuppe C, **Boor P**, **Jankowski V**, Schurgers L, **Kramann R**, **Floege J**. Altered vitamin K biodistribution and metabolism in experimental and human chronic kidney disease. *Kidney Int*. 2022;101:338-348. doi: 10.1016/j.kint.2021.10.029.
27. **Kahles F**, Rau M, Reugels M, Foldenauer AC, Mertens RW, Arrivas MC, Schröder J, Idel P, Moellmann J, **van der Vorst EPC**, **Marx N**, **Lehrke M**. The gut hormone glucose-dependent insulinotropic polypeptide is downregulated in response to myocardial injury. *Cardiovasc Diabetol*. 2022;21:18. doi: 10.1186/s12933-022-01454-3.
28. Kandzari DE, **Mahfoud F**, Weber MA, Townsend R, Parati G, Fisher NDL, Lobo MD, Bloch M, **Böhm M**, Sharp ASP, Schmieder RE, Azizi M, Schlaich MP, Papademetriou V, Kirtane AJ, Daemen J, Pathak A, Ukena C, Lurz P, Grassi G, Myers M, Finn AV, Morice MC, Mehran R, Jüni P, Stone GW, Krucoff MW, Whelton PK, Tsoufis K, Cutlip DE, Spitzer E. Clinical Trial Design Principles and Outcomes Definitions for Device-Based Therapies for Hypertension: A Consensus Document From the Hypertension Academic Research Consortium. *Circulation*. 2022;145:847-863. doi: 10.1161/circulationaha.121.057687.
29. Katzmann JL, Kieble M, Enners S, **Böhm M**, **Mahfoud F**, Laufs U, Schulz M. Trends in Ezetimibe Prescriptions as Monotherapy or Fixed-Dose Combination in Germany 2012-2021. *Front Cardiovasc Med*. 2022;9:912785. doi: 10.3389/fcvm.2022.912785.
30. Kers J, **Bülow RD**, Klinkhammer BM, Breimer GE, Fontana F, Abiola AA, Hofstraat R, Corthals GL, Peters-Sengers H, Djudaj S, von Stillfried S, Hölscher DL, Pieters TT, van Zuilen AD, Bemelman FJ, Nurmohamed AS, Naesens M, Roelofs J, Florquin S, **Floege J**, Nguyen TQ, Kather JN, **Boor P**. Deep learning-based classification of kidney transplant pathology: a retrospective, multicentre, proof-of-concept study. *Lancet Digit Health*. 2022;4:e18-e26. doi: 10.1016/s2589-7500(21)00211-9.
31. Kirschfink A, Alachkar MN, Alnaimi A, Vogt F, Schroeder J, **Lehrke M**, Frick M, Reith S, **Marx N**, Almalla M, Altiok E. Outcome of transcatheter edge-to-edge mitral valve repair in patients with diabetes mellitus: Results from a real-world cohort. *PLoS One*. 2022;17:e0276019. doi: 10.1371/journal.pone.0276019.
32. Klinkhammer BM, Buchtler S, Djudaj S, Bouteldja N, Palsson R, Edvardsson VO, Thorsteinsdottir M, **Floege J**, Mack M, **Boor P**. Current kidney function parameters overestimate kidney tissue repair in reversible experimental kidney disease. *Kidney Int*. 2022;102:307-320. doi: 10.1016/j.kint.2022.02.039.
33. Kunz M, Götzinger F, Emrich I, Schwenger V, **Böhm M**, **Mahfoud F**. Cardio-renal interaction - Clinical trials update 2022. *Nutr Metab Cardiovasc Dis*. 2022;32:2451-2458. doi: 10.1016/j.numecd.2022.07.002.
34. Kuppe C, Ramirez Flores RO, Li Z, Hayat S, Levinson RT, Liao X, Hannani MT, Tanevski J, Wünnemann F, Nagai JS, Halder M, Schumacher D, Menzel S, Schäfer G, **Hoeft K**, Cheng M, Ziegler S, Zhang X, Peisker F, **Kaesler N**, Saritas T, Xu Y, Kassner A, Gummert J, Morshuis M, Amrute J, Veltrop RJA, **Boor P**, Klingel K, Van Laake LW, Vink A, Hoogenboezem RM, Bindels EMJ, Schurgers L, Sattler S, Schapiro D, Schneider RK, Lavine K, Milting H, Costa IG, Saez-Rodriguez J, **Kramann R**. Spatial multi-omic map of

- human myocardial infarction. *Nature*. 2022;608:766-777. doi: 10.1038/s41586-022-05060-x.
35. Lauder L, Moon LB, Pipenhagen CA, Ewen S, Fish JM, Virmani R, Jensen JA, **Böhm M**, **Mahfoud F**. A drug-induced hypotensive challenge to verify catheter-based radiofrequency renal denervation in an obese hypertensive swine model. *Clin Res Cardiol*. 2022;111:595-603. doi: 10.1007/s00392-020-01764-0.
 36. Lee YH, Sato Y, Saito M, Fukuma S, Saito M, Yamamoto S, Komatsuda A, Fujiyama N, Satoh S, Lee SH, **Boor P**, Habuchi T, **Floege J**, Yanagita M. Advanced Tertiary Lymphoid Tissues in Protocol Biopsies are Associated with Progressive Graft Dysfunction in Kidney Transplant Recipients. *J Am Soc Nephrol*. 2022;33:186-200. doi: 10.1681/asn.2021050715.
 37. **Lehrke M**, Moellmann J, **Kahles F**, **Marx N**. Glucose-derived posttranslational modification in cardiovascular disease. *Mol Aspects Med*. 2022;86:101084. doi: 10.1016/j.mam.2022.101084.
 38. **Mahfoud F**, Kandzari DE, Kario K, Townsend RR, Weber MA, Schmieder RE, Tsioufis K, Pocock S, Dimitriadis K, Choi JW, East C, D'Souza R, Sharp ASP, Ewen S, Walton A, Hopper I, Brar S, McKenna P, Fahy M, **Böhm M**. Long-term efficacy and safety of renal denervation in the presence of antihypertensive drugs (SPYRAL HTN-ON MED): a randomised, sham-controlled trial. *Lancet*. 2022;399:1401-1410. doi: 10.1016/s0140-6736(22)00455-x.
 39. **Mahfoud F**, Mancía G, Schmieder RE, Ruilope L, Narkiewicz K, Schlaich M, Williams B, Ribichini F, Weil J, Kao HL, Rodriguez-Leor O, Noory E, Ong TK, Untersee T, de Araújo Gonçalves P, Zirikli A, Almeri K, Sharif F, Lauder L, Wanten M, Fahy M, **Böhm M**. Cardiovascular Risk Reduction After Renal Denervation According to Time in Therapeutic Systolic Blood Pressure Range. *J Am Coll Cardiol*. 2022;80:1871-1880. doi: 10.1016/j.jacc.2022.08.802.
 40. **Marx N**, Husain M, **Lehrke M**, Verma S, Sattar N. GLP-1 Receptor Agonists for the Reduction of Atherosclerotic Cardiovascular Risk in Patients With Type 2 Diabetes. *Circulation*. 2022;146:1882-1894. doi: 10.1161/circulationaha.122.059595.
 41. Millenaar D, Dillmann M, Fehlmann T, Flohr A, Mehran R, Al-Lamee R, Lauder L, Ukena C, **Böhm M**, Keller A, **Mahfoud F**. Sex Differences in Cardiovascular Research: A Scientometric Analysis. *J Am Heart Assoc*. 2022;11:e021522. doi: 10.1161/jaha.121.021522.
 42. Millenaar D, Ragošchke-Schumm A, Fehlmann T, Raible M, Lochner P, **Böhm M**, Fassbender K, Keller A, **Mahfoud F**, Ukena C. Ischemic Stroke-A Scientometric Analysis. *Front Neurol*. 2022;13:893121. doi: 10.3389/fneur.2022.893121.
 43. Moellmann J, Mann PA, Kappel BA, **Kahles F**, Klinkhammer BM, **Boor P**, **Kramann R**, Ghesquiere B, Lebherz C, **Marx N**, **Lehrke M**. The sodium-glucose co-transporter-2 inhibitor ertugliflozin modifies the signature of cardiac substrate metabolism and reduces cardiac mTOR signalling, endoplasmic reticulum stress and apoptosis. *Diabetes Obes Metab*. 2022;24:2263-2272. doi: 10.1111/dom.14814.
 44. Neradova A, Wasilewski G, Prisco S, Leenders P, Caron M, Welting T, van Rietbergen B, **Kramann R**, **Floege J**, Vervloet MG, Schurgers LJ. Combining phosphate binder therapy with vitamin K2 inhibits vascular calcification in an experimental animal model of kidney failure. *Nephrol Dial Transplant*. 2022;37:652-662. doi: 10.1093/ndt/gfab314.
 45. Ott C, **Mahfoud F**, Mancía G, Narkiewicz K, Ruilope LM, Fahy M, Schlaich MP, **Böhm M**, Schmieder RE. Renal denervation in patients with versus without chronic kidney disease: results from the Global SYMPPLICITY Registry with follow-up data of 3 years. *Nephrol Dial Transplant*. 2022;37:304-310. doi: 10.1093/ndt/gfab154.
 46. Parhofer KG, Birkenfeld AL, Krone W, **Lehrke M**, **Marx N**, Merkel M, **Schütt KS**, Zirikli A, Müller-Wieland D. Position Paper on Lipid Therapy in Patients with Diabetes Mellitus. *Exp Clin Endocrinol Diabetes*. 2022;130:S117-s122. doi: 10.1055/a-1624-3572.

47. Pavlicek V, Wedegärtner SM, Millenaar D, Wintrich J, **Böhm M, Kindermann I**, Ukena C. Heart-Focused Anxiety, General Anxiety, Depression and Health-Related Quality of Life in Patients with Atrial Fibrillation Undergoing Pulmonary Vein Isolation. *J Clin Med*. 2022;11. doi: 10.3390/jcm11071751.
48. Peisker F, Halder M, Nagai J, Ziegler S, **Kaesler N, Hoefft K**, Li R, Bindels EMJ, Kuppe C, Moellmann J, **Lehrke M**, Stoppe C, Schaub MT, Schneider RK, Costa I, **Kramann R**. Mapping the cardiac vascular niche in heart failure. *Nat Commun*. 2022;13:3027. doi: 10.1038/s41467-022-30682-0.
49. Peters LJF, Baaten C, Maas SL, Lu C, Nagy M, Jooss NJ, Bidzhekov K, Santovito D, Moreno-Andrés D, **Jankowski J**, Biessen EAL, Döring Y, Heemskerk JWM, Weber C, Kuijpers MJE, **van der Vorst EPC**. MicroRNA-26b Attenuates Platelet Adhesion and Aggregation in Mice. *Biomedicines*. 2022;10. doi: 10.3390/biomedicines10050983.
50. Petsophonsakul P, Burgmaier M, Willems B, Heeneman S, Stadler N, Gremse F, Reith S, Burgmaier K, **Kahles F, Marx N**, Natour E, Bidar E, Jacobs M, Mees B, Reutelingsperger C, Furmanik M, Schurgers L. Nicotine promotes vascular calcification via intracellular Ca²⁺-mediated, Nox5-induced oxidative stress, and extracellular vesicle release in vascular smooth muscle cells. *Cardiovasc Res*. 2022;118:2196-2210. doi: 10.1093/cvr/cvab244.
51. Puetz A, Artati A, Adamski J, **Schütt K**, Romeo F, Stoeck R, **Marx N**, Federici M, **Lehrke M**, Kappel BA. Non-targeted metabolomics identify polyamine metabolite acisoga as novel biomarker for reduced left ventricular function. *ESC Heart Fail*. 2022;9:564-573. doi: 10.1002/ehf2.13713.
52. Rau M, Thiele K, Hartmann NK, Möllmann J, Wied S, **Hohl M, Marx N, Lehrke M**. Effects of empagliflozin on markers of calcium and phosphate homeostasis in patients with type 2 diabetes - Data from a randomized, placebo-controlled study. *Bone Rep*. 2022;16:101175. doi: 10.1016/j.bonr.2022.101175.
53. Sato Y, Oguchi A, Fukushima Y, Masuda K, Toriu N, Taniguchi K, Yoshikawa T, Cui X, Kondo M, Hosoi T, Komidori S, Shimizu Y, Fujita H, Jiang L, Kong Y, Yamanashi T, Seita J, Yamamoto T, Toyokuni S, Hamazaki Y, Hattori M, Yoshikai Y, **Boor P, Floege J**, Kawamoto H, Murakawa Y, Minato N, Yanagita M. CD153/CD30 signaling promotes age-dependent tertiary lymphoid tissue expansion and kidney injury. *J Clin Invest*. 2022;132. doi: 10.1172/jci146071.
54. Schnell O, Battelino T, Bergenstal R, Blüher M, **Böhm M**, Brosius F, Carr RD, Ceriello A, Forst T, Giorgino F, Guerci B, Heerspink HJL, Itzhak B, Ji L, Kosiborod M, Lalić N, **Lehrke M, Marx N**, Nauck M, Rodbard HW, Rosano GMC, Rossing P, Rydén L, Santilli F, Schumm-Draeger PM, Vandvik PO, Vilsbøll T, Wanner C, Wysham C, Standl E. Report from the CVOT Summit 2021: new cardiovascular, renal, and glycemic outcomes. *Cardiovasc Diabetol*. 2022;21:50. doi: 10.1186/s12933-022-01481-0.
55. Schreibing F, Hannani MT, Kim H, Nagai JS, Ticconi F, Fewings E, Bleckwehl T, Begemann M, Torow N, Kuppe C, Kurth I, Kranz J, Frank D, Anslinger TM, Ziegler P, Kraus T, Enczmann J, Balz V, Windhofer F, Balfanz P, Kurts C, Marx G, **Marx N**, Dreher M, Schneider RK, Saez-Rodriguez J, Costa I, Hayat S, **Kramann R**. Dissecting CD8⁺ T cell pathology of severe SARS-CoV-2 infection by single-cell immunoprofiling. *Front Immunol*. 2022;13:1066176. doi: 10.3389/fimmu.2022.1066176.
56. **Schütt K**, Forst T, Birkenfeld AL, Zirlik A, Müller-Wieland D, **Marx N**. Diabetes Mellitus and the Heart. *Exp Clin Endocrinol Diabetes*. 2022;130:S123-s126. doi: 10.1055/a-1624-3593.
57. Selejan SR, Linz D, Mauz M, **Hohl M**, Huynh AKD, **Speer T**, Wintrich J, Kazakov A, Werner C, **Mahfoud F, Böhm M**. Renal denervation reduces atrial remodeling in hypertensive rats with metabolic syndrome. *Basic Res Cardiol*. 2022;117:36. doi: 10.1007/s00395-022-00943-6.
58. Soppert J, Frisch J, Wirth J, Hemmers C, **Boor P, Kramann R**, Vondenhoff S, Moellmann J, **Lehrke M, Hohl M, van der Vorst EPC**, Werner C, **Speer T**, Maack C, **Marx N**,

- Jankowski J, Roma LP, Noels H.** A systematic review and meta-analysis of murine models of uremic cardiomyopathy. *Kidney Int.* 2022;101:256-273. doi: 10.1016/j.kint.2021.10.025.
59. **Speer T**, Dimmeler S, **Schunk SJ**, **Fliser D**, Ridker PM. Targeting innate immunity-driven inflammation in CKD and cardiovascular disease. *Nat Rev Nephrol.* 2022;18:762-778. doi: 10.1038/s41581-022-00621-9.
 60. **Speer T, Schunk SJ.** Klotho in diabetic kidney disease: more than dust in the Wnt. *Kidney Int.* 2022;102:469-471. doi: 10.1016/j.kint.2022.05.016.
 61. Stöhr R, Dirrichs T, Kneizeh K, Reinartz S, Frank D, Brachmann J, Schroeder J, Schurgers L, **Göttsch C**, Keszei A, **Floege J, Marx N**, Brandenburg V, Schuh A. Influence of rivaroxaban compared to vitamin K antagonist treatment upon development of cardiovascular calcification in patients with atrial fibrillation and/or pulmonary embolism. *Clin Cardiol.* 2022;45:352-358. doi: 10.1002/clc.23819.
 62. Thiele K, Rau M, Hartmann NK, Möller M, Möllmann J, **Jankowski J**, Keszei AP, **Böhm M, Floege J, Marx N, Lehrke M.** Empagliflozin reduces markers of acute kidney injury in patients with acute decompensated heart failure. *ESC Heart Fail.* 2022;9:2233-2238. doi: 10.1002/ehf2.13955.
 63. Thurner L, Kessel C, Fadle N, Regitz E, Seidel F, **Kindermann I**, Lohse S, Kos I, Tschöpe C, Kheiroddin P, Kiblböck D, Hoffmann MC, Bette B, Carbon G, Cetin O, Preuss KD, Christofyllakis K, Bittenbring JT, Pickardt T, Fischer Y, Thiele H, Baldus S, Stangl K, Steiner S, Gietzen F, Kerber S, Deneke T, Jellinghaus S, Linke A, Ibrahim K, Grabmaier U, Massberg S, Thilo C, Greulich S, Gawaz M, Mayatepek E, Meyer-Dobkowitz L, Kindermann M, Birk E, Birk M, Lainscak M, Foell D, Lepper PM, Bals R, Krawczyk M, Mevorach D, Hasin T, Keren A, Kabesch M, Abdul-Khaliq H, Smola S, Bewarder M, Thurner B, **Böhm M**, Pfeifer J, Klingel K. IL-1RA Antibodies in Myocarditis after SARS-CoV-2 Vaccination. *N Engl J Med.* 2022;387:1524-1527. doi: 10.1056/NEJMc2205667.
 64. von Stillfried S, **Bülow RD**, Röhrig R, Meybohm P, **Boor P.** Intracranial hemorrhage in COVID-19 patients during extracorporeal membrane oxygenation for acute respiratory failure: a nationwide register study report. *Crit Care.* 2022;26:83. doi: 10.1186/s13054-022-03945-x.
 65. Vukadinović D, Abdin A, Anker SD, Rosano GMC, **Mahfoud F**, Packer M, Butler J, **Böhm M.** Side effects and treatment initiation barriers of sodium-glucose cotransporter 2 inhibitors in heart failure: a systematic review and meta-analysis. *Eur J Heart Fail.* 2022;24:1625-1632. doi: 10.1002/ehf.2584.
 66. Vukadinović D, Scheller B, Ukena C, Ewen S, **Mahfoud F, Böhm M.** Device-related risk of atrial fibrillation after closure of patent foramen ovale: a systematic review and meta-analysis. *Clin Res Cardiol.* 2022;111:583-587. doi: 10.1007/s00392-021-01964-2.
 67. Weber MA, Schmieder RE, Kandzari DE, Townsend RR, **Mahfoud F**, Tsioufis K, Kario K, Pocock S, Tatakis F, Ewen S, Choi JW, East C, Lee DP, Ma A, Cohen DL, Wilensky R, Devireddy CM, Lea JP, Schmid A, Fahy M, **Böhm M.** Hypertension urgencies in the SPYRAL HTN-OFF MED Pivotal trial. *Clin Res Cardiol.* 2022;111:1269-1275. doi: 10.1007/s00392-022-02064-5.
 68. Weber T, Wassertheurer S, Mayer CC, Hametner B, Danninger K, Townsend RR, **Mahfoud F**, Kario K, Fahy M, DeBruin V, Peterson N, Negoita M, Weber MA, Kandzari DE, Schmieder RE, Tsioufis KP, Binder RK, **Böhm M.** Twenty-Four-Hour Pulsatile Hemodynamics Predict Brachial Blood Pressure Response to Renal Denervation in the SPYRAL HTN-OFF MED Trial. *Hypertension.* 2022;79:1506-1514. doi: 10.1161/hypertensionaha.121.18641.
 69. Wollenhaupt J, Frisch J, Harlacher E, Wong DWL, Jin H, Schulte C, Vondenhoff S, Moellmann J, Klinkhammer BM, Zhang L, **Baleanu-Curaj A**, Liehn EA, **Speer T**, Kazakov A, Werner C, **van der Vorst EPC**, Selejan SR, **Hohl M, Böhm M, Kramann R**, Biessen EAL, **Lehrke M, Marx N, Jankowski J**, Maack C, **Boor P, Prates Roma L, Noels H.** Pro-oxidative priming but maintained cardiac function in a broad spectrum of murine models of chronic kidney disease. *Redox Biol.* 2022;56:102459. doi: 10.1016/j.redox.2022.102459.

