

Curriculum Vitae

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Education and Scientific Career

Biochemistry Study, National University of Tucumán (UNT), Argentina, 1996-2001

Diploma-Biochemist (officially approved) University of Hamburg, Germany, 2004

Postgraduate studies in Molecular Biology, University of Hamburg, Germany, 2003-2005

Doctoral Thesis, Centre of Molecular Neurobiology Hamburg (ZMNH), University of Hamburg, Germany, 2002-2005

Habilitation, University Medical Center, Göttingen, Germany, 2010-2015

Research Group Leader, Principal Investigator, Institute of Pharmacology and Toxicology, University Medical Center Göttingen, Germany, since 2010

Major Research Interests

- Molecular Cardiology
- Developmental Biology
- Molecular Pharmacology
- Cardiovascular Genetic
- Epigenetic and Biochemistry

Selected Publications (of last 5 years)

Orr Shomroni, Maren Sitte, Julia Schmidt, Sabnam Parbin, Fabian Ludewig, Gökhan Yigit, Laura Cecilia Zelarayan, Katrin Streckfuss-Bömeke, Bernd Wollnik and Gabriela Salinas. A novel single-cell RNA-sequencing approach and its applicability connecting genotype to phenotype in ageing disease. *Scientific Reports* 12, 4091 (2022).

Yanpu Chen, Felipe F. Lüttmann, Eric Schoger, Hans R. Schöler, Laura C. Zelarayán, Kee-Pyo Kim, Jody J. Haigh, Johnny Kim,* and Thomas Braun. Reversible reprogramming of cardiomyocytes to a fetal state drives adult heart regeneration in mice. *Science* 373(6562):1537-1540 (2021).

Franziska S. Rathjens, Lavanya M. Iyer, Anke Renger, Fahima Syeda, Claudia Noack, Andreas Jungmann, Matthias Dewenter, Karl Toischer, Ali El-Armouche, Oliver J. Müller, Larissa Fabritz, Wolfram-Hubertus Zimmermann, Laura C. Zelarayán* and Maria-Patapia Zafeiriou*. Preclinical evidence for the therapeutic value of TBX5 normalization in arrhythmia control. *Cardiovascular Research* cvaa239 (2020). (*corresponding authors)

Schoger E, Carroll KJ, Iyer LM, McAnally JR, Tan W, Liu N, Noack C, Shomroni O, Salinas G, Groß J, Herzog N, Doroudgar S, Bassel-Duby R, Zimmermann WH, Zelarayán LC. CRISPR-mediated activation of endogenous gene expression in the postnatal heart. *Circ Res* 3;126(1):6-24 (2020).

Claudia Noack*, Lavanya M. Iyer*, Norman Y. Liaw, Eric Schoger, Sara Khadjeh, Eva Wagner, Monique Woelfer, Maria-Patapia Zafiriou, Hendrik Milting, Samuel Sossalla, Katrin Streckfuss-Boemeke, Gerd Hasenfuss, Wolfram-Hubertus Zimmermann, and Laura C. Zelarayán. KLF15-Wnt-dependent cardiac reprogramming reveals a novel vascular player, SHISA3 in the mammalian heart. *Journal of the American College of Cardiology* 74(14):1804-1819 (*contributed equally) (2019).

Lavanya M. Iyer, Sankari Nagarajan, Monique Woelfer, Eric Schoger, Sara Khadjeh, Maria Patapia Zafiriou, Vijayalakshmi Kari, Jonas Herting, Sze Ting Pang, Tobias Weber, Franziska S. Rathjens, Thomas H. Fischer, Karl Toischer, Gerd Hasenfuss, Claudia Noack, Steven A. Johnsen and Laura C. Zelarayán. A context-specific cardiac Beta-catenin and GATA4 interaction influences TCF7L2 occupancy and remodels chromatin driving disease progression in the adult heart. *Nucleic Acids Research* 46(6):2850-2867 (2018).

Noack C, Zafiriou MP, Schaeffer HJ, Renger A, Pavlova E, Dietz R, Zimmermann WH, Bergmann MW, Zelarayán LC. Krueppel-like factor 15 regulates Wnt/beta-catenin transcription and controls cardiac progenitor cell fate in the postnatal heart. *EMBO Mol Med* 4: 992-1007 (2012).