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General information

Date of birth	8.6.1974, Freiburg, female
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Current position	Full professor (W2)
Children	2 children, years of birth 2012 and 2014

University training and degree

Add. qualification	2016, Fachphysiologin, German Society of Physiology
Diploma	1999
Subjects of study	1993–1999, Biology, Albert-Ludwigs-University, Freiburg

Advanced academic qualifications

Doctorate	2003, Institute of Vegetative Physiology, University of Cologne

Postgraduate professional career

since 2011	Full professor (W2) at the Institute for Cardiovascular Physiology, Medical Faculty, HHU
2009–2011	Research Assistant Professor (Akad. Rat, A13) at the Institute of Cardiovascular Physiology, Ruhr-University Bochum
2005–2009	Post-Doctoral fellow (C1) at the Institute of Zoology and Genetics, Dept. Physiology and Biophysics, WWU Münster
1999–2004	Graduate student and post-Doctoral fellow at the Institute of Vegetative Physiology, University of Cologne

Selected publications:

- Kötter S, Kazmierowska M, Andresen C, Bottermann K, Grandoch M, Gorressen S, Heinen A, Moll JM, Scheller J, Gödecke A, Fischer JW, Schmitt JP, Krüger M.Titin-based cardiomyocyte stiffening contributes to early adaptive ventricular remodeling after myocardial infarction. *Circ Res.119:1017-1029 (2016) DOI: 10.1161/CIRCRESAHA.116.309685.*
- Hopf AE, Andresen C, Kötter S, Isić M, Ulrich K, Sahin S, Bongardt S, Röll W, Drove F, Scheerer N, Vandekerckhove L, De Keulenaer GW, Hamdani N, Linke WA, Krüger M. Diabetes-induced cardiomyocyte passive stiffening is caused by impaired insulin-dependent titin modification and can be modulated by neuregulin-1. *Circ Res 123(3):342-355 (2018),* doi: 10.1161/CIRCRESAHA.117.312166
- Salcan S, Bongardt S, Monteiro Barbosa D, Efimov IR, Rassaf T, Krüger M, Kötter S. Elastic titin properties and protein quality control in the aging heart. *Biochim Biophys Acta Mol Cell Res. 2019:118532.* doi: 10.1016/j.bbamcr.2019.118532.
- Petz A, Grandoch M, Gorski D, Abrams M, Piroth M, Müller J, Yamaguchi Y, Wight T, Gorressen S, Ding Z, Heinen A, Kelm M, Gödecke A, Flögel U, Homann S, Hartwig S, Lehr S, Schneckmann R, Krüger M, Kötter S, Fischer J. Cardiac hyaluronan synthesis is critically involved in the cardiac macrophage response and promotes healing after ischemia reperfusion injury. *Circ Res. 2019 May 10;124(10):1433-1447. doi: 10.1161/CIRCRESAHA.118.313285.*
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- Müller E, Salcan S, Bongardt S, Monteiro Barbosa D, Krüger M, Kötter S. E3-ligase knock down revealed differential titin degradation by autophagy and the ubiquitin proteasome system. Scientific Reports. (2021) 11:21134. doi: 10.1038/s41598-021-00618-7
- Stoian L, Krüger M, Schmitt JP, Kleinbongard P. Is there an effect of ischemic conditioning on myocardial contractile function following acute myocardial ischemia/reperfusion injury? Biochim Biophys Acta Mol Basis Dis 2019;1865(4):822-830. doi: 10.1016/j.bbadis.2018.12.020.
- Kötter S. and Krüger M. Protein Quality Control at the Sarcomere: Titin Protection and Turnover and Implications for Disease Development. Front Physiol 13:914296. (2022) doi: 10.3389/fphys.2022.914296.
- Funk F, Kronenbitter A, Isić M, Flocke V, Gorreßen V, Semmler D, Brinkmann M, Beck K, Steinhoff O, Srivastava T, Monteiro Barbosa D, Voigt K, Wang L, Bottermann k, Kötter S, Grandoch M, Flögel U, Krüger M and Schmitt JP. Diabetes disturbs functional adaptation of the remote myocardium after ischemia/reperfusion*. J Mol Cell Cardiol.173:47-60 (2022). doi: 10.1016/j.yjmcc.2022.09.002*