70. Wu Z, **Jankowski V, Jankowski J**. Irreversible post-translational modifications - Emerging cardiovascular risk factors. *Mol Aspects Med.* 2022;86:101010. doi: 10.1016/j.mam.2021.101010.
71. Xu Y, Kuppe C, Perales-Patón J, Hayat S, Kranz J, Abdallah AT, Nagai J, Li Z, Peisker F, Saritas T, Halder M, Menzel S, **Hoefl K**, Kenter A, Kim H, van Roeyen CRC, **Lehrke M**, Moellmann J, **Speer T**, Buhl EM, Hoogenboezem R, **Boor P**, Jansen J, Knopp C, Kurth I, Smeets B, Bindels E, Reinders MEJ, Baan C, Gribnau J, Hoorn EJ, Steffens J, Huber TB, Costa I, **Floege J**, Schneider RK, Saez-Rodriguez J, Freedman BS, **Kramann R**. Adult human kidney organoids originate from CD24(+) cells and represent an advanced model for adult polycystic kidney disease. *Nat Genet.* 2022;54:1690-1701. doi: 10.1038/s41588-022-01202-z.
72. Abdin A, Anker SD, Cowie MR, Filippatos GS, Ponikowski P, Tavazzi L, Schöpe J, **Wagenpfeil S**, Komajda M, **Böhm M**. Associations between baseline heart rate and blood pressure and time to events in heart failure with reduced ejection fraction patients: Data from the QUALIFY international registry. *Eur J Heart Fail.* 2023;25:1985-1993. doi: 10.1002/ehf.3023.
73. Abdin A, Komajda M, Borer JS, Ford I, Tavazzi L, Batailler C, Swedberg K, Rosano GMC, **Mahfoud F, Böhm M**. Efficacy of ivabradine in heart failure patients with a high-risk profile (analysis from the SHIFT trial). *ESC Heart Fail.* 2023;10:2895-2902. doi: 10.1002/ehf2.14455.
74. Al Ghorani H, Kulenthiran S, Recktenwald MJM, Lauder L, Kunz M, Götzinger F, Ewen S, Ukena C, **Böhm M, Mahfoud F**. 10-Year Outcomes of Catheter-Based Renal Denervation in Patients With Resistant Hypertension. *J Am Coll Cardiol.* 2023;81:517-519. doi: 10.1016/j.jacc.2022.11.038.
75. Barbato E, Azizi M, Schmieder RE, Lauder L, **Böhm M**, Brouwers S, Bruno RM, Dudek D, Kahan T, Kandzari DE, Lüscher TF, Parati G, Pathak A, Ribichini FL, Schlaich MP, Sharp ASP, Sudano I, Volpe M, Tsioufis C, Wijns W, **Mahfoud F**. Renal denervation in the management of hypertension in adults. A clinical consensus statement of the ESC Council on Hypertension and the European Association of Percutaneous Cardiovascular Interventions (EAPCI). *Eur Heart J.* 2023;44:1313-1330. doi: 10.1093/eurheartj/ehad054.
76. Barros X, Friesen X, Mathias Brandenburg V, Liehn EA, Steppan S, Kiessling F, **Kramann R, Floege J**, Krüger T, **Kaesler N**. Magnesium Improves Cardiac Function in Experimental Uremia by Altering Cardiac Elastin Protein Content. *Nutrients.* 2023;15. doi: 10.3390/nu15061303.
77. Berger M, Dressel A, Kleber ME, März W, Hellstern P, **Marx N, Schütt K**. Platelet Reactivity and Cardiovascular Mortality Risk in the LURIC Study. *J Clin Med.* 2023;12. doi: 10.3390/jcm12051913.
78. Berger M, Kumowski N, Straw S, Verket M, **Marx N**, Witte KK, **Schütt K**. Clinical implications and risk factors for QRS prolongation over time in heart failure patients. *Clin Res Cardiol.* 2023;112:312-322. doi: 10.1007/s00392-022-02122-y.
79. **Böhm M**, Abdin A, Slawik J, **Mahfoud F**, Borer J, Ford I, Swedberg K, Tavazzi L, Batailler C, Komajda M. Time to benefit of heart rate reduction with ivabradine in patients with heart failure and reduced ejection fraction. *Eur J Heart Fail.* 2023;25:1429-1435. doi: 10.1002/ehf.2870.
80. **Böhm M**, Butler J, Krawczyk M, **Mahfoud F**, Haring B, Filippatos G, Ferreira JP, Pocock SJ, Brueckmann M, Ofstad AP, Schöler E, Wanner C, Verma S, Packer M, Anker SD. Liver tests, cardiovascular outcomes and effects of empagliflozin in patients with heart failure and preserved ejection fraction: The EMPEROR-Preserved trial. *Eur J Heart Fail.* 2023;25:1375-1383. doi: 10.1002/ehf.2922.
81. Buder F, **Mahfoud F, Böhm M**, Haring B. What Is the Relevance of Low Standing Blood Pressure? *Am J Hypertens.* 2023;36:586-587. doi: 10.1093/ajh/hpad074.

82. Carstensen H, Nissen SD, Saljic A, Hesselkilde EM, van Hunnik A, **Hohl M**, Sattler SM, Fløgstad C, Hopster-Iversen C, Verheule S, **Böhm M**, Schotten U, Jespersen T, Buhl R. Long-Term Training Increases Atrial Fibrillation Sustainability in Standardbred Racehorses. *J Cardiovasc Transl Res*. 2023;16:1205-1219. doi: 10.1007/s12265-023-10378-6.
83. Droste P, Wong DWL, **Hohl M**, von Stillfried S, Klinkhammer BM, **Boor P**. Semiautomated pipeline for quantitative analysis of heart histopathology. *J Transl Med*. 2023;21:666. doi: 10.1186/s12967-023-04544-2.
84. Dzhanayev R, Hasberg C, Gorgels A, Schmitz C, Winkler CF, Malyaran H, Gräber S, Gentier A, Jaminon A, Agten S, Hackeng T, Akbulut AC, Schurgers L, Mottaghy FM, **Goettsch C**, **Jahnen-Dechent W**. Application of the mineral-binding protein fetuin-A for the detection of calcified lesions. *Theranostics*. 2023;13:659-672. doi: 10.7150/thno.78773.
85. Emrich IE, **Böhm M**, **Mahfoud F**. Radial pseudoaneurysm following coronary angiography in a patient with autosomal dominant polycystic kidney disease. *Clin Res Cardiol*. 2023;112:1343-1345. doi: 10.1007/s00392-023-02159-7.
86. Ermert K, Buhl EM, Klinkhammer BM, **Floege J**, **Boor P**. Reduction of Endothelial Glycocalyx on Peritubular Capillaries in Chronic Kidney Disease. *Am J Pathol*. 2023;193:138-147. doi: 10.1016/j.ajpath.2022.11.003.
87. Götzinger F, **Hohl M**, Lauder L, Millenaar D, Kunz M, Meyer MR, Ukena C, Lerche CM, Philipsen PA, Reichrath J, **Böhm M**, **Mahfoud F**. A randomized, placebo-controlled, trial to assess the photosensitizing, phototoxic and carcinogenic potential of hydrochlorothiazide in healthy volunteers. *J Hypertens*. 2023;41:1853-1862. doi: 10.1097/hjh.0000000000003558.
88. Götzinger F, Kunz M, Lauder L, **Böhm M**, **Mahfoud F**. Arterial Hypertension-clinical trials update 2023. *Hypertens Res*. 2023;46:2159-2167. doi: 10.1038/s41440-023-01359-y.
89. Götzinger F, Kunz M, Lauder L, **Mahfoud F**, **Böhm M**. Radio frequency-based renal denervation: a story of simplicity? *Future Cardiol*. 2023;19:431-440. doi: 10.2217/fca-2023-0059.
90. Götzinger F, Lauder L, Sharp ASP, Lang IM, Rosenkranz S, Konstantinides S, Edelman ER, **Böhm M**, Jaber W, **Mahfoud F**. Interventional therapies for pulmonary embolism. *Nat Rev Cardiol*. 2023;20:670-684. doi: 10.1038/s41569-023-00876-0.
91. Götzinger F, Wilke T, Hardtstock F, Krieger J, Maywald U, Kunz M, Lauder L, Schulz M, **Mahfoud F**, **Böhm M**. Association of hydrochlorothiazide treatment compared with alternative diuretics with overall and skin cancer risk: a propensity-matched cohort study. *J Hypertens*. 2023;41:926-933. doi: 10.1097/hjh.0000000000003414.
92. **Hoeft K**, Schaefer GJL, Kim H, Schumacher D, Bleckwehl T, Long Q, Klinkhammer BM, Peisker F, Koch L, Nagai J, Halder M, Ziegler S, Liehn E, Kuppe C, Kranz J, Menzel S, Costa I, Wahida A, **Boor P**, Schneider RK, Hayat S, **Kramann R**. Platelet-instructed SPP1(+) macrophages drive myofibroblast activation in fibrosis in a CXCL4-dependent manner. *Cell Rep*. 2023;42:112131. doi: 10.1016/j.celrep.2023.112131.
93. **Hohl M**, Lauder L, Sevimli Ö, Tokcan M, Wagmann L, Götzinger F, **Schneider C**, Hübner U, Lehnert U, Meyer MR, **Böhm M**, **Mahfoud F**. Efficacy of Antihypertensive Drugs of Different Classes After Renal Denervation in Spontaneously Hypertensive Rats. *Hypertension*. 2023;80:e90-e100. doi: 10.1161/hypertensionaha.122.20756.
94. Hölscher DL, Bouteldja N, Joodaki M, Russo ML, Lan YC, Sadr AV, Cheng M, Tesar V, Stillfried SV, Klinkhammer BM, Barratt J, **Floege J**, Roberts ISD, Coppo R, Costa IG, **Bülow RD**, **Boor P**. Next-Generation Morphometry for pathomics-data mining in histopathology. *Nat Commun*. 2023;14:470. doi: 10.1038/s41467-023-36173-0.
95. Jia T, Xu T, Smeets B, Buhl EM, Moeller MJ, **Floege J**, Klinkhammer BM, **Boor P**. The Role of Platelet-Derived Growth Factor in Focal Segmental Glomerulosclerosis. *J Am Soc Nephrol*. 2023;34:241-257. doi: 10.1681/asn.2022040491.

96. **Kaesler N**, Cheng M, Nagai J, O'Sullivan J, Peisker F, Bindels EMJ, Babler A, Moellmann J, Droste P, Franciosa G, Dugourd A, Saez-Rodriguez J, Neuss S, **Lehrke M**, **Boor P**, **Goettsch C**, Olsen JV, **Speer T**, Lu TS, Lim K, **Floege J**, Denby L, Costa I, **Kramann R**. Mapping cardiac remodeling in chronic kidney disease. *Sci Adv*. 2023;9:eadj4846. doi: 10.1126/sciadv.adj4846.
97. Kandzari DE, Townsend RR, Kario K, **Mahfoud F**, Weber MA, Schmieder RE, Pocock S, Tsioufis K, Konstantinidis D, Choi J, East C, Lauder L, Cohen DL, Kobayashi T, Schmid A, Lee DP, Ma A, Weil J, Agdirlioglu T, Schlaich MP, Shetty S, Devireddy CM, Lea J, Aoki J, Sharp ASP, Anderson R, Fahy M, DeBruin V, Brar S, **Böhm M**. Safety and Efficacy of Renal Denervation in Patients Taking Antihypertensive Medications. *J Am Coll Cardiol*. 2023;82:1809-1823. doi: 10.1016/j.jacc.2023.08.045.
98. Kario K, **Mahfoud F**, Kandzari DE, Townsend RR, Weber MA, Schmieder RE, Tsioufis K, Pocock S, Brar S, Hettrick DA, Fahy M, **Böhm M**. Long-term reduction in morning and nighttime blood pressure after renal denervation: 36-month results from SPYRAL HTN-ON MED trial. *Hypertens Res*. 2023;46:280-288. doi: 10.1038/s41440-022-01042-8.
99. Kneizeh K, Milzi A, Vogt F, Witte K, **Marx N**, **Lehrke M**, Almalla M, Schröder J. Efficacy and Safety of Low-Dose Protamine in Reducing Bleeding Complications during TAVI: A Propensity-Matched Comparison. *J Clin Med*. 2023;12. doi: 10.3390/jcm12134243.
100. Kneizeh K, Milzi A, Vogt F, Witte KK, **Marx N**, **Lehrke M**, Schröder J. Plug-Based vs Suture-Based Vascular Closure Device After Transfemoral TAVR: A Randomized Controlled Trial. *JACC Cardiovasc Interv*. 2023;16:2692-2694. doi: 10.1016/j.jcin.2023.08.041.
101. Kunz M, Götzinger F, Jacobs CM, Lauder L, Ukena C, Meyer MR, Laufs U, Schulz M, **Böhm M**, **Mahfoud F**. Hidden sodium in effervescent-tablet dietary supplements and over-the-counter drugs: a comparative cross-sectional study. *BMJ Open*. 2023;13:e076302. doi: 10.1136/bmjopen-2023-076302.
102. Lauder L, **Mahfoud F**, Azizi M, Bhatt DL, Ewen S, Kario K, Parati G, Rossignol P, Schlaich MP, Teo KK, Townsend RR, Tsioufis C, Weber MA, Weber T, **Böhm M**. Hypertension management in patients with cardiovascular comorbidities. *Eur Heart J*. 2023;44:2066-2077. doi: 10.1093/eurheartj/ehac395.
103. Lauder L, Pérez Navarro P, Götzinger F, Ewen S, Al Ghorani H, Haring B, Lepper PM, Kulenthiran S, **Böhm M**, Link A, Scheller B, **Mahfoud F**. Mechanical thrombectomy in intermediate- and high-risk acute pulmonary embolism: hemodynamic outcomes at three months. *Respir Res*. 2023;24:257. doi: 10.1186/s12931-023-02552-w.
104. Liberale L, Kraler S, Puspitasari YM, Bonetti NR, Akhmedov A, Ministrini S, Montecucco F, **Marx N**, **Lehrke M**, Hartmann NK, Beer JH, Wenzl FA, Paneni F, Lüscher TF, Camici GG. SGLT-2 inhibition by empagliflozin has no effect on experimental arterial thrombosis in a murine model of low-grade inflammation. *Cardiovasc Res*. 2023;119:843-856. doi: 10.1093/cvr/cvac126.
105. **Mahfoud F**, Kieble M, Enners S, Kintscher U, Laufs U, **Böhm M**, Schulz M. Use of fixed-dose combination antihypertensives in Germany between 2016 and 2020: an example of guideline inertia. *Clin Res Cardiol*. 2023;112:197-202. doi: 10.1007/s00392-022-01993-5.
106. **Mahfoud F**, Mancia G, Schmieder RE, Ruilope L, Narkiewicz K, Schlaich M, Williams B, Ribichini F, Weil J, Almerri K, Sharif F, Lauder L, Wanten M, Fahy M, **Böhm M**. Outcomes Following Radiofrequency Renal Denervation According to Antihypertensive Medications: Subgroup Analysis of the Global SYMPPLICITY Registry DEFINE. *Hypertension*. 2023;80:1759-1770. doi: 10.1161/hypertensionaha.123.21283.
107. **Marx N**, Federici M, **Schütt K**, Müller-Wieland D, Ajjan RA, Antunes MJ, Christodorescu RM, Crawford C, Di Angelantonio E, Eliasson B, Espinola-Klein C, Fauchier L, Halle M, Herrington WG, Kautzky-Willer A, Lambrinou E, Lesiak M, Lettino M, McGuire DK, Mullens W, Rocca B, Sattar N. 2023 ESC Guidelines for the management of cardiovascular disease in patients with diabetes. *Eur Heart J*. 2023;44:4043-4140. doi: 10.1093/eurheartj/ehad192.

108. **Marx N**, Wanner C, **Jankowski J**, März W, Krane V, Genser B. Recurrent cardiovascular events in patients with type 2 diabetes and haemodialysis: analysis from the 4D Study. *Clin Kidney J.* 2023;16:1612-1621. doi: 10.1093/ckj/sfad029.
109. Nangaku M, Kitching AR, **Boor P**, Fornoni A, **Floege J**, Coates PT, Himmelfarb J, Lennon R, Anders HJ, Humphreys BD, Caskey FJ, Fogo AB. International Society of Nephrology first consensus guidance for preclinical animal studies in translational nephrology. *Kidney Int.* 2023;104:36-45. doi: 10.1016/j.kint.2023.03.007.
110. **Noels H**, **Jankowski J**. Increased Risk of Cardiovascular Complications in Chronic Kidney Disease: Introduction to a Compendium. *Circ Res.* 2023;132:899-901. doi: 10.1161/circresaha.123.322806.
111. Noubiap JJ, Millenaar D, Ojji D, Wafford QE, Ukena C, **Böhm M**, Sliwa K, Huffman MD, **Mahfoud F**. Fifty Years of Global Cardiovascular Research in Africa: A Scientometric Analysis, 1971 to 2021. *J Am Heart Assoc.* 2023;12:e027670. doi: 10.1161/jaha.122.027670.
112. Pavlicek V, **Mahfoud F**, Bubel K, Fries P, Ewen S, **Böhm M**, Scheller B, Ukena C. Prediction of conduction disturbances in patients undergoing transcatheter aortic valve replacement. *Clin Res Cardiol.* 2023;112:677-690. doi: 10.1007/s00392-023-02160-0.
113. Petersen J, Englmaier L, Artemov AV, Poverennaya I, Mahmoud R, Boudierlique T, Tesarova M, Deviatiiarov R, Szilvász-Szabó A, Akkuratov EE, Pajuelo Reguera D, Zeberg H, Kaucka M, Kastriti ME, Krivanek J, Radaszkiewicz T, Gömöryová K, Knauth S, Potesil D, Zdrahal Z, Ganji RS, Grabowski A, Buhl ME, Zikmund T, Kavkova M, Axelson H, Lindgren D, **Kramann R**, Kuppe C, Erdélyi F, Máté Z, Szabó G, Koehne T, Harkany T, Fried K, Kaiser J, **Boor P**, Fekete C, Rozman J, Kasperek P, Prochazka J, Sedlacek R, Bryja V, Gusev O, Adameyko I. A previously uncharacterized Factor Associated with Metabolism and Energy (FAME/C14orf105/CCDC198/1700011H14Rik) is related to evolutionary adaptation, energy balance, and kidney physiology. *Nat Commun.* 2023;14:3092. doi: 10.1038/s41467-023-38663-7.
114. Reimer KC, Nadal J, Meiselbach H, Schmid M, Schultheiss UT, Kotsis F, Stockmann H, Friedrich N, Nauck M, Krane V, Eckardt KU, Schneider MP, **Kramann R**, **Floege J**, Saritas T. Association of mineral and bone biomarkers with adverse cardiovascular outcomes and mortality in the German Chronic Kidney Disease (GCKD) cohort. *Bone Res.* 2023;11:52. doi: 10.1038/s41413-023-00291-8.
115. Schmidt-Lauber C, Hänzelmann S, **Schunk S**, Petersen EL, Alabdo A, Lindenmeyer M, Hausmann F, Kuta P, Renné T, Twerenbold R, Zeller T, Blankenberg S, **Fliser D**, Huber TB. Kidney outcome after mild to moderate COVID-19. *Nephrol Dial Transplant.* 2023;38:2031-2040. doi: 10.1093/ndt/gfad008.
116. Schmieder RE, **Mahfoud F**, Mancía G, Narkiewicz K, Ruilope L, Hutton DW, Cao KN, Hettrick DA, Fahy M, Schlaich MP, **Böhm M**, Pietzsch JB. Clinical event reductions in high-risk patients after renal denervation projected from the global SYMPPLICITY registry. *Eur Heart J Qual Care Clin Outcomes.* 2023;9:575-582. doi: 10.1093/ehjqcco/qcac056.
117. **Schuett K**, **Marx N**, **Lehrke M**. The Cardio-Kidney Patient: Epidemiology, Clinical Characteristics and Therapy. *Circ Res.* 2023;132:902-914. doi: 10.1161/circresaha.122.321748.
118. Soppert J, Brandt EF, Heussen NM, Barzakova E, Blank LM, Kuepfer L, Hornef MW, Trebicka J, **Jankowski J**, Berres ML, **Noels H**. Blood Endotoxin Levels as Biomarker of Nonalcoholic Fatty Liver Disease: A Systematic Review and Meta-analysis. *Clin Gastroenterol Hepatol.* 2023;21:2746-2758. doi: 10.1016/j.cgh.2022.11.030.
119. **Speer T**, **Schunk SJ**, Sarakpi T, Schmit D, Wagner M, Arnold L, Zewinger S, Azukaitis K, Bayazit A, Obrycki L, Kaplan Bulut I, Duzova A, Doyon A, Ranchin B, Caliskan S, Harambat J, Yilmaz A, Alpay H, Lugani F, Balat A, Arbeiter K, Longo G, Melk A, Querfeld U, Wühl E, Mehls O, **Fliser D**, Schaefer F. Urinary DKK3 as a biomarker for short-term kidney function

