

**Name: Eva Rog-Zielinska**

**Institution:** Institute for Experimental Cardiovascular Medicine (IEKM)  
University Heart Center (UHZ), University of Freiburg, Freiburg, Germany

**Contact:** Telephone: +49 761 270 63954; email: [eva.rog-zielinska@uniklinik-freiburg.de](mailto:eva.rog-zielinska@uniklinik-freiburg.de)

**Position:** Group/Section leader

### Academic education including academic degrees

2008 - 2009 MSc in Cardiovascular Science, University of Edinburgh, Edinburgh, UK  
2006 - 2008 MSc in Medical Biology, Copernicus University Toruń, Toruń, Poland  
2003 - 2005 BSc in Biotechnology, Copernicus University Toruń, Toruń, Poland

### Scientific graduation

2009 - 2013 Doctor of Philosophy, Cardiovascular Science, University of Edinburgh, Edinburgh, UK

### Employment

2018 - Emmy-Noether-Programme research group leader, IEKM, University of Freiburg  
2017 - Head of 4D Imaging Section, IEKM, University of Freiburg  
2013 - 2017 Post-doctoral Research fellow, Imperial College London, London, UK  
2012 - 2013 Post-doctoral Research fellow, University of Edinburgh, Edinburgh, UK

### Other activities, awards and honours

2024 - Steering committee member, DFG SFB1425  
2023 - Representative to the Faculty Council, Medical Faculty of the University of Freiburg  
2023 - Teaching module coordinator (Pathophysiology, MSc in Cardiovascular Science), University of Freiburg  
2023 - Teaching module coordinator (Wissenschaftliches Handeln und Denken II), Faculty of Medicine, University of Freiburg  
2023 - Oskar Lapp Research Prize member of the board of trustees, German Cardiological Society (DGK)  
2022 Habilitation and the title of Venia legendi, Faculty of Biology, University of Freiburg, Freiburg  
2022 - Advisory Board member, MICROCARD EU Horizon 2020 project  
2021 - Principal Investigator, DFG SFB1425  
2019 - Faculty Member of Spemann Graduate School for Biology and Medicine, University of Freiburg  
2018- DFG Emmy-Noether Fellow  
2016 - Programme committee member, Mechano-Electrical Coupling and Arrhythmias 2016/2019/2022/2025, Freiburg  
2016 - Visiting Researcher, EMBL Heidelberg  
2015 Chair, Cardiac Arrhythmia Mechanisms Gordon Research Seminar, Italy

### Ten most important publications

**Disease severity, arrhythmogenesis, and fibrosis are related to longer action potentials in tetralogy of Fallot.** Fürniss HE, Wülfers E, Iaconianni P, Ravens U, Kross J, Stiller B, Kohl P, Rog-Zielinska EA, Peyronnet R. *Clin Res Cardiol* 2023/113:716-727

**Cardiac 3D nano-structure: form, function, future.** Kohl P, Greiner J, Rog-Zielinska EA. *Nat Rev Cardiol* 2022/19:607-619

**Beat-by-beat cardiomyocyte T-tubule deformation drives tubular content exchange.** Rog-Zielinska EA, Scardigli M, Peyronnet R, Zgierski-Johnston CM, Greiner J, Madl J, O'Toole ET, Morphew MK, Hoenger A, Sacconi L, Kohl P. *Circ Res* 2021/128:2013-215

**Nano-scale morphology of cardiomyocyte t-tubule/sarcoplasmic reticulum junctions revealed by ultra-rapid high-pressure freezing and electron tomography.** Rog-Zielinska EA, Moss R, Kaltenbacher W, Greiner J, Verkade P, Seemann G, Kohl P, Cannell MB. *J Mol Cell Cardiol* 2021/153:86-92

**Sinoatrial node structure, mechanics, electrophysiology and the chronotropic response to stretch in rabbit and mouse.** MacDonald EA, Madl J, Greiner J, Ramadan AF, Wells SM, Torrente A, Kohl P, Rog-Zielinska EA\*, Quinn TA\*. *Front Physiol* 2020/11:809

**Junctophilin-2 expression rescues atrial dysfunction through polyadic junctional membrane complex biogenesis.** Brandenburg S, Pawlowitz J, Eikenbusch B, Peper J, Kohl T, Mitronova GY, Sossalla S, Hasenfuss G, Wehrens X, Kohl P, Rog-Zielinska EA, Lehnart SE. *JCI Insight* 2019/4:e127116

**Solute movement in the t-tubule system of rabbit and mouse cardiomyocytes.** Kong CHT\*, Rog-Zielinska EA\*, Kohl P, Orchard CH, Cannell MB. *Proc Natl Acad Sci USA* 2018/115(30):7073-7080

**Species differences in the morphology of transverse tubule openings in cardiomyocytes.** Rog-Zielinska EA, Kong CHT, Zgierski-Johnston CM, Verkade P, Mantell J, Cannell MB, Kohl P. *Europace* 2018/20:120-124

**The living scar – cardiac fibroblasts and the injured heart.** Rog-Zielinska EA, Norris RA, Kohl P, Markwald R. *Trends Mol Med* 2016/22:99-114

**Electrotonic coupling of excitable and nonexcitable cells in the heart revealed by optogenetics.** Quinn TA\*, Camelliti P\*, Rog-Zielinska EA\*, Siedlecka U, Poggioli T, O'Toole ET, Knöpfel T, Kohl P. *Proc Natl Acad Sci USA* 2016/113:14852-14857