- decline in children with chronic kidney disease: an observational cohort study. *Lancet Child Adolesc Health*. 2023;7:405-414. doi: 10.1016/s2352-4642(23)00049-4.
120. Stamellou E, Seikrit C, Tang SCW, **Boor P**, Tesař V, **Floege J**, Barratt J, **Kramann R**. IgA nephropathy. *Nat Rev Dis Primers*. 2023;9:67. doi: 10.1038/s41572-023-00476-9.
121. Struthoff H, Lauder L, **Hohl M**, Hermens A, Tzafriri AR, Edelman ER, Kunz M, **Böhm M**, Tschernig T, **Mahfoud F**. Histological examination of renal nerve distribution, density, and function in humans. *EuroIntervention*. 2023;19:612-620. doi: 10.4244/eij-d-23-00264.
122. Thiele K, Rau M, Grebe J, Korbinian Hartmann NU, Altiok E, **Böhm M**, Keszei AP, **Marx N**, **Lehrke M**. Empagliflozin Improves Left Atrial Strain in Patients With Type 2 Diabetes: Data From a Randomized, Placebo-Controlled Study. *Circ Cardiovasc Imaging*. 2023;16:e015176. doi: 10.1161/circimaging.122.015176.
123. **van der Vorst EPC**, Maas SL, Theodorou K, Peters LJF, Jin H, Rademakers T, Gijbels MJ, Rousch M, Jansen Y, Weber C, **Lehrke M**, Lebherz C, Yildiz D, Ludwig A, Bentzon JF, Biessen EAL, Donners M. Endothelial ADAM10 controls cellular response to oxLDL and its deficiency exacerbates atherosclerosis with intraplaque hemorrhage and neovascularization in mice. *Front Cardiovasc Med*. 2023;10:974918. doi: 10.3389/fcvm.2023.974918.
124. van Kuijk K, McCracken IR, Tillie R, Asselberghs SEJ, Kheder DA, Muijtens S, Jin H, Taylor RS, Wichers Schreur R, Kuppe C, Dobie R, Ramachandran P, Gijbels MJ, Temmerman L, Kirkwood PM, Luyten J, Li Y, **Noels H**, Goossens P, Wilson-Kanamori JR, Schurgers LJ, Shen YH, Mees BME, Biessen EAL, Henderson NC, **Kramann R**, Baker AH, Sluimer JC. Human and murine fibroblast single-cell transcriptomics reveals fibroblast clusters are differentially affected by ageing and serum cholesterol. *Cardiovasc Res*. 2023;119:1509-1523. doi: 10.1093/cvr/cvad016.
125. Verket M, Jacobsen M, **Schütt K**, **Marx N**, Müller-Wieland D. Influenza vaccination in patients affected by diabetes. *Eur Heart J Suppl*. 2023;25:A36-a41. doi: 10.1093/eurheartjsupp/suac119.
126. Wang J, Liu X, Gu Y, Gao Y, **Jankowski V**, Was N, Leitz A, Reiss LK, Shi Y, Cai J, Fang Y, Song N, Zhao S, **Floege J**, Ostendorf T, Ding X, Raffetseder U. DNA binding protein YB-1 is a part of the neutrophil extracellular trap mediation of kidney damage and cross-organ effects. *Kidney Int*. 2023;104:124-138. doi: 10.1016/j.kint.2023.02.032.
127. Werlein C, Ackermann M, Stark H, Shah HR, Tzankov A, Haslbauer JD, von Stillfried S, **Bülow RD**, El-Armouche A, Kuenzel S, Robertus JL, Reichardt M, Haverich A, Höfer A, Neubert L, Plucinski E, Braubach P, Verleden S, Salditt T, **Marx N**, Welte T, Bauersachs J, Kreipe HH, Mentzer SJ, **Boor P**, Black SM, Länger F, Kuehnel M, Jonigk D. Inflammation and vascular remodeling in COVID-19 hearts. *Angiogenesis*. 2023;26:233-248. doi: 10.1007/s10456-022-09860-7.
128. Wintrich J, Pavlicek V, Brachmann J, Bosch R, Butter C, Oswald H, Rybak K, **Mahfoud F**, **Böhm M**, Ukena C. Impedance-based remote monitoring in patients with heart failure and concomitant chronic kidney disease. *ESC Heart Fail*. 2023;10:3011-3018. doi: 10.1002/ehf2.14387.
129. Abdin A, Abdin AD, Merone G, Aljundi W, Haring B, Abu Dail Y, **Mahfoud F**, Emrich I, Al Ghorani H, Böhm EW, Seitz B, **Böhm M**. Cardio-ocular syndrome: Retinal microvascular changes in acutely decompensated heart failure. *Eur J Heart Fail*. 2024;26:2421-2430. doi: 10.1002/ejhf.3474.
130. Abdin A, Lauder L, Fudim M, Abraham WT, Anker SD, **Böhm M**, **Mahfoud F**. Neuromodulation interventions in the management of heart failure. *Eur J Heart Fail*. 2024;26:502-510. doi: 10.1002/ejhf.3147.
131. Adam S, Maas SL, Huchzermeier R, Rakateli L, Abschlag K, **Hohl M**, Liao L, Bartneck M, Teunissen M, Wouters K, Santovito D, **Jankowski J**, Biessen EAL, **van der Vorst EPC**. The calcium-sensing-receptor (CaSR) in adipocytes contributes to sex-differences in the

- susceptibility to high fat diet induced obesity and atherosclerosis. *EBioMedicine*. 2024;107:105293. doi: 10.1016/j.ebiom.2024.105293.
132. Al Ghorani H, Kulenthiran S, Lauder L, Recktenwald MJM, Dederer J, Kunz M, Götzinger F, Ewen S, Ukena C, **Böhm M, Mahfoud F**. Ultra-long-term efficacy and safety of catheter-based renal denervation in resistant hypertension: 10-year follow-up outcomes. *Clin Res Cardiol*. 2024;113:1384-1392. doi: 10.1007/s00392-024-02417-2.
 133. Albrecht F, **Schunk S**, Fuchs M, Volk T, Geisel J, **Fliser D**, Meiser A. Rapid and Effective Elimination of Myoglobin with CytoSorb® Hemoadsorber in Patients with Severe Rhabdomyolysis. *Blood Purif*. 2024;53:88-95. doi: 10.1159/000534479.
 134. Arjune S, Späth MR, Oehm S, Todorova P, **Schunk SJ**, Lettenmeier K, Chon SH, Bartram MP, Antczak P, Grundmann F, **Fliser D**, Müller RU. DKK3 as a potential novel biomarker in patients with autosomal polycystic kidney disease. *Clin Kidney J*. 2024;17:sfad262. doi: 10.1093/ckj/sfad262.
 135. Berger M, Maqua H, Lysaja K, Mause SF, Hindle MS, Naseem K, Dahl E, **Speer T, Marx N, Schütt K**. Platelets from patients with chronic inflammation have a phenotype of chronic IL-1 β release. *Res Pract Thromb Haemost*. 2024;8:102261. doi: 10.1016/j.rpth.2023.102261.
 136. Berger M, März W, Niessner A, Delgado G, Kleber M, Scharnagl H, **Marx N, Schuett K**. IL-6 and hsCRP predict cardiovascular mortality in patients with heart failure with preserved ejection fraction. *ESC Heart Fail*. 2024;11:3607-3615. doi: 10.1002/ehf2.14959.
 137. **Böhm M**, de la Sierra A, **Mahfoud F**, Schwantke I, Lauder L, Haring B, Vinyoles E, Gorostidi M, Segura J, Williams B, Staplin N, Ruilope LM. Office measurement vs. ambulatory blood pressure monitoring: associations with mortality in patients with or without diabetes. *Eur Heart J*. 2024;45:2851-2861. doi: 10.1093/eurheartj/ehae337.
 138. Buse M, Cheng M, **Jankowski V**, Lellig M, Sterzer V, Strieder T, Leuchtle K, Martin IV, Seikrit C, Brinkkoetter P, Crispatzu G, **Floege J, Boor P, Speer T, Kramann R**, Ostendorf T, Moeller MJ, Costa IG, Stamellou E. Lineage tracing reveals transient phenotypic adaptation of tubular cells during acute kidney injury. *iScience*. 2024;27:109255. doi: 10.1016/j.isci.2024.109255.
 139. Cloß K, Verket M, Müller-Wieland D, **Marx N, Schuett K**, Jost E, Crysandt M, Beier F, Brümmendorf TH, Kobbe G, Brandts J, Jacobsen M. Application of wearables for remote monitoring of oncology patients: A scoping review. *Digit Health*. 2024;10:20552076241233998. doi: 10.1177/20552076241233998.
 140. **Curaj A**, Vanholder R, Loscalzo J, Quach K, Wu Z, **Jankowski V, Jankowski J**. Cardiovascular Consequences of Uremic Metabolites: an Overview of the Involved Signaling Pathways. *Circ Res*. 2024;134:592-613. doi: 10.1161/circresaha.123.324001.
 141. Dai Y, Junho CVC, Schieren L, Wollenhaupt J, Sluimer JC, **van der Vorst EPC, Noels H**. Cellular metabolism changes in atherosclerosis and the impact of comorbidities. *Front Cell Dev Biol*. 2024;12:1446964. doi: 10.3389/fcell.2024.1446964.
 142. Emrich IE, Pickering JW, Götzinger F, **Kramann R**, Kunz M, Lauder L, Papademetriou V, **Böhm M**, Heine GH, **Mahfoud F**. Comparison of three creatinine-based equations to predict adverse outcome in a cardiovascular high-risk cohort: an investigation using the SPRINT research materials. *Clin Kidney J*. 2024;17:sfae011. doi: 10.1093/ckj/sfae011.
 143. Farhadi Ghalati P, M ES, Verket M, Balfanz P, Müller-Wieland D, Jonas S, Napp A, Wanner C, Ketteler M, Vassiliadou A, Heidenreich S, Deserno T, Hetzel G, **Fliser D**, Kelm M, **Floege J, Marx N**, Schuppert A. Monitoring individualized glucose levels predicts risk for bradycardia in type 2 diabetes patients with chronic kidney disease: a pilot study. *Sci Rep*. 2024;14:30290. doi: 10.1038/s41598-024-81983-x.
 144. Fischer P, **Mahfoud F, Böhm M**, Ukena C. The elephant trunk: a rare morphology of the left atrial appendage-a case report. *Eur Heart J Case Rep*. 2024;8:ytae334. doi: 10.1093/ehjcr/ytae334.

145. Götzinger F, Kieble M, Daudí AE, Kunz M, Lauder L, **Böhm M**, Laufs U, **Mahfoud F**, Schulz M. Use of fixed-dose combinations for cardiovascular indications from 2018 to 2023: a nationwide population-based study. *J Hypertens*. 2024;42:1720-1727. doi: 10.1097/hjh.0000000000003789.
146. Götzinger F, Kunz M, Lauder L, **Böhm M**, **Mahfoud F**. New ways of mitigating aldosterone in cardiorenal disease. *Eur Heart J Cardiovasc Pharmacother*. 2024;10:557-565. doi: 10.1093/ehjcvp/pvae049.
147. Haring B, Schumacher H, Mancía G, Teo KK, Lonn EM, **Mahfoud F**, Schmieder R, Mann JFE, Sliwa K, Yusuf S, **Böhm M**. Triglyceride-glucose index, low-density lipoprotein levels, and cardiovascular outcomes in chronic stable cardiovascular disease: results from the ONTARGET and TRANSCEND trials. *Eur J Prev Cardiol*. 2024;31:311-319. doi: 10.1093/eurjpc/zwad340.
148. Harlacher E, Schulte C, Vondenhoff S, Schmitt-Kopplin P, Diederich P, Hemmers C, Moellmann J, Wollenhaupt J, Veltrop R, Biessen E, **Lehrke M**, Peters B, Schlieper G, Kuppe C, **Floege J**, **Jankowski V**, **Marx N**, **Jankowski J**, **Noels H**. Increased levels of a mycophenolic acid metabolite in patients with kidney failure negatively affect cardiomyocyte health. *Front Cardiovasc Med*. 2024;11:1346475. doi: 10.3389/fcvm.2024.1346475.
149. **Hoefl K**, Koch L, Ziegler S, Zhang L, Luetke S, Tanzer MC, Mohanta D, Schumacher D, Schreiebing F, Long Q, Kim H, Klinkhammer BM, Schikarski C, Maryam S, Baens M, Hermann J, Krieg S, Peisker F, De Laporte L, Schaefer GJ, Menzel S, **Jankowski J**, Humphreys BD, Wahida A, Schneider RK, Versele M, **Boor P**, Mann M, Sengle G, Hayat S, **Kramann R**. ADAMTS12 promotes fibrosis by restructuring extracellular matrix to enable activation of injury-responsive fibroblasts. *J Clin Invest*. 2024;134. doi: 10.1172/jci170246.
150. Joodaki M, Shaigan M, Parra V, **Bülow RD**, Kuppe C, Hölscher DL, Cheng M, Nagai JS, Goedertier M, Bouteldja N, Tesar V, Barratt J, Roberts IS, Coppo R, **Kramann R**, **Boor P**, Costa IG. Detection of Patient-Level distances from single cell genomics and pathomics data with Optimal Transport (PILOT). *Mol Syst Biol*. 2024;20:57-74. doi: 10.1038/s44320-023-00003-8.
151. Kario K, Kandzari DE, **Mahfoud F**, Weber MA, Schmieder RE, Tsioufis K, Liu M, **Böhm M**, Townsend RR. Renal Denervation Lowers Nighttime Blood Pressure in True Resistant Hypertension. *Hypertension*. 2024;81:e200-e202. doi: 10.1161/hypertensionaha.124.23848.
152. Katahira S, Barth M, Döpp R, Sugimura Y, Schmidt V, Selig JI, Saiki Y, F, **Marx N**, **Jahnen-Dechent W**, Lichtenberg A, Akhyari P. Pioglitazone treatment mitigates cardiovascular bioprosthetic degeneration in a chronic kidney disease model. *Front Pharmacol*. 2024;15:1412169. doi: 10.3389/fphar.2024.1412169.
153. Kirschfink A, Frick M, Al Ateah G, Kneizeh K, Alnaimi A, Dettori R, **Schuetz K**, **Marx N**, Altioek E. Evaluation of the Truncated Cone-Rhomboid Pyramid Formula for Simplified Right Ventricular Quantification: A Cardiac Magnetic Resonance Study. *J Clin Med*. 2024;13. doi: 10.3390/jcm13102850.
154. Knaup I, **Kramann R**, Sasula MJ, Mack P, Bastos Craveiro R, Niederau C, Coenen F, Neuss S, **Jankowski J**, Wolf M. TNF reduces osteogenic cell fate in PDL cells at transcriptional and functional levels without alteration of periodontal proliferative capacity. *J Orofac Orthop*. 2024. doi: 10.1007/s00056-024-00541-2.
155. Lauder L, **Mahfoud F**, **Böhm M**. Management of Resistant Hypertension. *Annu Rev Med*. 2024;75:443-457. doi: 10.1146/annurev-med-050922-052605.
156. Lauder L, Siwy J, Mavrogeorgis E, Keller F, Kunz M, Wachter A, Emrich IE, **Böhm M**, Mischak H, **Mahfoud F**. Impact of Renal Denervation on Urinary Peptide-Based Biomarkers in Hypertension. *Hypertension*. 2024;81:1374-1382. doi: 10.1161/hypertensionaha.124.22819.

157. **Lehrke M**, Fuernau G, Jung C, **Kahles F**, Moellmann J, Eitel I, Thelemann N, Desch S, Werdan K, Zeymer U, Adams V, **Marx N**, Thiele H. GLP-1 in patients with myocardial infarction complicated by cardiogenic shock-an IABP-SHOCK II-substudy. *Clin Res Cardiol.* 2024;113:1211-1218. doi: 10.1007/s00392-023-02366-2.
158. Lellig M, Rodríguez M, López-Baltanás R, Hermann J, Wollenhaupt J, **Noels H**, Zidek W, Tepel M, **Mahfoud F**, **Jankowski J**, Muñoz-Castañeda JR, **Jankowski V**. Pyridoxal-5'-phosphate: A cost-effective treatment candidate for hypertensive patients? *J Intern Med.* 2024;296:435-448. doi: 10.1111/joim.20015.
159. Malyaran H, Craveiro RB, Mert S, Niederau C, Maas SL, **van der Vorst EPC**, Hölzle F, **Jahnen-Dechent W**, Wolf M, Neuss S. Identifying Differences in Molecular Characteristics Relevant for Remodeling of Periodontal Ligament Stem Cells from the Upper and Lower Jaw. *Int J Mol Sci.* 2024;25. doi: 10.3390/ijms25063207.
160. Mancía G, Schumacher H, **Böhm M**, Grassi G, Teo KK, **Mahfoud F**, Parati G, Redon J, Yusuf S. Impact of seasonal blood pressure changes on visit-to-visit blood pressure variability and related cardiovascular outcomes. *J Hypertens.* 2024;42:1269-1281. doi: 10.1097/hjh.0000000000003759.
161. **Marx N**, Federici M, **Schütt K**, Müller-Wieland D, Crawford C, Eliasson B, Espinola-Klein C, Fauchier L, Halle M, Kautzky-Willer A, Lambrinou E, Lesiak M, Lettino M, Mullens W, Rocca B, Sattar N. [2023 ESC Guidelines for the management of cardiovascular disease in patients with diabetes]. *G Ital Cardiol (Rome).* 2024;25:e1-e103. doi: 10.1714/4162.41558.
162. **Marx N**, Müller-Wieland D, Verket M, **Schütt K**. [Management of cardiovascular diseases in patients with diabetes : ESC guidelines 2023]. *Herz.* 2024;49:15-18. doi: 10.1007/s00059-023-05218-x.
163. **Marx N**, Rydén L, Federici M, **Marx-Schütt K**, Verket M, Müller-Wieland D, Gerstein HC, Chan J, Cosentino F, Holman RR, Mellbin L, Ray KK, Standl E, Verma S, Wood D, Tuomilehto J, De Caterina R. Great debate: pre-diabetes is not an evidence-based treatment target for cardiovascular risk reduction. *Eur Heart J.* 2024;45:5117-5126. doi: 10.1093/eurheartj/ehae533.
164. Milzi A, Thomsen T, Landi A, Dettori R, **Marx N**, **Kahles F**, Escaned J, Mejía-Rentería H, Burgmaier M, Valgimigli M. Diagnostic accuracy of quantitative flow ratio in patients with arrhythmias. *EuroIntervention.* 2024;20:1039-1041. doi: 10.4244/eij-d-24-00144.
165. Moellmann J, Krueger K, Wong DWL, Klinkhammer BM, Buhl EM, Dehairs J, Swinnen JV, **Noels H**, **Jankowski J**, Lebherz C, **Boor P**, **Marx N**, **Lehrke M**. 2,8-Dihydroxyadenine-induced nephropathy causes hexosylceramide accumulation with increased mTOR signaling, reduced levels of protective SirT3 expression and impaired renal mitochondrial function. *Biochim Biophys Acta Mol Basis Dis.* 2024;1870:166825. doi: 10.1016/j.bbadis.2023.166825.
166. Mouzakis FL, Hima F, Kashefi A, Greven J, Rink L, **van der Vorst EPC**, **Jankowski J**, Mottaghy K, Spillner J. Molecular Hydrogen and Extracorporeal Gas Exchange: A Match Made in Heaven? An In Vitro Pilot Study. *Biomedicines.* 2024;12. doi: 10.3390/biomedicines12081883.
167. Niederau C, Tolba RH, **Jankowski J**, **Marx N**, Wolf M, Craveiro RB. Xanthohumol: Anti-Inflammatory Effects in Mechanically Stimulated Periodontal Ligament Stem Cells. *Biomedicines.* 2024;12. doi: 10.3390/biomedicines12122688.
168. **Noels H**, **Jankowski V**, **Schunk SJ**, Vanholder R, Kalim S, **Jankowski J**. Post-translational modifications in kidney diseases and associated cardiovascular risk. *Nat Rev Nephrol.* 2024;20:495-512. doi: 10.1038/s41581-024-00837-x.
169. Parhofer KG, Birkenfeld AL, Krone W, **Lehrke M**, **Marx N**, Merkel M, **Schütt KS**, Zirlik A, Müller-Wieland D. Position Paper on Lipid Therapy in Patients with Diabetes Mellitus. *Exp Clin Endocrinol Diabetes.* 2024;132:57-62. doi: 10.1055/a-2166-6859.

170. Rau M, Kurt B, Hartmann O, Lobo de Sá FD, Schwarz M, Thiele K, Hartmann NK, Spiesshoefer J, Möllmann J, **Hohl M**, Selejan SR, **van der Vorst EPC**, Dahl E, **Marx N**, **Kahles F**, **Lehrke M**. Proenkephalin A 119-159 (penKid) and mortality in stable patients at high cardiovascular risk. *Clin Kidney J*. 2024;17:sfae246. doi: 10.1093/ckj/sfae246.
171. Schulze-Späte U, Wurschi L, **van der Vorst EPC**, Hölzle F, Craveiro RB, Wolf M, **Noels H**. Crosstalk between periodontitis and cardiovascular risk. *Front Immunol*. 2024;15:1469077. doi: 10.3389/fimmu.2024.1469077.
172. **Schütt K**, Federici M, Verket M, **Marx N**, Müller-Wieland D. The '10 commandments' for the 2023 ESC Guidelines for the management of cardiovascular disease in patients with diabetes. *Eur Heart J*. 2024;45:1298-1300. doi: 10.1093/eurheartj/ehad881.
173. **Schütt K**, Forst T, Birkenfeld AL, Zirlik A, Müller-Wieland D, **Marx N**. Diabetes Mellitus and the Heart. *Exp Clin Endocrinol Diabetes*. 2024;132:64-67. doi: 10.1055/a-2166-6885.
174. Shao X, Xu H, Kim H, Ljaz S, Beier F, **Jankowski V**, Lellig M, Vankann L, Werner JN, Chen L, Ziegler S, Kuppe C, Zenke M, Schneider RK, Hayat S, Saritas T, **Kramann R**. Generation of a conditional cellular senescence model using proximal tubule cells and fibroblasts from human kidneys. *Cell Death Discov*. 2024;10:364. doi: 10.1038/s41420-024-02131-y.
175. Sharp ASP, Kandzari DE, Townsend RR, Kario K, **Mahfoud F**, Weber MA, Schmieder RE, Tsioufis K, **Böhm M**, Choi JW, Liu M, DeBruin V, Lee DP. A novel, proof-of-concept radiofrequency renal denervation strategy to improve procedural efficiency: 12-month results from the SPYRAL DYSTAL pilot study. *Cardiovasc Revasc Med*. 2024;68:30-36. doi: 10.1016/j.carrev.2024.04.005.
176. Stamellou E, Agrawal S, Siegerist F, Buse M, Kuppe C, Lange T, Buhl EM, Alam J, Strieder T, **Boor P**, Ostendorf T, Gröne HJ, **Floege J**, Smoyer WE, Endlich N, Moeller MJ. Inhibition of the glucocorticoid receptor attenuates proteinuric kidney diseases in multiple species. *Nephrol Dial Transplant*. 2024;39:1181-1193. doi: 10.1093/ndt/gfad254.
177. Stamellou E, Nadal J, Hendry B, Mercer A, Bechtel-Walz W, Schiffer M, Eckardt KU, **Kramann R**, Moeller MJ, **Floege J**. Long-term outcomes of adults with FSGS in the German Chronic Kidney Disease cohort. *Clin Kidney J*. 2024;17:sfae131. doi: 10.1093/ckj/sfae131.
178. Stamellou E, Nadal J, Hendry B, Mercer A, Seikrit C, Bechtel-Walz W, Schmid M, Moeller MJ, Schiffer M, Eckardt KU, **Kramann R**, **Floege J**. Long-term outcomes of patients with IgA nephropathy in the German CKD cohort. *Clin Kidney J*. 2024;17:sfae230. doi: 10.1093/ckj/sfae230.
179. Stamellou E, **Noels H**, **Floege J**. Factor XI inhibition in hemodialysis patients: the safer anticoagulation? *Kidney Int*. 2024;106:21-23. doi: 10.1016/j.kint.2024.03.029.
180. Struthoff H, Lauder L, Federspiel JM, **Hohl M**, **Böhm M**, Tschernig T, **Mahfoud F**. Human nerve distribution and density around the carotid artery bifurcation. *Clin Res Cardiol*. 2024;113:1508-1513. doi: 10.1007/s00392-024-02419-0.
181. Tokcan M, Federspiel J, Lauder L, **Hohl M**, Al Ghorani H, Kulenthiran S, Bettink S, **Böhm M**, Scheller B, Tschernig T, **Mahfoud F**. Characterisation and distribution of human coronary artery innervation. *EuroIntervention*. 2024;20:e1107-e1117. doi: 10.4244/eij-d-24-00167.
182. Tokcan M, Lauder L, Götzinger F, **Böhm M**, **Mahfoud F**. Arterial hypertension-clinical trials update 2024. *Hypertens Res*. 2024;47:3114-3125. doi: 10.1038/s41440-024-01900-7.
183. Townsend RR, Ferdinand KC, Kandzari DE, Kario K, **Mahfoud F**, Weber MA, Schmieder RE, Pocock S, Tsioufis K, David S, Steigerwalt S, Walton A, Hopper I, Bertolet B, Sharif F, Fengler K, Fahy M, Hettrick DA, Brar S, **Böhm M**. Impact of Antihypertensive Medication Changes After Renal Denervation Among Different Patient Groups: SPYRAL HTN-ON MED. *Hypertension*. 2024;81:1095-1105. doi: 10.1161/hypertensionaha.123.22251.
184. von Haehling S, Assmus B, Bekfani T, Dworatzek E, Edelmann F, Hashemi D, Hellenkamp K, Kempf T, Raake P, **Schütt KA**, Wachter R, Schulze PC, Hasenfuss G, **Böhm M**,

- Bauersachs J. Heart failure with preserved ejection fraction: diagnosis, risk assessment, and treatment. *Clin Res Cardiol*. 2024;113:1287-1305. doi: 10.1007/s00392-024-02396-4.
185. Vondenhoff S, **Schunk SJ**, **Noels H**. Increased cardiovascular risk in patients with chronic kidney disease. *Herz*. 2024;49:95-104. doi: 10.1007/s00059-024-05235-4.
186. Vukadinović D, Lauder L, Kandzari DE, Bhatt DL, Kirtane AJ, Edelman ER, Schmieder RE, Azizi M, **Böhm M**, **Mahfoud F**. Effects of Catheter-Based Renal Denervation in Hypertension: A Systematic Review and Meta-Analysis. *Circulation*. 2024;150:1599-1611. doi: 10.1161/circulationaha.124.069709.
187. Weyrich M, Cremer S, Gerster M, Sarakpi T, Rasper T, Zewinger S, Patyna SR, Leistner DM, Heine GH, Wanner C, März W, **Fliser D**, Dimmeler S, Zeiher AM, **Speer T**. Loss of Y Chromosome and Cardiovascular Events in Chronic Kidney Disease. *Circulation*. 2024;150:746-757. doi: 10.1161/circulationaha.124.069139.
188. Wintrich J, Pavlicek V, Brachmann J, Bosch R, Butter C, Oswald H, Rybak K, Millenaar D, **Mahfoud F**, **Böhm M**, Ukena C. Differences in management of telemedicine alerts on weekdays and public holidays: Results from the OptiLink heart failure trial. *J Telemed Telecare*. 2024;30:173-179. doi: 10.1177/1357633x211039398.
189. Wollenhaupt J, **Noels H**, Dickson W, Schulte C, **Jankowski J**. Sex differences in an experimental long-term mouse model of chronic kidney disease. *Atherosclerosis*. 2024;395.
190. Xu T, Herkens L, Jia T, Klinkhammer BM, Kant S, Krusche CA, Buhl EM, Hayat S, **Floege J**, Strnad P, **Kramann R**, Djudjaj S, **Boor P**. The role of desmoglein-2 in kidney disease. *Kidney Int*. 2024;105:1035-1048. doi: 10.1016/j.kint.2024.01.037.
191. Amini M, Frisch J, Jost P, Sarakpi T, Selejan SR, Becker E, Sellier A, Engel J, **Böhm M**, **Hohl M**, **Noels H**, Maack C, **Schunk S**, **Roma LP**, **Niemeyer BA**, **Speer T**, **Alansary D**. Purinergic receptor P2X7 regulates interleukin-1 α mediated inflammation in chronic kidney disease in a reactive oxygen species-dependent manner. *Kidney Int*. 2025;107:457-475. doi: 10.1016/j.kint.2024.10.024.
192. **Böhm M**, Butler J, Coats A, Lauder L, **Mahfoud F**, Filippatos G, Ferreira JP, Pocock SJ, Brueckmann M, Hauske SJ, Schueler E, Wanner C, Verma S, Zannad F, Packer M, Anker SD. Empagliflozin in resistant hypertension and heart failure with preserved ejection fraction: the EMPEROR-Preserved trial. *Eur Heart J*. 2025;46:1304-1317. doi: 10.1093/eurheartj/ehae938.
193. Bonnin-Marquez A, **Jankowski J**, Maas SL, Hermann J, **Kahles F**, Lellig M, **Fliser D**, **Schunk S**, Stamellou E, Berger M, **Speer T**, Kalim S, Leong Wong DW, **van der Vorst EPC**, **Jankowski V**. Guanidinylation compromises the anti-inflammatory and anti-oxidative properties of apolipoprotein A-I in chronic kidney disease progression. *Kidney Int*. 2025;107:916-929. doi: 10.1016/j.kint.2025.02.010.
194. Dahmer-Heath M, Gerß J, **Fliser D**, Liebau MC, **Speer T**, Telgmann AK, Burgmaier K, Pennekamp P, Pape L, Schaefer F, Konrad M, König JC. Urinary Dickkopf-3 Reflects Disease Severity and Predicts Short-Term Kidney Function Decline in Renal Ciliopathies. *Kidney Int Rep*. 2025;10:197-208. doi: 10.1016/j.ekir.2024.09.023.
195. de la Puente-Secades S, Mikolajetz D, Gayrard N, Hermann J, **Jankowski V**, Bhargava S, Meyer A, Argiles A, Saritas T, **van der Vorst EPC**, Wu Z, **Noels H**, Tepel M, Alghamdi K, Ward D, Zidek W, Wolf M, **Floege J**, Schurgers L, Orth-Alampour S, **Jankowski J**. Vasoconstriction-inhibiting factor: an endogenous inhibitor of vascular calcification as a calcimimetic of calcium-sensing receptor. *Cardiovasc Res*. 2025. doi: 10.1093/cvr/cvaf016.
196. Delles C, Schmieder RE, Daly R, Kannenkeril D, Bosch A, Lauder L, Kunz M, **Böhm M**, Hamilton G, Schmieder RS, Schmid A, Herzyk P, **Mahfoud F**. Response of Blood Pressure to Renal Denervation Is Not Associated With Genetic Variants. *Hypertension*. 2025;82:118-125. doi: 10.1161/hypertensionaha.124.23393.

197. Emrich IE, Obeid R, Geisel J, **Fliser D, Böhm M**, Heine GH, Zawada AM. Association of Homocysteine, S-Adenosylhomocysteine and S-Adenosylmethionine with Cardiovascular Events in Chronic Kidney Disease. *Nutrients*. 2025;17. doi: 10.3390/nu17040626.
198. Guimarães P, Keller A, **Böhm M**, Lauder L, Fehlmann T, Ruilope LM, Vinyoles E, Gorostidi M, Segura J, Ruiz-Hurtado G, Staplin N, Williams B, de la Sierra A, **Mahfoud F**. Artificial Intelligence-Derived Risk Prediction: A Novel Risk Calculator Using Office and Ambulatory Blood Pressure. *Hypertension*. 2025;82:46-56. doi: 10.1161/hypertensionaha.123.22529.
199. Jiang H, Kittipibul V, **Mahfoud F, Böhm M**, Sobotka PA, Esler M, Wang J, Fudim M. The road to renal denervation for hypertension and beyond (HF): two decades of failed, succeeded, and to be determined. *Heart Fail Rev*. 2025;30:293-314. doi: 10.1007/s10741-024-10463-1.
200. **Kaesler N**, Kaushik S, Frisch J, Ziegler S, Grommes J, Gombert A, **Roma LP**, Kuppe C, **Jankowski J, Floege J**, de la Puente-Secades S, **Kramann R, Jankowski V**. Vitamin K preserves gamma-glutamyl carboxylase activity against carbamylations in uremia: Implications for vascular calcification and adjunct therapies. *Acta Physiol (Oxf)*. 2025;241:e70040. doi: 10.1111/apha.70040.
201. Kario K, Kandzari DE, **Mahfoud F**, Weber MA, Schmieder RE, Tsioufis K, Liu M, **Böhm M**, Townsend RR. Two-year nighttime blood pressure changes after radiofrequency renal denervation: pooled results from the SPYRAL HTN trials. *Hypertens Res*. 2025. doi: 10.1038/s41440-025-02186-z.
202. **Mahfoud F**, Townsend RR, Kandzari DE, Mancía G, Whitbourn R, Lauder L, Bhatt DL, Kario K, Schmieder RE, Schlaich M, Fahy M, **Böhm M**. Long-Term, Patient-Level Analysis of Radiofrequency Renal Denervation in the SYMPLICITY Clinical Trial Program. *JACC Adv*. 2025;4:101606. doi: 10.1016/j.jacadv.2025.101606.
203. Martin L, Martin C, Peine A, Imöhl M, Kersten A, **Kramann R**, Saritas T, **Marx N**, Dreher M, Marx G, Simon TP. Implementation and One-Year Evaluation of Proenkephalin A in Critical Care. *Int J Mol Sci*. 2025;26. doi: 10.3390/ijms26062602.
204. **Marx N, Schütt K**, Müller-Wieland D, Di Angelantonio E, Herrington WG, Ajjan RA, Kautzky-Willer A, Rocca B, Sattar N, Fauchier L, Lettino M, Federici M. Key priorities for the implementation of the 2023 ESC Guidelines for the management of cardiovascular disease in patients with diabetes in low-resource settings. *Eur Heart J Qual Care Clin Outcomes*. 2025. doi: 10.1093/ehjqcco/qcae105.
205. **Marx-Schütt K**, Cherney DZI, **Jankowski J**, Matsushita K, Nardone M, **Marx N**. Cardiovascular disease in chronic kidney disease. *Eur Heart J*. 2025. doi: 10.1093/eurheartj/ehaf167.
206. Peters L, Rakateli L, Huchzermeier R, Bonnin-Marquez A, Maas SL, Lin C, Jans A, Geng Y, Gorter A, Gijbels M, Rensen S, Olinga P, Hendrikx T, Krawczyk M, Brisbois M, **Jankowski J**, Bidzhekov K, Weber C, Biessen EAL, Shiri-Sverdlov R, Houben T, Doering Y, Bartneck M, **van der Vorst E**. MicroRNA-26b protects against MASH development in mice and can be efficiently targeted with lipid nanoparticles. *Elife*. 2025;13. doi: 10.7554/eLife.97165.
207. Schmieder RE, Hettrick DA, **Böhm M**, Kandzari DE, Kario K, **Mahfoud F**, Tsioufis K, Weber MA, Esler MD, Townsend RR. Novel approaches to define responders to interventional treatment in hypertension: insights from the SPYRAL HTN-OFF and HTN-ON MED trials. *Hypertens Res*. 2025;48:327-335. doi: 10.1038/s41440-024-01949-4.
208. Therre M, **Kindermann I**, Wedegärtner SM, Groß S, Schwantke I, **Mahfoud F, Böhm M**. Determinants of reliability of self-reported height and weight and their impact on medication dosing: a cross-sectional study. *BMJ Open*. 2025;15:e090020. doi: 10.1136/bmjopen-2024-090020.

209. Wintrich J, Bismpos D, Teusch A, Pavlicek V, Fischer P, **Mahfoud F, Böhm M**, Ukena C. Severity of tricuspid regurgitation predicts risk of recurrence of atrial fibrillation after pulmonary vein isolation. *ESC Heart Fail*. 2025. doi: 10.1002/ehf2.15197.
210. Moellmann J, Glandien K, Klinkhammer BM, Wollenhaupt J, **Noels H, Jankowski J**, Lebherz C, **Boor P, Lehrke M, Marx N**. Development of a mouse model of uremic cardiomyopathy: Investigating the impact of chronic kidney disease on cardiac function and signaling pathway. *FASEB J*. 2025. doi.org/10.1096/fj.202500281R.
211. Lauxen J, Vondenhoff S, Junho CVC, Martin P, Fleig S, **Schütt K**, Schulze-Späte U, **Prates Roma L**, Döring Y, Baaten CCFMJ, **Noels H**. Neutrophil function in patients with chronic kidney disease: a systematic review and meta-analysis. *Acta Physiologica*. 2025; 241:e70057. doi: 10.1111/apha.70057.
212. **Hohl M**, Götzinger F, Jäger S, Wagmann L, Tokcan M, Tschernig T, Reichrath J, Federspiel JM, **Boor P**, Meyer MR, **Mahfoud F, Böhm M**. Assessing phototoxic drug properties of hydrochlorothiazide using human skin biopsies. *Commun Biol*. 2025;8:705. doi: 10.1038/s42003-025-08064-1.
213. Heyn J, Gorgels A, Hense N, Gombert A, Buhl EM, Stark L, Simon J, **Noels H, Marx N, Goettsch C**. GRP75 inhibition attenuates arterial calcification. *Atherosclerosis*. 2025; 15:119243. doi: 10.1016/j.atherosclerosis.2025.119243.
214. **Kaesler N**, Kaushik S, Frisch J, Ziegler S, Grommes J, Gombert A, **Prates Roma L**, Kuppe C, **Jankowski J, Floege J**, Puente-Secades S, **Kramann R, Jankowski V**. Vitamin K preserves gamma-glutamyl carboxylase activity against carbamylations in uremia: Implications for vascular calcification and adjunct therapies. *Acta physiologica* 2025;241(5):e70040. doi: 10.1111/apha.70040.
215. Kurt B, Rau M, Hartmann O, Bergmann A, Reugels M, Just S, Wenzl FA, Moellmann J, Spiesshöfer J, Milzi A, Kneizeh K, Thiele K, **Hohl M**, Selejan S, **van der Vorst EPC**, Dahl E, Schröder J, Lüscher TF, **Marx N, Lehrke M, Kahles F**. Adjustment of the SMART risk score 1 by bioactive adrenomedullin enables a more accurate prediction of mortality in patients with ASCVD. *Atherosclerosis* 2025. Accepted. doi.org/10.1016/j.atherosclerosis.2025.120220.
216. Markwirth P, Selejan S, **Hohl M, Schunk SJ**, Müller A, **Wagenpfeil S**, Wagmann L, **Kahles F**, Tokcan M, Therre M, **van der Vorst EPC**, Rau M, **Noels H**, Wollenhaupt J, **Mahfoud F, Böhm M**. Renal denervation improves uremic cardiomyopathy in rats with chronic kidney disease. *JAHA*. 2025. Accepted. Acceptance letter in Appendix §7.3.

7.3 Acceptance letters of manuscripts

This includes the acceptance letters of accepted manuscripts that are not yet available online. The PDFs of these manuscripts are available on the protected area of our SFB/TRR219 website.

216. Markwirth, P, Selejan S, **Hohl M, Schunk SJ**, Müller A, **Wagenpfeil S**, Wagmann L, **Kahles F**, Tokcan M, Therre M, **van der Vorst EPC**, Rau M, **Noels H**, Wollenhaupt J, **Mahfoud F, Böhm M**. Renal denervation improves uremic cardiomyopathy in rats with chronic kidney disease. *JAHA*. 2025. Accepted.

From: jaha@journalaha.org
To: philipp.markwirth@uks.eu
Cc: simone.selejan@uks.eu; Matthias.Hohl@gnv.de; andreas.mueller@uks.eu; ja.wagmann@uks.eu; kahles.floian@gnv.de; mert.tokcan@uks.eu; Markus.Therre@uks.eu; van.der.Vorst.EPC@gnv.de; Emiel.Petrus.Caiaj@gnv.de; Matthias.Noels@gnv.de; Heidi.Wollenhaupt@gnv.de; felix.mahfoud@gmail.com; michael.boehm@uks.eu
Subject: JAHA/2024/038785-T2 Decision Letter
Date: Wednesday, May 21, 2025 6:42:26 AM

May 21, 2025

Dr. Philipp Markwirth, MD
 Universität des Saarlandes
 Klinik für Innere Medizin III, IMED
 Kirrbergerstraße 100
 Homburg/Saar 66421
 GERMANY

RE: JAHA/2024/038785-T2
 Renal denervation improves uremic cardiomyopathy in rats with chronic kidney disease

Dear Dr. Markwirth,

Thank you for returning your revised manuscript promptly. We are pleased to inform you that it is now acceptable for publication in *JAHA: Journal of the American Heart Association*. We plan to publish this manuscript as soon as possible.

We are very pleased to be able to publish your manuscript in our journal, and we would like to be sure to promote it effectively when it is published. To assist us with this, please provide the following via email to the Editorial Office (jaha@journalaha.org):

- a. A very brief (120 characters maximum) summary of your manuscript to be used as a Tweet.
- b. An X handle for you, the first author, and/or your institution, if you would like us to tag you in posts about your manuscript.

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As an Open Access journal, publication in *JAHA* requires the payment of an Article Publication Charge (APC). Details about the APC are available on our website: <https://www.ahajournals.org/jaha/openaccess>

We are very pleased to have the opportunity to publish this interesting work. Thank you very much.

Sincerely yours,

Bruce Ovbiagele, MD, MSc, MAS, MBA, MLS
 Editor-in-Chief
JAHA: Journal of the American Heart Association
jaha@journalaha.org

7.4 Meetings and seminars organized by the SFB/TRR219

7.4.1 Cardiorenal Seminars organized by the SFB/TRR19

Date	Speaker & Title
2022, January 20 th	Prof. Leon Schurgers (M) Cardiovascular Research Institute (CARIM), Biochemistry of Vascular Calcification, Maastricht University, Netherlands „The role of vitamin K in health and disease.“
2022, February 17 th	Joshua Hutcheson, PhD (M) Department of Biomedical Engineering, Cardiovascular Matrix Remodeling Lab, Florida International University, USA “Targeting the Caveolae-Dependent Mechanism of Calcifying Extracellular Vesicle Formation.” <i>Online</i>
2022, March 17 th	Prof. Leon J. de Windt (M) Molecular Cardiovascular Biology, Department of Molecular Genetics, Maastricht University, The Netherlands "Small tricks to mend a broken heart."
2022, April 22 nd	Susanne Sattler, PhD (F) National Heart & Lung Institute Imperial College London, UK „Immunopathology in Heart Failure: Can we call it an autoimmune disease yet?“ <i>Online</i>
2022, May 12 th	Andreas Herrlich, MD, PhD (M) Division of Nephrology Washington University School of Medicine, USA „Identification of kidney injury-released circulating osteopontin as causal agent of respiratory failure.“ <i>Online</i>
2022, June 23 rd	Prof. Philip Wenzel (M) Centre for Thrombosis and Haemostasis - "Vascular Inflammation", University Medical Centre, Johannes Gutenberg University Mainz "Interplay of coagulation and innate immune cells in vascular inflammation."
2022, September 29 th	Prof. Katja Simon (F) Kennedy Institute, Oxford University, UK Max Delbrück Center, Berlin, Autophagy in the Immune System, "Autophagy's role in aging, differentiation and function of immune cells." <i>Online</i>
2022, December 1 st	Prof. Alexander Bartelt (M) Institute for Cardiovascular Prevention (IPEK), Cardiovascular Immunometabolism, Ludwig-Maximilians-University, Munich (LMU), "Adipocytes & cardiometabolic health."
2023, March 16 th	Prof. Jaap van Buul (M) Vascular Cell Biology / Amsterdam UMC, Swammerdam Institute for Life Sciences (SILS), Sanquin Research Institute, The Netherlands, "Leukocyte transendothelial migration: it takes two to tango."
2023, April 20 th	Dr. Stefan Rudloff (M) Department for Biomedical Research (DBMR), Universität Bern, Schweiz, „Trading off tissue integrity for premature aging - a tale of fetal hypoxia.“
2023, June 15 th	Prof. Ferdinand le Noble (M) Department of Cell and Developmental Biology, Karlsruhe Institute of Technology (KIT), Karlsruhe, Germany, "Organo-typical control of vascular network formation: impact on designing pro- and anti-angiogenic therapies."
2023, August 11 th	Dr. Candice Roufosse (F) Centre for Inflammatory Disease, Dept of Immunology and Inflammation, Imperial College London, UK, "Antibody-mediated rejection in kidney transplantation: an update."

2023, November 16 th	Prof. Marcela Ramos (F) Center for Natural and Human Sciences, Federal University of ABC (UFABC), Campus Santo André, São Paulo, Brasil, "Kidney-Heart connection: molecular and functional aspects in renocardiac syndrome."
2024, January 31 st	Prof. Peter Grant (M) Division of Cardiovascular and Diabetes Research, University of Leeds, UK, "Organ-crosstalk - The lung as a target for Diabetes Mellitus complications"
2024, June 10 th	Dr. Conny Gysemans (F) Clinical and Experimental Endocrinology, KU Leuven, Belgium, "Neutrophils: neglected immune cells in type 1 diabetes"
2024, August 29 th	Prof. Yvonne Döring (F) Translational Angiology, University Hospital Bern, "Top dogs and newcomers – Cell specific actions of chemokines and their receptors in atherosclerosis"
2024, September 19 th	Prof. Nikolaus Marx (M) Medical Clinic I, University Hospital Aachen, „Understanding the evolving trends in cardiovascular-kidney-metabolic diseases"
2025, February 13 th	Dr. Marten Hoeksema (M) Atherosclerosis & Ischemic Syndromes, Amsterdam UMC, The Netherlands, "Fine-tuning the macrophage's inflammatory potential: natural genetic variation as a tool to reveal transcriptional responses."
2025, March 27 th	Prof. Jan Van den Bossche (M) Translational Macrophage Immunometabolism, Amsterdam UMC, NL, "A decade of macrophage immunometabolism research."
2025, April 3 rd	Prof. Ellen Blaak (F) Department of Human Biology, Maastricht University, The Netherlands, "Metabolic phenotypes towards type 2 diabetes and cardiometabolic risk: a precision nutrition approach."
2025, Mai 6 th	Prof. Sahir Kalim (M) Massachusetts General Hospital Harvard Medical School, Boston, USA "Post-translational protein modifications in CKD: Causes and consequences of carbamylation." <i>Online</i>
2025, September 25 th	Prof. Norbert Gerdes (M) Cardiovascular Research Laboratory (CVRL), University Hospital Düsseldorf, Title: tba
2025, October 2 nd	Prof. Sean Jurgens (M) Amsterdam UMC and Broad Institute of MIT and Harvard Title: tba
2025, October 30 th	Prof. Dr. Henri Spronk (M) Department of Biochemistry, Department of Internal Medicine Maastricht University "Cardiovascular protection: the coagulation system revised"
2025, November 20 th	Prof. Holger Winkels (M) Experimental Cardiology of Ageing, University Hospital Cologne, Title: tba
2025, December 11 th	Prof. Gabriele Schiattarella (M) Cardiometabolic Diseases, German Heart Center of the Charité (DHZC) Title: tba

7.4.2 National and International Meetings and Summer Schools organized by SFB/TRR219

First CRC Convent: Joint meeting of 14 DFG-funded German SFB research consortia & graduate schools focusing on kidney, heart and vessels, Seeheim (05.- 06.05.2022)



Deutsche
Forschungsgemeinschaft



Aachen
Homburg

Joint meeting of German SFB research consortia & graduate schools focusing on kidney, heart and vessels



















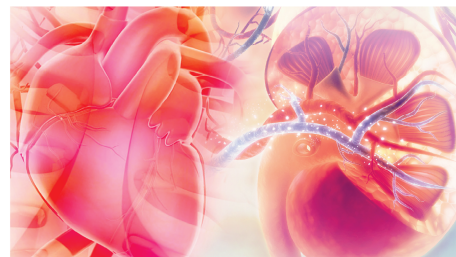

*Tackling kidney and cardiovascular diseases:
with joint forces towards increased insights
into underlying pathologies*

05 - 06 May 2022

Second CRC Convent: Joint meeting of 18 DFG-funded CRC and graduate schools, Frankfurt (09.- 10.10.2024)



Joint meeting of German DFG-funded CRC consortia & graduate schools focusing on heart, vasculature and kidney



Organized with financial support of:



*Importance and Highlights of Cardiac,
Vascular and Kidney Research
in Germany*

09 - 10 October 2024

Organizers

Program committee

Prof. Dr. Joachim Jankowski

PD Dr. Heidi Noels

PD Dr. Claudia Goettsch

Prof. Dr. Peter Kohl

Prof. Dr. Kerstin Amann

On behalf of all participating CRCs

Organization committee

SFB/TRR219 (Aachen-Homburg)

www.sfb-trr219.de

University Hospital RWTH Aachen

Institute for Molecular Cardiovascular Research (IMCAR)

Prof. Dr. Joachim Jankowski – Speaker of SFB/TRR219

PD Dr. Heidi Noels – Program Manager of SFB/TRR219

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Organizing Consortia



SFB1425



SFB1453



SFB1470



SFB1525



SFB 1531
Damage control by the
plasma-membrane compartment



Other Participating Consortia & Institutes



TRR205



CRC1340



SFB 1403
CELL DEATH
IN IMMUNITY, INFLAMMATION AND DISEASE



SFB 1454
Metainflammation
and Cellular
Programming



International Cardiorenal Summer School, Skopje (21.- 23.09.2022)

**Joint Summer School of the ESAO,
EUTox working group, COAT
consortium, Strategy-CKD
& SFB/TRR219 IRTG**

**Contact/Organizer**

University Hospital RWTH Aachen
Institute for Molecular Cardiovascular Research (IMCAR)
Prof. Dr. Joachim Jankowski & PD Dr. Heidi Noels
Medical Clinic I - Cardiology
PD Dr. Claudia Goettsch

University of Skopje
Department of Nephrology
Prof. Dr. Goce Spasovski

Organization

Sandra Knarren
Phone: +49-176 66698749
Phone: +49-241-8080580
Email: sknarren@ukaachen.de

**“Emerging and future technologies to remove
uremic toxins: tackling cardiovascular complications
in kidney failure”**



Skopje, Republic North Macedonia,
21-23 September 2022

Official opening of the 'Aachen-Maastricht Institute for CardioRenal Disease' – AMICARE (20.10.2022)



Official opening
of **AMICARE** as Aachen-Maastricht
Institute for CardioRenal Disease

AMICARE official opening:
Thursday October 20th, 2022
With visit of the AMICARE premises

Followed by
the "Aachen Conference on Cardiovascular Disease"
on October 21-22, 2022
Aachen, Germany

Contact for more information:
Sandra Knarren: sknarren@ukaachen.de – Tel. +49 241 80-80580

Meeting venue
Enterprise-Integration-Center (EICe)
Campus-Boulevard 55
52074 Aachen









SFB/TRR219 session at the 2023 annual meeting of the DGfN (15. Jahrestagung der Deutschen Gesellschaft für Nephrologie) (5.–8.10.2023)

<https://www.sfb-trr219.de/post/sfb-trr219-session-dgfn-congress-berlin>

SFB/TRR219 session at the 2024 ESAO (50th ESAO Congress. European Society for Artificial Organs) (08.–10.11.2024)

<https://www.sfb-trr219.de/post/sfb-trr219-session-on-the-50th-esao-congress-in-aachen-organ-crosstalk-honoring-the-past-empower>

SFB/TRR219 session at the 2024 annual meeting of the DGfN (16. Jahrestagung der Deutschen Gesellschaft für Nephrologie) (26.–29.09.2024)

<https://www.sfb-trr219.de/post/sfb-trr219-session-at-the-2024-annual-meeting-of-the-dgfn>

Aachen Conference on Cardiovascular Disease and Diabetes, 2022 (21.- 22.10.2022)

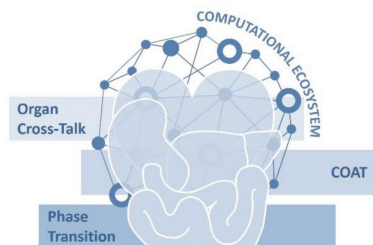
Aachen Conference on Cardiovascular Disease and Diabetes



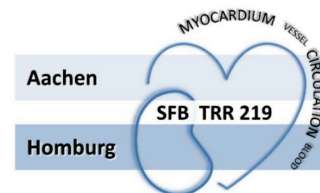
Topic 2022:

*Translational research
in cardiovascular disease:
Molecular mechanisms and clinical implications*

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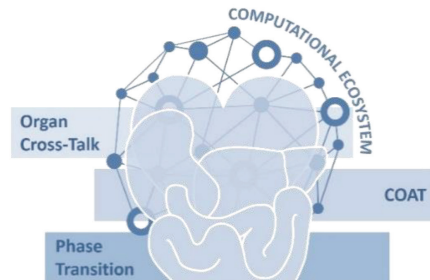
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DFG Deutsche
Forschungsgemeinschaft

Aachen Conference on Cardiovascular Disease and Diabetes, 2023 (10.- 11.11.2023)

Aachen Conference on Cardiovascular Disease and Diabetes



Topic 2023:

*Translational research in cardiovascular disease:
Molecular mechanisms and clinical implications*

**DFG-Sonderforschungsbereich/Transregio 219,
PASSION-HF and iCARE4CVD**



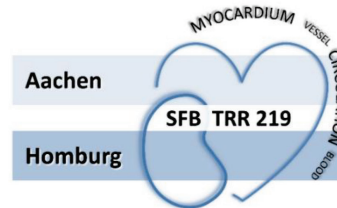
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2023

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November

organized by the
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Aachen Conference on Cardio-Renal Diseases and Diabetes, 2024 (11.- 13.11.2024)



Aachen Conference on Cardio-Renal Diseases and Diabetes

Topic 2024:

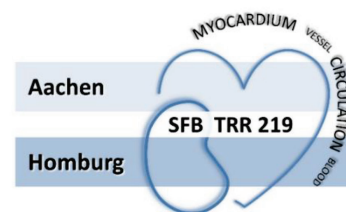
*Translational research in cardio-renal metabolic diseases
and risks: Molecular mechanisms and clinical implications*

DFG-Sonderforschungsbereich Transregio 219

2024

11th – 13th

November



organized by the
AMICARE Development GmbH

DFG Deutsche
Forschungsgemeinschaft

7.4.3 Annual Meetings of SFB/TRR219

Annual PI Meeting 2023, Boppard (03.- 04.05.2023)

Organizers / Contact

SFB/TRR219 (Aachen-Homburg)
www.sfb-trr219.de

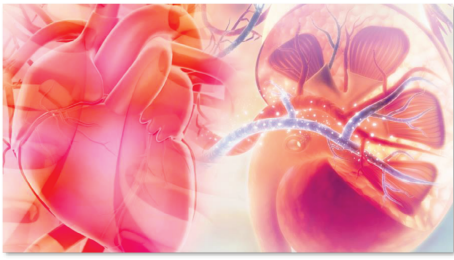
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Institute for Molecular Cardiovascular Research (IMCAR)
Prof. Dr. Joachim Jankowski – Speaker of SFB/TRR219
PD Dr. Heidi Noels – Program Manager of SFB/TRR219

Medical Clinic I
PD Dr. Claudia Goettsch – Coordinator of the SFB/TRR219 graduate school

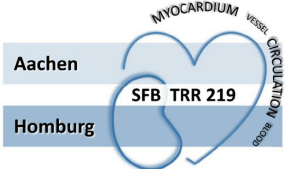
Contact
Sandra Knarren
sknarren@ukaachen.de
Tel.: 0241 80-80580




Annual PI Meeting 2023 SFB/TRR219



03 - 04 May 2023



IRTG Summer School of SFB/TRR219 2023 (21.- 23.06.2023)

Organizers / Contact

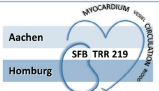
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Prof. Dr. Joachim Jankowski – Speaker of SFB/TRR219
PD Dr. Heidi Noels – Program Manager of SFB/TRR219
Dr. Juliane Hermann – Project S-03
Dr. Julia Wollenhaupt – Project M-05

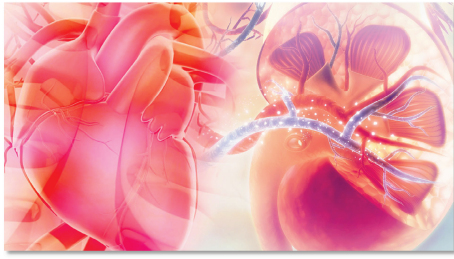
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PD Dr. Claudia Goettsch – Head of the SFB/TRR219 graduate school
Dr. Julia Möllmann – Project M-03

Saarland University, Campus Homburg
Dr. Janina Frisch – Project M-04

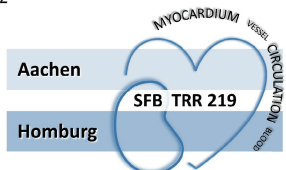
Contact
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IRTG Summer School 2023 SFB/TRR219



21 – 23 June 2023



Annual Meeting 2024, Seeheim (11.- 13.03.2024)**Organizers / Contact**

SFB/TRR219 (Aachen-Homburg)
www.sfb-trr219.de

University Hospital RWTH Aachen

Institute for Molecular Cardiovascular Research (IMCAR)

Univ.-Prof. Dr. Joachim Jankowski
Priv.-Doz. Dr. Heidi Noels

Medical Clinic I

Priv.-Doz. Dr. Claudia Goettsch

Contact

Sandra Knarren	Mareike Staudt
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DFG Deutsche
Forschungsgemeinschaft



Annual Meeting 2024 SFB/TRR219



Meeting venue **Lufthansa Seeheim**

Lufthansa Seeheim Conference Hotel

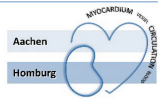
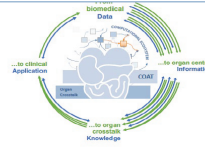
Lufthansaring 1
64342 Seeheim-Jugenheim, Germany
+49 69 696 13 1000
info@lufthansa-seeheim.de

11 – 13 March 2024

7.4.4 SFB/TRR219 Postdoc Workshop (18.09.2023)

SFB/TRR219 Postdoc Workshop

18. September 2023



11:30 – 12:00	Discussion of career development in context of the SFB
12:00 – 12:30	Guidance of PhD students: exchange of experience
12:30 – 13:00	Teaching within the SFB and the official curriculum for medical students
13:00	Networking

7.5 Presentations of SFB/TRR219 PIs at national and international meetings

Project	Year	Presentations
Kaesler (C-01)	2022	DGfN Congress, „Vitamin K in CKD“
	2022	VFED, Annual Meeting, „Vitamin K2“
	2022	Berlin Dialysis Seminar, „Vitamins in Chronic Kidney Disease“
	2023	McMaster International Review Course in Internal Medicine, Krakow, Poland, „Vitamins in Patients with Chronic Kidney Disease“
	2023	Dr. Schaer Congress, "Role of the nutrition team and ketogenic protocols in use in Germany"
	2023	VFED, Annual Meeting, „Laborparameter bei Nierenkrankheiten“
Goettsch (C-02)	2022	French Society on Biomineralization, Nantes, France; invited talk
	2024	DGK Congress - 2 invited talks
	2025	Invited talk for Masterclass: The mechanism of Calcifying Aortic Valve Disease; Nijmegen, The Netherlands
	2025	VMAC, Essen; invited talk
Jankowski J (C-04; S-03; IRTG; Z-01)	2021	ASAIO - American Society for Artificial Internal Organs, Washington, USA
	2022	The World Congress of Nephrology (WCN), Bangkok, Thailand
	2022	3rd Iberoamerican Conference of Mass Spectrometry, Brasil
	2022	DGfN Congress
	2022	ESAO Congress
	2022	ERA-EDTA Congress
	2022	Protease World in Health & Disease Symposium
	2022	IDEAS! Innovation in Dialysis Conference, Seattle, USA
	2022	Cell Symposia Metabolites in Signaling and Disease, Lissabon, Portugal
	2023	DGK Congress
	2023	DGfN Congress
	2023	ESAO Congress
	2023	ERA-EDTA Congress
	2023	German Hypertension Congress
	2023	Japanese Society for Artificial Organs Congress, Tokyo, Japan
	2023	Bergen Meeting of Nephrology
	2023	The future of kidney care, Brussels EU Parliament, Belgium
	2023	‘Kardioreneraler Forschungsdialog’
	2024	DGK Congress
	2024	DGfN Congress
	2024	ESAO Congress
	2024	ERA-EDTA Congress
	2024	Day on Organ Crosstalk
	2024	Invited speaker at Instituto di Ricerche Farmacologiche Mario Negri, Bergamo, Italy
	2024	Conference of Health Technologies and the Estonian Society of Biomedical Engineering and Medical Physics, Tallin, Estonia
	2024	Indo-German Workshop on Crosstalk between cardiovascular disease and chronic inflammation via the routes of metabolites and immunity, Bhubaneswar, India
	2024	World Congress of Nephrology, Buenos Aires, Argentina
Kramann (C-01; C-05)	2021	Mapping of human kidney fibrosis. ASN Kidney Week 2021, online
	2022	Single cell and spatial mapping of human kidney and cardiovascular disease. Mount Desert Island Biology Laboratory Scientific Lecture Series, Maine, USA online
	2022	Mapping Kidney and Cardiovascular Fibrotic Disease using Spatial and Single Cell Genomics, Experimental Biology, Philadelphia, Journal of Histochemistry & Cytochemistry Lecture
	2022	The different facets of Myofibroblasts in kidney. European Renal Association, Paris
	2022	Spatiotemporal mapping of the heart. Bad Nauheim, Cardiovascular Excellence Cluster, Max Planck Institute, University Frankfurt and Giessen, Bad Nauheim
	2022	Spatial Transcriptomics Define Pathways Regulating Myocardial and Kidney Fibrosis, Keystone Conference on Tissue Fibrosis and Repair, Keystone, Colorado
	2022	Single cell and spatial mapping of kidney and cardiovascular disease. The Jackson Laboratory Scientific Lecture Series, Bar Harbor, ME, USA
	2023	Drivers of Kidney and Cardiac Fibrosis, Keystone Conference on Fibrosis Pathogenesis and Resolution, Banff Canada
	2023	Single cell and spatial genomics to dissect mechanisms of fibrosis in kidney and heart. American Society of Clinical Investigation (ASCI), Association of American Physicians (AAP) Joint meeting, New Member Keynote Presentation
	2023	Single-cell approaches to understand myocardial infarction biology. European Society of Cardiology Meeting, Amsterdam, The Netherlands
	2023	Single Cell and Spatial Genomics to Unravel Mechanisms in Cardiac Remodelling 1 st Immuno-Cardiology Symposium, Bar Harbor, Maine, USA

	2023	Dissecting mechanisms of kidney and cardiovascular disease using genomics and organoids. Renal Grand Rounds, Indiana University, USA
	2024	Spatiotemporal mapping of kidney fibrosis to identify mechanisms and therapeutic targets. European Renal Association, Annual Meeting, Stockholm, Sweden
	2024	Molecular mechanisms of cardiorenal disease, German Society of Nephrology, Annual Meeting, Berlin, Germany
	2024	Single cell genomics and human iPSC organoids to dissect mechanisms of kidney and heart disease. 2 nd Symposium of Tokyo Tech and RWTH Aachen University
	2024	Dissecting Mechanisms of Kidney and Heart Fibrosis using Single Cell and Spatial Transcriptomics, Keystone Fibrosis: Inflammation, Drivers and Therapeutic Resolution, Whistler, Canada
Marx-Schütt (C-07)	since 2021	> 30 presentations at congresses and training events
Speer (C-08)	2022	VMAC Congress talk
	2022	DGfN talk
	2022	DGfN Congress, 1 talk
	2023	DHL online, talk
	2023	VMAC Congress talk
	2023	Australien-New Zealand Society of Nephrology, Keynote lecture and two talks
	2023	Annual Meeting of the DGfN, 3 talks
	2024	EUROD Meeting, talk
	2024	DGK Congress, 1 talk
	2024	DGfN Congress, 3 talks
Fliser (C-09)	2021	ERA-EDTA Congress (online); "Dickkopf-3 (DKK3) links reciprocal lung and kidney injury in mice and humans"
	2021	DGfN Congress – Rostock (online); „Interleukin-1a ist ein zentraler Regulator von Inflammation bei Myokardinfarkt und chronischer Nierenerkrankung"
	2022	DGfN Congress; „Diagnose und Steuerung der Progression der CKD"
	2023	GSK Nierenwerkstatt (online); „Diagnostik und Steuerung der CKD-Progression"
	2023	DGfN Congress; „DKK3 – ein Werkzeug zum Progressionsmonitoring"
Alansary (C-09)	2024	Talk at the annual meeting of the German Society of Nephrology (DGfN)
Boor (M-01; S-02)	2021	Weimar Sepsis Kongress
	2021	Lissabon, ISMRM Workshop
	2021	DGfN Congress
	2022	Talk at the Umbrella Symposium „Life Science & Engineering - Data analytics, Neuroscience, Multiscale Approaches and Applications", Aachen
	2022	Talk „Digital Pathology for Prediction" on Meeting „Instabilità Digitale; ECM/FAD Sincrona in quattro puntate"; Sicily
	2023	19th European Congress on Digital Pathology (ECDP)
	2023	Meeting of the Austrian Society for Pathology, Innsbruck
	2024	NUM Conference, Berlin Congress Center
	2024	RWTH-Delegation to Japan
	2024	15. TMF-Annual Meeting: Medical Innovation
	2024	DGfN Congress
	2024	Digital Pathology Congress, Seoul, South Korea
	2024	Belgian Week of Pathology, Belgium
	2024	Invited talk, Alberta, Edmonton, Kanada
Hohl (M-02; S-02)	2022	Targets in heart failure treatment, Würzburg
	2023	DGfN Congress
	2024	Aachen Conference on Cardio-Renal Disease and Diabetes
Marx (M-03; M-05)	2022	EASD 2022 Stockholm / Lecture: Diabetes and the heart
	2022	Ital. Diabetes Meeting Rimini / Lecture: Heart failure in Diabetes
	2022	Kenia University Nairobi / Lecture: Prevailing evidence of empagliflozin benefits in HFrEF
	2023	ESC 2023 Amsterdam / Lecture: Presentation of ESC 2023 GLS on CVD in Diabetes
	2023	WCIR 2023 Los Angeles / Lecture: ESC GL Management of CVD in diabetes
	2023	'DGK Herztage': Organ-Cross Talk in CVD
	2024	VMAC 2024 Augsburg / Schönheimer Medaille / Lecture: Organ Cross-Talk in CVD
	2024	DGfN Congress; Heart failure in CKD
Niemeyer (M-04; IRTG)	2023	FASEB talk
	2023	Talk at Calcium Signaling at MCS (Israel)
Roma (M-04)	2023	Talk seminar programme of the Helmholtz Zentrum München
	2023	Chair and speaker of Module at FESBE/SBFis (Brazil)
	2024	Talk Sino-German Symposium
	2024	Talk Redox meeting Köln

Noels (M-05; IRTG)	2022	Dutch Nephrology Days - Invited talk
	2022	Qian-Jiang International Cardiovascular Symposium (Chair: Jane Freedman) - Invited talk
	2022	International Cardiorenal Winterschool, Skopje, Northern-Macedonia
	2023	DGfN Congress
	2023	Bern, Inselspital, Switzerland
	2024	DGK Congress - Invited talk
van der Vorst (M-07)	2024	EU Metaheart Cost Action, Würzburg - Invited talk
	2022	European Atherosclerosis Society Meeting
	2022	European Atherosclerosis Society Young Fellows Meeting
	2022	Dutch Atherosclerosis Society Meeting
	2023	European Atherosclerosis Society Meeting
Kahles (M-07)	2024	Frontiers in Cardiovascular Medicine Meeting
	2022	DGK Congress
	2023	DGK Congress
Schneider (S-01)	2023	'Dresdner Herzkreislaufftage'
	2018	AASLD 2018, San Francisco, US
	2019	GASL 2019, Heidelberg, Germany
	2019	EASL ILC 2019, Young Investigator Award, Vienna, Austria
	2019	DGIM 2019, Young Investigator Award, Wiesbaden
	2020	DGVS 2019, Best Abstract Travel Award, Mannheim, Germany
	2022	DGVS 2020: Acceptance speech for the C. A. Ewald Prize
	2023	Gordon Conference Lipoprotein Metabolism, Boston, US
	2023	UEG, Copenhagen, Denmark
	2023	DGVS, Hamburg, Germany
	2023	German Society for Nutrition, Aachen, Germany
	2023	Nantes Institute Thorax, Nantes, France
	2024	Munich, LMU, Nfse, Germany
	2024	Paris, Inserm Universite, France
	2024	Bern, Inselspital, Switzerland
	2024	TUM, Munich, Germany
	2024	AASLD, Boston, USA
Jankowski V (S-03)	2021	ASAIO - American Society for Artificial Internal Organs, Washington, USA
	2021	ERA-EDTA Congress
	2022	3rd Iberoamerican Conference of Mass Spectrometry
	2022	The Cell Symposium: Metabolites in Signalling and Disease
	2022	ISN-World Congress of Nephrology
	2022	ESAO Congress
	2022	ERA-EDTA Congress
	2022	Hypertension - Scientific Session American Heart Association
	2023	ERA-EDTA Congress
	2023	DGK Congress
	2023	ESAO Congress
	2024	ERA-EDTA Congress
	2024	ESAO Congress

DGfN, Deutsche Gesellschaft für Nephrologie; DGK, Deutsche Gesellschaft für Kardiologie; ERA-EDTA, European Renal Association-European Dialysis and Transplant Association; ESAO, European Society for Artificial Organs; VMAC, Vascular Medicine and Atherosclerosis Congress

7.6 Awards of SFB/TRR219-associated PhD/MD students and postdocs

Award / Scholarship	Name	Status	Project
2022			
DGK Otto Hess Promotion Award	Gideon Schäfer	MD student	C-05
DGK Otto Hess Promotion Award	Anna Müller	MD student	C-05
Kaltenbach Stipendium of the ‚Deutsche Stiftung für Herzforschung (DSHF)‘	Tobias Henning	MD student	M-05
Promotionskolleg Medical Faculty Aachen	Maximilian Neuhaus	MD student	M-07
Recognition of ‘Summa cum laude’ doctorate from RWTH-Aachen with a Borchers-Plakette	Shruti Bhargava	Postdoc	C-04
Oral presentation award, International CardioRenal Summer School (Skopje)	Sofia de la Puente Secades	Postdoc	C-04
Oral presentation award, International CardioRenal Summer School (Skopje)	Julia Möllmann	Postdoc	M-03
Early career abstract award (with travel grant): Annual meeting of the International Society on Thrombosis and Haemostasis (ISTH)	Constance Baaten	Postdoc	M-05
Best abstract in Basic Research; Belgian Society of Nephrology	Benjamin Vervaets	Postdoc	S-02
2023			
DGK Otto Hess Promotion Award	Carina Ciliox	MD student	C-02
DGK Otto Hess Promotion Award	Jonas Heyn	MD student	C-02
Promotionskolleg Medical Faculty Aachen	Jonas Heyn	MD student	C-02
Promotionskolleg Medical Faculty Aachen	Jonas Bodelier	MD student	M-01
Kaltenbach Stipendium of the ‚Deutsche Stiftung für Herzforschung (DSHF)‘	Nadim Tabaza	MD student	M-07
Promotionskolleg Medical Faculty Aachen	Emilia Firat	MD student	S-02
Posterpreis Kardiorenale Forschung (präklinisch) 1. Platz / 6. Kardiorenalere Forschungsdialog of Bayer Vital GmbH; Berlin	Michaela Lellig	PhD student	S-03
Early career abstract award (with travel grant): Annual meeting of the International Society on Thrombosis and Haemostasis (ISTH): Montreal, Canada	Constance Baaten	Postdoc	M-05
2nd best abstract in Clinical Research; Belgian Society of Nephrology	Benjamin Vervaets	Postdoc	S-02
Best abstract in Basic Research; Belgian Society of Nephrology	Benjamin Vervaets	Postdoc	S-02
2024			
Promotionskolleg Medical Faculty Aachen	Sophie Schiestel	MD student	C-02
DGK Otto Hess Promotion Award	Kaiseng Quach	MD student	C-04
Poster award PDGF Meeting Kármán Konferenz	Jonas Bodelier	MD student	M-01
Best Poster Award, European Islet Study Group	Markus Hoffmann	PhD student	M-04
Doctoral award to the best basic research thesis from Medical Faculty RWTH Aachen from Firma Grünenthal GmbH	Sofia de la Puente Secades	Postdoc	C-04
Recognition of ‘Summa cum laude’ doctorate from RWTH-Aachen with a Borchers-Plakette	Sofia de la Puente Secades	Postdoc	C-04
DGfN Best Abstract award	Tamim Sarakpi	MD (Postdoc)	C-08
Best Poster Presentation at the EUKISS	Barbara Mara Klinkhammer	Postdoc	M-01
Best Poster Presentation at the PDGF Meeting	Barbara Mara Klinkhammer	Postdoc	M-01
Poster award: PDGF Meeting Kármán Konferenz	Burcu Yesilyurt Öztürk	Postdoc	M-01
Recognition of ‘Summa cum laude’ doctorate from RWTH-Aachen with a Borchers-Plakette	Julia Wollenhaupt	Postdoc	M-05
Paper of the month award - RWTH Aachen	Sanne Maas	Postdoc	M-07

Young Investigator Fellowship - European Atherosclerosis Society (EAS)	Sanne Maas	Postdoc	M-07
Hans-Kaffarnik-Young-Investigator-Award der DGAF	Berkan Kurt	MD (Postdoc)	M-07
Poster award PDGF Meeting Kármán Konferenz	Patrick Droste	MD (Postdoc)	S-02
2024 2nd best abstract in Translational Research; Belgian Society of Nephrology	Benjamin Vervaets	Postdoc	S-02
Best abstract in Case Reports; Belgian Society of Nephrology	Benjamin Vervaets	Postdoc	S-02
2025			
Thesis award	Kaiseng Quach	MD student	C-04
Best Poster Nomination on the DGK meeting	Sina Hourtz	PhD student	M-05
Paper of the month award - RWTH Aachen	Michaela Lellig	PhD student	S-03
Aletta Jacobs Award	Sofia de la Puente Secades	Postdoc	C-04
Rudi Busse Award - DGK	Nadim Tabaza	Postdoc	M-07

7.7 Scientific collaboration beyond the SFB/TRR219

Subproject	Cooperation (name)	Institution
C-01 (Kramann/Kaesler)	Prof. W. März	University Graz, Austria and University Mannheim/Heidelberg, Germany
	Prof. L. Schurgers	Maastricht University, The Netherlands
	Prof. L. Tiano	University of Marche, Ancona, Italy
	B. Humphreys, MD, PhD	Harvard Medical School, Boston, USA
	E. Aikawa, MD, PhD	Brigham and Women's Hospital, Boston, USA
	B. Freedman, PhD	School of Medicine, Seattle, USA
	B. Ebert, MD, PhD	Brigham and Women's Hospital, Boston, USA
	J. Bonventre, MD, PhD	Brigham and Women's Hospital, Boston, USA
	N. Henderson, MD, PhD	University Edinburgh, UK
	A. Baker, PhD	University Edinburgh, UK
	Prof. J. Epstein	University Pennsylvania, USA
	Prof. K. Lavine	Washington University, USA
	Prof. F. Leuschner	University of Heidelberg, Germany
C-02 (Goettsch)	Prof. E. Aikawa, MD, PhD	Brigham and Women's Hospital, Boston, USA
	Prof. J. D. Hutcheson, PhD	Florida State University, USA
	Prof. A. Nykjær, PhD	Aarhus University, Denmark
	Prof. M. Kjolby, MD, PhD	Aarhus University, Denmark
	T. Quillard, PhD	University of Nantes, France
	Prof. K. Schroeder	University Frankfurt, Germany
C-04 (Jankowski J/Băleanu-Curaj)	Prof. G. Nickenig	University Bonn, Germany
	Prof. H. Augustin	University Heidelberg, Germany
	Prof. P. Person	Charité University, Berlin, Germany
	Prof. R. Brandes	University Frankfurt, Germany
	Prof. H. Mischak	University of Glasgow, UK
	Prof. E.A. Liehn	University Carol Davila, Bucharest, Romania and St. Katharinen Hospital Frechen, Germany
	Prof. R. Vanholder	University Ghent, Belgium
	Prof. A. Schuh	St. Katharinen Hospital Frechen, Germany
	Prof. A. Argiles	University Montpellier, France
C-05 (Kramann)	Prof. W. März	University Graz, Austria and University Mannheim/Heidelberg, Germany
	B. Humphreys, MD, PhD	Harvard Medical School, Boston, USA
	E. Aikawa, MD, PhD	Brigham and Women's Hospital, Boston, USA
	B. Freedman, PhD	School of Medicine, Seattle, USA
	B. Ebert, MD, PhD	Brigham and Women's Hospital, Boston, USA
	J. Bonventre, MD, PhD	Brigham and Women's Hospital, Boston, USA
	N. Henderson, MD, PhD	University Edinburgh, UK
	A. Baker, PhD	University Edinburgh, UK
	Prof. L. Schurgers	Maastricht University, The Netherlands
	Prof. J. Epstein	University Pennsylvania, USA

	Prof. K. Lavine	Washington University, USA
	Prof. F. Leuschner	University of Heidelberg, Germany
C-07 (Marx-Schütt)	Prof. R. Ajjan	University of Leeds, UK
	Dr. Schröder	University of Bern, Switzerland
C-08 (Speer)	Prof. J. Reiser	Rush University, Chicago, USA
	Prof. W. März	University Graz, Austria and University Mannheim/Heidelberg, Germany
	Prof. H. Schunkert	TU München, Germany
C-09 (Fliser/Alansary)	Prof. H. Gröne	Philipps-Universität, Marburg, Germany
	Prof. J. Reiser	Rush University Medical Center, Chicago, USA
	Prof. R. Bals	Saarland University, Homburg, Germany
M-01 (Boor)	Prof. U. Eriksson	Karolinska Institute, Stockholm, Sweden
	Prof. L. Olson	Oklahoma Medical Research Foundation, Oklahoma, USA
M-02 (Hohl/Böhm)	Prof. T. Tschernig	Saarland University, Homburg, Germany
	Dr. A. Müller	Saarland University, Germany
	Dr. J. M. Federspiel	Saarland University, Homburg, Germany
	Dr. L. Wagmann/Prof. M. R. Mayer	Saarland University, Homburg, Germany
	Prof. J. Reichrath	Saarland University, Homburg, Germany
	Prof. C. Maack	University Würzburg, Germany
M-03 (Marx)	Prof. M. Federici	University Rome, Italy
	Prof. B. Staels	University Lille, France
	Prof. S. Verma	University of Toronto, Canada
	Prof. B. Ghesquiere	University Leuven, Belgium
	Prof. B. Meijers	University Leuven, Belgium
	Dr. A. Artati	Helmholtz Munich, Germany
	Dr. M. Witting	Helmholtz Munich, Germany
M-04 (Roma/Niemeyer)	Prof. V. Helms	Saarland University, Germany
	Prof. N. de Jonge	Saarland University, Germany
	Prof. M. Schroda	University Kaiserslautern, Germany
	Prof. M. Vaeth	University Würzburg, Germany
	Prof. P. Pizzo	University Padua, Italy
	Prof. B. Winner	University Erlangen, Germany
	Prof. D. Bruns	Saarland University, Homburg, Germany
	Prof. G. Thiel	University Darmstadt, Germany
	Prof. R. Shroff	University College London, UK
	Prof. E. Latz	University Bonn, Germany
	Prof. J.-C. Jonas	University Leuven, Belgium
	Prof. P. MacDonald	University Alberta, Canada
	Prof. A. Girardi	Sao Paulo University, Brazil
	Prof. P. Gilon	University Leuven, Belgium
	Prof. I. Quesada	University Miguel Hernández Elche, Alicante, Spain
	Prof. A. Rafacho	University Santa Catarina, Florianopolis, Brazil

M-05 (Noels/Marx)	Prof. M. Federici	University Rome, Italy
	Prof. B. Staels	University Lille, France
	Prof. S. Verma	University of Toronto, Canada
	Prof. E. Biessen	Maastricht University, the Netherlands
	Prof. B. Ghesquiere	University Leuven, Belgium
M-07 (van der Vorst/Kahles)	Prof. B. Staels	University Lille, France
	Dr. J. Spießhoefer	RWTH Aachen, Germany
	Prof. M. Dreher	RWTH Aachen, Germany
	Prof. J. Stingl	University Heidelberg, Germany
	Prof. D. Drucker	University of Toronto, Canada
	Prof. C. Weber	Ludwig-Maximilians University Munich, Germany
	Prof. S. Steffens	Ludwig-Maximilians University Munich, Germany
	Prof. E. Biessen	Maastricht University, The Netherlands
M-08 (Bülow/Hoeft)	Prof. J. Epstein	University Pennsylvania, USA
	Prof. K. Lavine	Washington University, USA
	Prof. F. Leuschner	University of Heidelberg, Germany
	C.N. Baker, PhD	The Jackson Laboratory, USA
	Prof. M. Conrad	Helmholtz Zentrum, München, Germany
	Dr. J. Kers	UMC Amsterdam, The Netherlands
	Prof. M. Naesens	KU Leuven, Belgium
S-01 (Böhm/Kindermann/ Schneider)	Prof. J. M. McMurray	University Glasgow, Scotland
	Prof. R. Schmieder	University Erlangen, Germany
	Prof. G. Mancina	University Milan, Italy
	Prof. M. Komajda	University Paris, France
	Prof. G. Heusch	University Essen, Germany
	Prof. D. Rader	University of Pennsylvania, USA
	Prof. I. Zandavkili	University of Cincinnati, USA
	Prof. M. Vujcovicz	University of Pennsylvania, USA
	Prof. K. Townsend Creasy	University of Pennsylvania, USA
	Prof. K.J. Wangenstein	Mayo Clinic Minnesota, USA
	Prof. J. Kather	TU Dresden, Germany
	Dr. B. Heinrichs	Medical University Hannover, Germany
	Prof. J. Zucman Rossi	University Paris, France
	Prof. M. Heikenwälder	University Tübingen, Germany
	J. Dörenberg	University Tübingen, Germany
S-02 (Boor/Hohl)	Prof. U. Eriksson	Karolinska Institute, Stockholm, Sweden
	Prof. L. Olson	Oklahoma Medical Research Foundation, USA
	Prof. T. Tschernig	Saarland University, Homburg, Germany
	Dr. A. Müller	Saarland University, Homburg, Germany
	Dr. J. M. Federspiel	Saarland University, Homburg, Germany
	Dr. L. Wagmann/Prof. Dr. M. R. Mayer	Saarland University, Homburg, Germany

	Prof. J. Reichrath	Saarland University, Homburg, Germany
	Prof. C. Maack	University Würzburg, Germany
S-03 (Jankowski V/Jankowski J)	Prof. G. Nickenig	University Bonn, Germany
	Prof. H. Augustin	University Heidelberg, Germany
	Prof. H. Mischak	University of Glasgow, UK
	Prof. R. Vanholder	University Ghent, Belgium
	Prof. A. Argiles	University Montpellier, France
	Prof. T. Eschenhagen	University Hamburg, Germany
	Dr. R. Birner-Grünberger	Medical University Graz, Austria
	Prof. P. Person	Charité University, Berlin, Germany
	Prof. R. Brandes	University Frankfurt, Germany
	Dr. A.von Kriegsheim	University Edinburgh, UK
IRTG (Noels/Jankowski J / Niemeyer)	same as mentioned in M-05, C-04, M-04, respectively	
Z-01 (Jankowski J/Fliser)	same as mentioned in C-04 and C-09, respectively	

7.8 AMICARE

AMICARE is a joint European institute of the
Maastricht University (NL)
and RWTH Aachen University (DE)

“Building on strong, established collaborations between the Maastricht and Aachen partners as well as international level parties, we strive to promote innovation and dedication in the field of cardiorenal research and improve cardiorenal patient care.”

A strong CardioRenal Maastricht-Aachen axis with European and international backbone underlies the development of AMICARE:

INTRICARE MUMC/RWTH
Interreg North-West Europe **PASSION-HF** MUMC/RWTH
EURLIPIDS MUMC/RWTH
EUtox RWTH
DFG Aachen Homburg
caReSIA RWTH/MUMC
Cardiology (RWTH/UMC)
Nephrology (RWTH/UMC)
Institute for Molecular Cardiovascular Research (IMCAR) (RWTH/UMC)
Helmholtz Institute for Biomedical Engineering (RWTH/UMC)
Pathology (RWTH/UMC)
Cardiology (UMC/MUMC)
Nephrology (UMC/MUMC)
Cardiovascular Research Institute Maastricht (CARIM) (UMC/MUMC)
Biochemistry (UMC/MUMC)
Pathology (UMC/MUMC)

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Maastricht University | Maastricht UMC+

New AMICARE building under development

The strategy of AMICARE

Bundle cross-border research efforts and expertise to fight against chronic kidney disease and cardiovascular disease, to the benefit of the cardiorenal patient.

18% of the population in Europe suffer from CKD
45% of CKD patients stage 4-5 suffer from CVD, with CVD being the No.1 cause of death
1,4M people die annually from cardiorenal disease

Cardiovascular disease and chronic kidney disease have long been seen as two separate disease entities.

However, almost 45% of patients in advanced stage of chronic kidney disease also suffer from cardiovascular disease.

Taking the ageing population and changing lifestyle into account, the incidence of cardiorenal diseases is only expected to increase.

AMICARE, as dedicated centre of expertise with close, interdisciplinary interaction of researchers, clinicians and private partners from both the cardiology and nephrology fields, will accelerate application-driven and patient-relevant research and translation thereof.

Early detection
Understanding & interference
Therapy & regenerative medicine
Prevention & education

Patients
Biotech companies
Pharmaceutical companies
Clinicians & clinical scientists
Basic scientists
Medical & digital techniques & device companies

AMICARE

AMICARE as dedicated centre of expertise with close, interdisciplinary interaction of researchers, clinicians and private partners from both the cardiology and nephrology fields, will accelerate application-driven and patient-relevant research and translation thereof.

“At RWTH Aachen University and Maastricht University, we are proud to address the clinically and socially highly relevant health issue of the cardiorenal patient with AMICARE as a joint international institute of our universities.”

Together, we will achieve our mission to fight against chronic kidney and cardiovascular disease, to the benefit of the cardiorenal patient and the aging population in general”

Rector of RWTH Aachen
Prof. Dr. Ulrich Rüdiger

President of Maastricht University
Prof. Dr. Martin Paul

7.9 List of career-focused activities organized by the SFB/TRR219 in the 2nd funding period

Industry involvement in grey.

Career-supporting activity	Speaker	Organizer	Date
RWTH "Young Research Day"; Seminar "How to apply for research funds"	RWTH	RWTH	25.09.2025
Workshop: Opportunities and challenges for basic researchers in medicine - training & support in "medical scientist programs"	<i>Prof. Dr. Peter Kohl (Freiburg) & PD Dr Claudia Goettsch (Aachen)</i>	SFB/TRR219; CRC Convent, Frankfurt 2024	09.10.2024
DFG information session: "All you wanted to know about DFG applications"	DFG representatives Dr. Sigrid Hanke, Dr. Wiebke Ginter	SFB/TRR219; CRC Convent, Frankfurt 2024	09.10.2024
Career Talk: my life in industry	SFB/TRR219 alumni Christian Hemmers (Lonza, Switzerland)	SFB/TRR219 Peer-2-Peer	06.05.2024
Career Talk: my life in industry	SFB/TRR219 alumni Guilia Bagarolo (Julius Clinical, the Netherlands)	SFB/TRR219 Peer-2-Peer	21.11.2023
Panel discussion: Women in science – a personal perspective	SFB/TRR219 PhD/MD students	SFB/TRR219 Peer-2-Peer	22.09.2023
How to give great talks	Dr. Shruti Bhargava/C-04	SFB/TRR219 Peer-2-Peer	23.06.2023
Stress and Conflict Management	Dr. Andrea Gorgels/C-02	SFB/TRR219 Peer-2-Peer	23.06.2023
IP and Start-Up support structures	Dr. Marieke Sternkopf RWTH Innovation GmbH	IRTG SFB/TRR219; IRTG summer school	21.06.2023
How to write a successful grant	Prof. Dr. Griet Glorieux, Prof. Dr. Tonia Vlahou	SFB/TRR219; International Summer School	22.09.2022
Biography presentation	SFB/TRR219 alumni Marieke Sternkopf (RWTH Innovation GmbH)	SFB/TRR219 Peer-2-Peer	14.04.2022

Supplemented with monthly online **career-oriented talks** organized by the RWTH Aachen and also open for PhD/MD students and postdocs from Saarland university via SFB/TRR219

(Only a selection of offered courses is shown here):

- *My Academic Journey: Tools for Career Planning*
- *All about a Career in Science: Paths, Requirements, and Application Processes*
- *Career Options in Research Management*
- *Creating a LinkedIn Profile*
- *Creating a Social Media Presence: Strategies for Digital Science Communication*
- *Increase your employability with a doctoral degree (in English)*
- *Career orientation for scientists: The academic career path or are there other options? (in English)*

7.10 List of completed or ongoing PhD/MD theses since the SFB/TRR219 start

This table is the complete version compared to Table 6 in Chapter 1. It includes all completed and ongoing PhD/MD theses of doctoral students funded by or associated with the SFB/TRR219 since the start of the SFB/TRR219 in 2018.

Full Table 6. Completed and ongoing PhD/MD theses of doctoral students funded by or associated with the SFB/TRR219 since the start of the SFB/TRR219 in 2018 (153 in total, of whom 64 PhD students and 89 MD students; 58% F). Students who defended are in bold. Students indicated with “**” started their PhD before the SFB/TRR219 start-off in 2018. In the extra category column, MD students are indicated as ‘MD’. ‘Funding by IRTG’ refers to the short-time fellowships that were specifically applied for within the IRTG in the 1st and 2nd funding periods to increase the integration of medical students in the research projects. ‘Associated’ students were not funded by the SFB/TRR219 itself but were closely integrated in the IRTG training program due to thematic or methodological complementarity, thereby contributing to their scientific development.

Project	Surname, first name	Type of funding	Topic	Extra category	Duration / starting point
C-01	Dr. rer. nat. Halder, Maurice (M)	EU	Modulating Vitamin K-dependent proteins targeting vascular calcification		01.2018 – 09.2023
	Dr. med. Schreibing, Felix (M)	IRTG	Vitamin K-Transport in urämisch veränderten Lipoproteinen	MD	01.2018 – 02.2020
	Lacheva, Danina (F)	cand. med.	Ist-Analyse und Optimierung der Nährstoffversorgung von Dialyse Patienten in medizinischen Einrichtungen	MD	04.2024
C-02	Dr. rer. nat. Himmelsbach, Anika (F)	SFB/TRR 219	Molecular mechanisms of cardiovascular calcification in CKD		02.2018 – 09.2021
	Dr. rer. nat. Mir, Bilal (M)	SFB/TRR 219	The role of endolysosomal maturation in vascular calcification		01.2018 – 08.2021
	Dr. rer. nat. Heuschkel, Marina (F)	EU	The role of glucose induced vascular calcification		01.2018 – 09.2022
	Dr. rer. nat. Alibiglou, Hoda (F)	EU	TNAP activation in calcifying vascular smooth muscle cells		11.2018 – 10.2021
	Heyn, Jonas (M)	IRTG	Mitochondria-ER-Contacts in vascular calcification	MD	10.2020
	Dr. med. Ciliox, Carina (F)	IRTG	The role of cytoskeleton dynamics in vascular calcification	MD	04.2019 – 08.2023
	Dr. med. Kampmann, Matthias (M)	cand. med.	The role of ER translocation in cardiovascular calcification	MD	11.2020 – 05.2024
	Dr. med. Schiestel, Sophie (F)	cand. med.	The role of adipose tissue secretome in vascular calcification	MD	05.2020 – 12.2024
	Hense, Nicolas (M)	DFG	The role of sortilin in cardiovascular calcification in CKD patients		06.2021 – 02.2025
	Stein, Melina (F)	IRTG	The role of sortilin in kidney fibrosis	MD	10.2021
	Dr. med. Wolter, Jan-Felix (M)	cand. med.	Molecular mechanism of sortilin-induced myofibroblast activation	MD	11.2022 – 05.2025
	Simon, Joel (M)	cand. med.	Der Einfluss der Exozytose und der endosomalen Reifung auf die vesikel-vermittelte vaskuläre Kalzifizierung	MD	02.2023
	Köneke, Tabea (F)	cand. med.	Die Rolle der Mitochondrien-Homöostase in vaskulärer Kalzifizierung	MD	10.2023
	Terliesener, Mara (F)	cand. med.	The calcification potential of extracellular vesicles	MD	04.2023
	Willems, Jan (M)	cand. med.	Die Rolle der Rab27 vermittelten Exozytose und der Einfluss von Endozytose auf vaskuläre Kalzifizierung von glatten Gefäßmuskelzellen	MD	03.2024
	Stark, Lisa (F)	cand. med.	Die Rolle von Sortilin und dessen Interaktionspartner im kanonischen TGFβ-Signalweg.	MD	06.2024
C-03 (ends 12.2025)	Dr. rer. nat. Gorgels, Andrea (F)	SFB/TRR 219	Cellular calcification mechanisms triggered by blood-borne particles and their role in CKD		01.2018 – 12.2021
	Morgan, Aaron David (M)	DFG/SFB/TRR219	Microfluidic devices for studying vessel calcification		11.2020
	Dr. rer. nat. Köppert, Sina (F)	SFB/TRR 219	Cellular Response and Clearance Mechanisms Triggered by Protein-Mineral Complexes		01.2018 – 03.2021

C-03 (ends 12.2025)	Dr. med., Dr. rer. medic. Dzhanaev, Robert (M)	EU/DFG/SFB/TRR 219	Rational design and production of recombinant RANKL ligand. Fetuin-A-based theranostics in ectopic calcification.	MD PhD	01.2018 – 12.2020 12.2020 – 09.2023
	Winkler, Camilla Franziska (F)	University/SFB/TRR 219	Fetuin-A Phosphorylation Regulates Calcium Phosphate Binding		09.2021
	Hasberg, Christian (M)	University/SFB/TRR 219	Structure-Function Analysis of the Plasma Protein Fetuin-A		10.2021
C-04	Dr. rer. nat. Bhargava, Shruti (F)	EU	Characterization of the recently identified 'calcification blocking factor' (CBF) and isolation of unknown mediators inhibiting calcification processes		01.2018 – 03.2022
	Bagarolo, Giulia Ilaria (F)	EU	Plasma peptidomics to identify Cardiorenal Syndrome (CRS) biomarkers		08.2018 – 12.2022
	Cascone, Federica (F)	EU	Plasma peptidomics and metabolome analysis for mediators of gut-kidney axis		11.2020 – 10.2023
	Staudt, Mareike (F)	BMBF	Angiogenese und Reendothelialisierung bei kardiovaskulären Erkrankungen		01.2018
	Dr. med. Wu, Diana (F)	cand. med.	Lipide in kardiorenenalen Erkrankungen	MD	04.2020 – 11.2024
	Meyer, Amina (F)	cand. med.	Weiterentwicklung und Charakterisierung peptidischer Inhibitoren gegen die vaskuläre Kalzifizierung	MD	04.2021
	Dr. med. Optenhoevel, Svea (F)	cand. med.	Entwicklung und Charakterisierung von Peptidmimetika gegen die vaskuläre Kalzifizierung	MD	04.2021 – 08.2024
	Kucikas, Vitautas (M)	DFG	Multiphoton Endoscopy		06.2020 – 12.2024
	Merkelbach, Erik (M)	University	Impact of chronic renal failure on periodontal bone disease		01.2023
	Mikolajetz, Dustin (M)	SFB/TRR 219	Prävention und Behandlung von isolierter systolischer Hypertonie durch einen endogenen Kalzifizierungsinhibitor		11.2021
	Rao, Zhuangting (F)	Scholarship holder	Massenspektrometrische Analyse der Darm-Leber Achse Gut-Liver crosstalk – functional analysis of novel mediators identified from the portal vein	MD PhD	10.2022 – 07.2024 08.2024
	Dr. med. Exarchou, Jasmin (F)	cand. med.	Zelluläre Besiedlung eines dreidimensionalen Myokardpflasters	MD	01.2018 – 03.2019
	Eicher, Karoline (F)	cand. med.	Clarification of the signaling of the recently identified inhibitor of medial calcification	MD	01.2023
	Dr. med. Richter, Anna (F)	cand. med.	Entwicklung und Charakterisierung peptischer Inhibitoren für die vaskuläre Kalzifizierung	MD	10.2020 – 06.2024
	Dr. med. Quach, Kaiseng (M)	IRTG/Scholarship	The cardioprotective effect of a new angiotensin II type 2 receptor agonist "Vasoconstriction-Inhibiting Factor" (VIF) on a murine model of myocardial infarction	MD	10.2021 – 01.2025
	Dr. rer. nat. De la Puente Secades, Sofia (F)	EU	Vitamin K deficiency and vascular calcification in CKD: studying the expression of Vitamin K synthesis-related enzymes		08.2018 – 11.2023
	Dr. med. Stricker, Laura (F)	cand. med.	Identifikation eines potentiellen inflammatorischen Biomarkers bei chronischer Niereninsuffizienz	MD	01.2018 – 08.2021
	Jaimes Campos, Mayra (F)	EU	Proteomics-guided interventions in kidney and cardiovascular diseases		03.2023
	Mavrogeorgis, Emmanouil (M)	EU	Molecular pathophysiology of cardiovascular and chronic kidney disease		05.2021
	Su, Jiannan (M)	Scholarship holder	Systemische Übersicht – Post-translationale Modifikation von Insulin in der Krankheitsentwicklung von Diabetes	MD	06.2024
	Yao, Yugi (M)	Scholarship holder	An integrated multi-omics signature of kidney fibrosis for CKD precision medicine		01.2025
	Zelzer, Nathalie (F)	SFB/TRR 219	Protective effects of recently identified peptide after myocardial infarction		02.2024
C-05	Dr. rer. nat. Peisker, Fabian (M)	EU	Reprogramming of the (innate) immune system in chronic kidney disease as a potential driver of cardiovascular disease		01.2019 – 02.2024

	Dr. med. Schäfer, Gideon (M)	IRTG	Role of CXCL4 in kidney and cardiac fibrosis	MD	03.2020 – 02.2024
	Müller, Anna (F)	cand. med.	Role of aging in vascular calcification in CKD	MD	01.2021
	Cloots, Daniel (M)	cand. med.	Role of sclerostin in the development and progression of cardiovascular calcification	MD	01.2021
	Ijaz, Sadaf (F)	Industry	Development of computational tools and resources for integrative analyses of single-cell datasets		09.2022
	Maryam, Sidrah (F)	Industry	Development of computational tools and resources for identifying novel targets and biomarkers for cardio-renal diseases		02.2022
	Zhang, Xiaoting (F)	DFG	Automated detection and quantification of single RNAs at single molecular resolution in kidney tissue and cell		10.2018 – 01.2022
C-07	Dr. rer. nat. Maxeiner, Sebastian (M) *	SFB/TRR 219	Complement Activation Leads to C3 & C5 Dependent Prothrombotic Alterations of Fibrin Clots		11.2013 – 12.2019
	Dr. med. Hermeler, Leonie (F)	cand. med.	Assoziation zwischen den zirkulierenden mRNA 423-5p und NTproBNP bei Patienten mit chronischer Herzinsuffizienz	MD	01.2022 – 02.2025
	Safieh, Ranin (F)	cand. med.	CKD und Proteinurie bei Herzinsuffizienz	MD	10.2023
C-08	Dr. med. Klug, Mira (F)	cand. med.	Mechanism of NLRP3 inflammasome activation in chronic kidney disease and cardiovascular disease	MD	01.2018 – 05.2022
	Lehmann, Marlene (F)	cand. med.	Symmetrisches Dimethylarginin, High-Density Lipoproteine und kardiovaskuläre Erkrankungen	MD	01.2018
	Dr. med. Paschen, Anna (F)	cand. med.	Die Rolle des NLRP3-Inflammasoms und IL-1b bei Patienten mit chronischer Nierenerkrankung	MD	01.2018 – 09.2022
	Dr. med. Sarakpi, Tamim (M)	cand. med.	Guanidinyliertes Apolipoprotein C3 als Mediator einer kardiovaskulären und renalen Schädigung	MD	01.2018 – 08.2022
	Dr. med. Wernicke, Gabriel (M)	cand. med.	HDL von Patienten mit chronischer Nierenerkrankung induziert endotheliale Dysfunktion	MD	01.2018 – 04.2022
	Dr. med. Jaumann, Isabella (F)	cand. med.	Lebenslange genetisch-determinierte Aktivierung des NLRP3 Inflammasoms ist mit kardiovaskulärer Mortalität assoziiert	MD	01.2018 – 07.2024
	Gerster, Martin (M)	cand. med.	Rolle des Verlustes des Y-Chromosoms (Loss of Y chromosome) bei der Entstehung kardiovaskulärer Erkrankungen bei Patienten mit chronischer Nierenerkrankung	MD	07.2024 – 02.2025
	Eberle, Aaron-Laurien (M)	SFB/TRR 219	Role of extramedullary hematopoiesis in the development of CKD-associated cardiovascular diseases		07.2024
C-09	Dr. med. Hütter, Gregor (M)	cand. med.	Die Rolle von Dickkopf 3 in der Interaktion von Lunge und Niere	MD	01.2018 – 12.2022
	Dr. med. Küting, Fabienne (F)	cand. med.	Interleukin-1a ist ein zentraler Regulator der Leukozyten-Endotheladhäsion bei Myocardinfarkt und chronischer Nierenerkrankung	MD	01.2018 – 11.2023
	Dr. med. Arnold, Ludger (M)	cand. med.	Dickkopf-3 (DKK3) als Marker einer progredienten Nierenschädigung bei Kindern mit chronischer Nierenerkrankung	MD	01.2018 – 02.2024
M-01	Dr. rer. nat. Yesilyurt, Burcu (F)	SFB/TRR 219	Platelet-Derived Growth Factor (PDGF) – a mediator of Cardiovascular Diseases in Chronic Kidney Disease		04.2018 – 08.2024
	Dr. med. Tyra, Paula Marie (F)	cand. med.	Collagen expression in renal fibrosis.	MD	01.2018 – 05.2021
	Herkens, Lea (F)	DFG/SFB TRR219	The role of DDT in kidney fibrosis		06.2021
	Dr. med. Li, Zhang (F)	Guest scientist	The role of PDGF signaling in primary mouse cardiac endothelial cells under uremic condition	MD	09.2019 – 02.2024
	Dr. med. Ting, Jia (f)	BMBF	The role of Platelet-Derived Growth Factor (PDGF) in focal segmental glomerulosclerosis	MD	05.2019 – 05.2021
	Goedertier, Michael (M)	DFG/University/SFB/TRR219	Integration of Transcriptomics and Pathomics		02.2023
	Bodelier, Jonas (M)	SFB/TRR 219	Die Rolle von PDGF bei der Entstehung und Progression der Halbmondglomerulonephritis		11.2022-
	Konstantinos, Karyniotakis (M)	SFB/TRR 219	The role of MIF in Focal Segmental Glomerulosclerosis		07.2022-

	Große, Julia (F)	SFB/TRR 219	Role of PDGFRa in aortic calcification during CKD		11.2024-
M-02	Dr. med. Lehnert, Ulrike (F)	cand. med.	Einfluss einer gesteigerten neurohumoralen Aktivität bei einer chronischen Nierenerkrankung (CKD) auf die Entwicklung eines atrialen arrhythmogenen Substrates	MD	06.2019 – 02.2022
	Dr. med. Linz, Benedikt (M)	cand. med.	Charakterisierung der arrhythmogenen Substrate für Vorhofflimmern in einem Rattenmodell für obstruktive Schlafapnoe	MD	01.2018 – 10.2020
	Markwirth, Philipp (M)	cand. med.	Einfluß von Urämietoxinen auf die Expression von Pattern-Recognizing-Receptors - Rolle der renalen Denervation	MD	02.2019
	Mauz, Muriel (F)	cand. med.	Atriales metabolisches Remodelling bei Vorhofflimmern und Niereninsuffizienz - Rolle von Sympathikotonus und RAGE	MD	11.2018
	Dr. med. Blaumer, Jakob (M)	cand. med.	Sympathoadrenerge Regulation von Interleukin 17 bei chronischer Niereninsuffizienz	MD	04.2019 – 02.2025
	Kirsch, Felicitas (F)	cand. med.	Charakterisierung von RAGE-Isoformen bei Patienten mit chronischer Niereninsuffizienz	MD	11.2018
	Dr. med. Tatu, Anna-Maria (F)	cand. med.	Sympathoadrenerge Immunomodulation durch Regulation des Rezeptors für Advanced Glycation End Products (RAGE) bei metabolischem Syndrom mit Niereninsuffizienz	MD	01.2018 – 06.2022
	Schulz, Annika (F)	cand. med.	Einfluss einer gesteigerten neurohumoralen Aktivität bei einer chronischen Niereninsuffizienz (CKD) auf die Entwicklung kardialer Arrhythmien und maladaptiven strukturellen Veränderungen	MD	02.2021
	Hönig, Jannik (M)	cand. med.	Modulation des sympathischen Nervensystems als Prävention eines pro-arrhythmischen atrialen Remodelings in CKD	MD	02.2021
	Dr. med. Pfau, Vanessa (F)	cand. med.	Einfluss einer SGLT2-Inhibition auf das Remodeling und die sympathische Innervation im linken Atrium in einem Maus-Modell mit chronischer Nierenerkrankung.	MD	05.2022 – 01.2025
	Sevimli, Özlem (F)	cand. med.	Effekte blutdrucksenkender Medikamente nach renaler Denervation in einem chronischen Hypertonie-Modell der Ratte.	MD	03.2020
M-03	Dr. rer. medic. Möllmann, Julia (F) *	University	Behandlung metabolischer Erkrankungen durch die Inhibition der Phosphodiesterase 4 (PDE-4) und durch Spaltprodukte des Glucagon-like Peptids 1		06.2013 – 10.2019
	Dr. rer. nat. Mann, Pascal (M)	SFB/TRR 219	The SGLT2 inhibitor ertugliflozin reduces cardiac fibrosis and modulates cardiac substrate metabolism in a mouse model of cardiac hypertrophy		05.2018 – 03.2022
	Dr. med. Haj-Yehia, Elias (M)	cand. med.	Interaktion zwischen Verdauungstrakt und Myokard - die Bedeutung der intestinalen Hormone GLP-1 und PYY bei Myokardinfarkt	MD	01.2018 – 09.2021
	Pluymackers, Michael (M)	cand. med.	In vitro Charakterisierung urämischer Toxine	MD	02.2019
	Dr. med. Hartmann, Niels Ulrik (M)	IRTG	Untersuchung zur Wirkung von Empagliflozin auf die Hämodynamik und Herzfunktion bei Patienten mit Diabetes mellitus Typ II	MD	03.2018 – 08.2021
	Dr. med. Mertens, Robert W. (M)	cand. med.	The role of GLP-2 in sepsis	MD	01.2018 – 09.2023
	Idel, Paul (M)	cand. med.	Gut hormones as risk markers for CVD	MD	08.2019
	Kunth, Elisabeth (F)	SFB/TRR 219	Characterization of the cardiorenal effects of GIP		02.2024
	Dr. rer. nat. Diebold, Sebastian (M) *	SFB/TRR 219	Regulation und Funktion von Glucagon-like Peptide 1 und 2 unter inflammatorischen Bedingungen.		04.2013 – 07.2019
	Dr. med. Dickerhoff, Alissa Luisa (F)	cand. med.	Einfluss des glukoseabhängigen insulinotropen Peptids (GIP) auf das kardiale Remodeling nach Myokardinfarkt im Mausmodell	MD	01.2018 – 11.2023
	Dr. med. Hartmann, Bojan Maximilian (M)	cand. med.	Glycaemic variability is associated with all-cause mortality in COVID-19 patients with ARDS, a retrospective subcohort study	MD	01.2018 – 08.2023
M-04	Amini, Maryam (F)	SFB/TRR 219	Role of IL-1alpha in chronic kidney disease-associated systemic inflammation		10.2018 – 12.2022

	Reckner, Tabea (F)	SFB/TRR 219	The role of oxidative stress for cardiac remodeling in CKD - in vitro studies	MD	01.2019
	Degro, Priska (F)	SFB/TRR 219	Calcium dependent regulation of suppressive capacity of CD4+ regulatory Tcells		01.2022
	Hoffmann, Markus (M)	SFB/TRR 219	Role of redox changes in diabetes development		01.2022
	Röll, Christina (F)	cand. med.	Mitochondriale Redoxanalysen in humanen glatten Gefäßmuskelzellen der Koronararterien im Rahmen chronischer Nierenerkrankungen	MD	04.2024
	Träger, Patrick (M)	cand. med.	Analyse der Redox-Homöostase und deren Downstream-Effekte im Zellkern von humanen glatten Gefäßmuskelzellen der Koronararterien unter urämischen Bedingungen	MD	04.2024
M-05	Dr. rer. nat. Harlacher, Eva (F)	SFB/TRR 219	Impact of CKD on the infarcted heart		01.2018 – 06.2022
	Dr. rer. nat. Wollenhaupt, Julia (F)	SFB/TRR 219	Impact of CKD on cardioregulatory mechanisms		01.2018 – 12.2022
	Dr. rer. nat. Hemmers, Christian (M)	EU	Identification of cardiokines influencing fibroblasts and vasoactivity		01.2018 – 04.2022
	Dr. rer. nat. Sternkopf, Marieke (F)	BMBF	From the pathophysiology of cardiovascular disease to new therapeutic approaches		01.2018 – 02.2021
	Schröer, Jonas (M)	IRTG	Influence of uremic toxins on platelet function	MD	05.2020
	Henning, Tobias (M)	IRTG/ Scholar-schip	Interaction of platelets and vasculature in thrombus formation in chronic kidney disease	MD	12.2020
	Lauxen, Jane (F)	IRTG	Characterization of neutrophils in CKD as potential contributors of increased inflammatory and thrombotic risk	MD	04.2021
	Wohler, Sonja (F)	University	Molecular analysis of increased thrombotic risk in CKD		11.2022
	Martin, Philipp (M)	IRTG	Analysis of neutrophil activity in patients with CKD	MD	11.2022
	Hermann, Charlotte (F)	cand. med.	Tertiary lymphoid structures, inflammation and fibrosis in CKD	MD	02.2023
	Dai, Yusang (F)	cand. med.	Effect of comorbidities on cardiovascular risk: mechanistic analyses	MD	09.2023
	Xinglin, Chu (F)	cand. med.	Analysis of potential novel mediators of organ crosstalk	MD	08.2024
M-07	Hourtz, Sina (F)	SFB/TRR 219	Inflammation underlying comorbidities of cardiovascular disease		03.2025
	Ganesh, Naresh (M)	EFSD	Effect of Fasting on Immune System		01.2022
	Sausen, Maximilian (M)		Der Einfluss von GLP-2 auf Atherosklerose	MD	06.2021
	Bonnin Marquez, Andrea (F)	DFG	Apolipoprotein A-I and chronic kidney disease		01.2021
	Huchzermeier, Rosanna (F)	Third-party foundation	The role of the Aryl Hydrocarbon Receptor in atherosclerosis		01.2022
	Dr. rer. nat. Peters, Linsey (F)	Third-party foundation	Role of MiR26b in cardiometabolic diseases		09.2020 – 03.2024
	Sundaramann, Sai Sahana (F)	Third-party foundation	PCSK9 and CaSR in inflammation and atherosclerosis		09.2020 – 08.2023
	Adam, Svenja (F)	cand. med.	Adipocyte CaSR as mediator of sex-specific obesity effects	MD	06.2022
	Maria Arrivas (F)	Third-party foundation	Identifizierung und Validierung von Biomarkern zur Charakterisierung der Reaktion des Immunsystems bei schwerer Sepsis		08.2019 – 10.2023
	Tabaza, Nadim (M)	cand. med.	The role of gut immune cells in myocardial infarction	MD	03.2021
	Quintana, Luis (M)	cand. med.	The role of GLP-1 in sepsis	MD	01.2021
	Berndt Corcini, Melissa (F)	DFG	The role of kinases in the gut-liver axis		03.2024

	Romel, Caron (F)	Third-party foundation	The role of kinases in cardiovascular disease		01.2025
	Gourevich, Hannah (F)	IRTG	Role of sex-hormones in cellular senescence	MD	10.2024
	Salagundi, Rutuja (F)	SFB/TRR 219	Das Organ-Crosstalk zwischen Herz und Leber in Gegenwart von MASLD in Mäusen		08.2023
	Neuhaus, Maximilian (M)	cand. med.	Die Rolle von Darmmimmunzellen in der Herzinsuffizienz und kardiovaskulären Erkrankungen	MD	07.2022
S-01	Schwandtke, Igor (M)	SFB/TRR 219	Einfluss der Herzfrequenz auf die Sterblichkeit – eine Registerstudie	MD	08.2019
	Dr. med. Wintrich, Jan (M)	cand. med.	Auftreten potentieller lebensbedrohlicher ventrikulärer Arrhythmien nach ICD-Implantation bei Patienten mit biptisch gesicherter Myokarditis.	MD	01.2018 – 09.2019
S-02	Dr. rer. nat. Ermert, Katja (F)	SFB/TRR 219	Characterisation of renal microvasculature in chronic kidney disease		01.2018 – 05.2021
	Dr. rer. nat. Bouteldja, Nassim (M)	SFB/TRR 219	Deep Learning-basierte Analyse von Nieren- und Herzgewebe		01.2021 – 04.2023
	Dr. med. Droste, Patrick (M)	cand. med.	PDGF in a model of glomerular thrombotic microangiopathy and chronic kidney disease	MD	10.2018 – 03.2024
	Dr. med. Tong, Xu (M)	Scholarship	Functional role of desmosomes in renal disease	MD	05.2019 – 03.2022
	Nguyen, Huong Quynh (F)	SFB/TRR 219	Automatic Segmentation and Quality Control in Digital Pathology		11.2023
	Niggemeier, Leon (M)	SFB/TRR 219	Kidney Foundation Model for Histopathological Images		11.2023
	Lan, Yu-Chia (M)	EMPAIA/DFG/ERC SFB/TRR 219	Classification and Analysis of Kidney Transplant Diseases in Histopathology using Deep Learning		03.2021
	Firat, Emilia (F)	SFB/TRR 219/University	Role of PDGF-D in Alport-Syndrome	MD	10.2022
S-03	Dr. rer. medic He, Tianlin (F)	EU	Urinary Proteomics of Patients Suffering From Cardiorenal Syndrome		02.2019 – 06.2021
	Dr. rer. med. Hermann, Juliane (F)	SFB/TRR 219	MALDI-massenspektrometrische Bildgebungsmethoden zur Lokalisierung und Identifizierung pathophysiologisch-relevanter Regulatoren in Gewebeproben		01.2018 – 04.2022
	Lellig, Michaela (F)	SFB/TRR 219	Isolation and identification of molecules affected by CVD- and CKD		10.2019
	Dr. med. Artmeyer, Astrid (F)	IRTG	Isolation and identification of lipoproteins	MD	01.2018 – 10.2021
	Petra, Eleni (F)	EU	Urinary peptidomics and in-silico analysis for the molecular characterisation of the cardiorenal syndrome (CRS) and chronic kidney disease (CKD)		10.2018 – 06.2021
	Hua, Lei (M)	Scholarship	Peptidomic score to improve the prediction model of left ventricular hypertrophy risk based on clinical characteristics Cardioprotective effects and their therapeutic impact of the recently identified peptide "Vasodilation Inducing Factor" (VIF) in patients with myocardial infarction	MD PhD	02.2023 09.2024
	Dr. rer. nat. Lohia, Sonnal (F)	EU	Peptidomic analysis to investigate the pathophysiology of chronic diseases		07.2021 – 05.2024
	Lohman, James (M)	SFB/TRR 219	Isolation and Identification of Unknown Substances Affecting Cardiovascular and Renal Disease		11.2023
	Rafeya, Jannatul (F)	University	Proteomic Profiling and Identification of Pathophysiological mediators		03.2024

7.11 List of IRTG activities in the 2nd funding period

This table lists all training events organized by the IRTG in the 2nd funding period.

Average time frame:

- P2P events: 2h/event
- Lectures: 1.5h/lecture
- Workshops_RDM: 2h/event
- Workshop_Medical scientist: 1h/event
- Others: as indicated.

Target group:

- P2P: PhD/MD students and master students
- Others: All PhD/MD students, master students and postdocs
- Lecture series were also integrated into the teaching curriculum of the Medical Faculties in Aachen and Homburg to integrate medical students systematically. In Aachen, the lecture series were also announced in the Faculty of Mathematics, Computer Sciences and Natural Sciences to attract students interested in Life Sciences. They were even, in part, officially integrated as elective courses in their teaching curriculum.

Additional trainings organized by our SFB/TRR219 but not included in this list:

- Monthly 'Cardiorenal seminars' (Appendix §7.4.1; www.sfb-trr219.de/cardiorenal-seminars)
- Monthly webseminars, jointly with other international consortia (Chapter 1 §1.2.3; www.sfb-trr219.de/webseminars)
- Biweekly 'IRTG Journal clubs' for all IRTG members (Chapter 1 §1.4.1; www.sfb-trr219.de/irtg-journal-club)
- Complementary skill courses offered by the universities. An overview of these activities was distributed on a weekly basis by mail to IRTG and postdoc members (IRTG project description, §3.18.3).

3 summer/winter schools & 8 meetings with poster sessions		29 Peer-to-Peer (P2P) meetings	32 workshops & lecture series
Date	IRTG activity	Topics	
2022			
27.01.	P2P	What you need to know as a doctoral student: Last steps before handing in thesis/defense by Juliane Hermann, Institute for Molecular Cardiovascular Research & Bilal Mir, Medical Clinic 1	
17.02.	P2P	What you need to know as a doctoral student: Graphical abstract design by Marina Heuschkel- Augusto, Medical Clinic 1	
17.03.	P2P	Networking: Open discussion: Who is new?	
14.04.	P2P	Career outside academia: Biography presentation by our alumni Marieke Sternkopf (former M-05)	
05. - 06.05.	SFB Convent 2022 with graduate training day	Joint Meeting of 14 German SFB research consortia & graduate schools focusing on kidney, heart and vessels: 'Tackling kidney and cardiovascular diseases: with joint forces towards increased insights into underlying pathologies' <i>With invited speakers, patient representation, project presentations (posters)</i>	
April - July	Lecture series (10 sessions)	Multi-organ diseases - Pathological mechanisms underlying disease (With live streaming for Homburg participants)	
28.06.	P2P	After work networking	
09.08.	P2P	Hands-on training: ECG by medical students Jonas Heyn & Melina Stein (C-02)	
01.09.	P2P	After work networking	

August & September	Workshop (0.5 day)	Hands-on: Mass spectrometry imaging (S-03)
21. - 23.09.	5 th Cardiorenal Summer School in Skopje, North Macedonia	Joint Event SFB/TRR219 & Marie-Curie ITN StrategyCKD, ESAO and EUTox <i>With invited speakers, research innovation, grant pitching, emerging technologies & project presentations (posters)</i>
21. - 22.10.	Aachen Conference on Cardiorenal Disease and Diabetes	Conference <i>with SFB/TRR219 IRTG Poster Session</i>
26.10.	P2P	CardioRenal Teaching: Nephrology Seminar by our clinician scientist Konrad Hoeft (M-08)
17.11.	P2P	After work networking
17.12.	P2P	After work networking
2023		
24.01.	P2P	What you need to know as a doctoral student: Writing Session: Do your chores! Working together to increase motivation.
01.03.	P2P	CardioRenal Teaching: Cardiology Seminar by our clinician scientist Martin Berger (C-07)
April - July	Lecture series (10 sessions)	Multi-organ diseases - Pathological mechanisms underlying disease (With live streaming for Homburg participants)
07.04.	Workshop _ RDM	Research Data Management Plans: Introduction & Support by Kseniia Dukkart (SFB Data manager)
23.04.	P2P	After work networking
11.05.	Workshop _ RDM	eLabJournal: Intro by Katharina Grünwald (IT-Center, ELN user)
16.05.	P2P	Sustainability in the lab by Dr. Kerstin Hermuth-Kleinschmidt
23.05.	P2P	CardioRenal Teaching: Nephrology case study by our medical students Felix Wolters (C-02) & Philipp Martin (M-05) & clinician scientists Adelina Baleanu-Curaj (C-04) & Susanne Fleig (C-05)
13.06.	Workshop _ RDM	eLabJournal seminar by Michael Kreisel (ELN coordinator), Lukas Bossert (IT-Center RWTH)
21. - 23.06.	6 th Cardiorenal Summer School, Gemünd <i>Fully self-organized</i>	<i>Medical session, Innovative methods, Complementary skills (presentation; stress and conflict management), Sustainability, Project presentations (pitching, posters)</i>
July	P2P	After work networking
22.09.	P2P	Women in science – a personal perspective
28.09.	Other	Educational science day <i>with poster presentations</i>
10.10.	Workshop _ RDM	eLabJournal seminar by Barbara Klinkhammer (SFB, ELN user), Michael Kreisel (ELN coordinator)
09. - 11.11.	Aachen Conference on Cardiorenal Disease and Diabetes	Conference <i>with SFB/TRR219 IRTG Poster Session</i>
21.11.	P2P	Career outside academia: My life in industry by our alumni Giulia Ilaria Bagarolo (C-04)
28.11.	Workshop_Medical scientist	Clinical studies: Basics Part 1: Overview of clinical studies
18.12.	Workshop_Medical scientist	Clinical studies: Basics Part 2: Interpretation of clinical studies

18.12.	Workshop _ RDM	Guidelines to RDM according to the FAIR principle (University library)
19.12.	P2P	After work networking
October 2023 - February 2024	Lecture series (10 sessions)	Shared mechanisms underlying diseases: Hot Topics (With live streaming for Homburg participants)
2024		
January & February	Workshop_Medical scientist	Clinical studies: Clinical Shadowing for Scientists
18. & 25.01.	Workshop_Medical scientist	Clinical studies: Cardiorenal Case Study Discussion
28.02.	P2P	After work networking
13.03.	Workshop _ RDM	Research data management on a practical level: how to achieve transparent data description and storage? by Corinna Schulte, Anne Babler, Janina Frisch (SFB postdocs)
21.03.	P2P	What you need to know as a doctoral student: Statistic Workshop with open discussion by Julia Wollenhaupt (M-05 postdoc)
April - July	Lecture series (10 sessions)	Sex & Gender in Kidney and Heart (With live streaming for Homburg participants)
April - July	Lecture series (10 sessions)	Multi-organ diseases - Pathological mechanisms underlying disease (With live streaming for Homburg participants)
06.05.	P2P	Career outside academia: My life in industry by our alumni Christian Hemmers (former M-05)
22.05.	Workshop_Medical scientist	Clinical studies: Basics Part 3: a practical example Insides to the ARIANA study - scientific background and practical execution (M-07)
06.06.	Workshop _ RDM	Integration of ELN and animal documentation program Tick@Lab by Kseniia Dukkart (SFB Data manager)
12.06.	Workshop_Medical scientist	Clinical studies: Basics Part 4: Statistics
27.06.	Workshop _ RDM	Coscine presentation: Solutions to research data storage according to the FAIR principle by Katja Jansen (Coscine service manager); Kseniia Dukkart (SFB Data manager)
16.09.	Workshop _ RDM	RDM for DFG applications: Practical guidelines and tips by Daniela Hausen (University library), Urnaa Ritman (University), Kseniia Dukkart (SFB Data manager)
25.09.	Other	RWTH Young Researchers Day <i>With IRTG poster presentations</i>
09.10.	7 th Cardiorenal Summer School, Frankfurt	EUKISS Summer School (co-organized by IRTG) <i>With project presentations and IRTG posters</i>
09. & 10.10.	SFB Convent 2024 with graduate training day	Several training sessions: - ChatGPT and Large Language Models in Clinics and Research - Opportunities and challenges for basic researchers in medicine - DFG information session on funding applications (plenary and individual) - Hot topics from the participating CRC consortia guided poster session
October 2024 - February 2025	Lecture series (10 sessions)	Shared mechanisms underlying diseases: Hot Topics (With live streaming for Homburg participants)
11. - 13.11.	Aachen Conference on Cardiorenal Disease and Diabetes	Conference <i>with SFB/TRR219 IRTG Poster Session</i>
09.12.	Workshop _ RDM	ELN Exchange: SFB/TRR219 and CRC1382: best practice examples on how to use an ELabJournal. by Dickson Wong (M-01; S-02), Michael Kreisel (ELN coordinator), Lukas Bossert (IT-Center RWTH)

2025		
28.01.	P2P	What you need to know as a doctoral student: How to submit a paper
05.02.	P2P	UKA Research Alliance Connect Workshop
14.03.	Workshop (1 day)	Programming/AI in Cooperation with EU COST PerMedik
31.03.	Workshop_Medical scientist	Clinical studies: Basics Part 5: Biomarkers in Clinical Settings
07.04.	Workshop_Medical scientist	Clinical studies: Basics Part 6: The value of clinical biobank analysis – the UK biobank
08.04.	P2P	Hands-On: Mass spectrometry
30.04.	P2P	UKA Research Alliance Connect Workshop
April - July	Lecture series (10 sessions)	Sex & Gender in Kidney and Heart (With live streaming for Homburg participants)
April - July	Lecture series (10 sessions)	Multi-organ diseases - Pathological mechanisms underlying disease (With live streaming for Homburg participants)
April - July	Workshop_Medical scientist	The CardioRenal Patient Case discussion, in Aachen (With live streaming for Homburg participants)
Planned activities		
27.06.	P2P	CardioRenal Teaching: Kidney histology
07.07.	Workshop_Medical scientist	Clinical studies: Basics Part 7
August	P2P	What you need to know as a doctoral student: How to apply for research funds
October	P2P	CardioRenal Teaching: Advanced in vitro modelling of the kidney
October 2024 - February 2025	Lecture series (10 sessions)	Sex & Gender in Kidney and Heart (With live streaming for Homburg participants)
October 2024 - February 2025	Workshop_Medical scientist	The CardioRenal Patient Case discussion, in Aachen (With live streaming for Homburg participants)
13. – 15.11.	Aachen Conference on Cardiorenal Disease and Diabetes	Conference <i>with SFB/TRR219 IRTG Poster Session</i>