

CURRICULUM VITAE

SURNAME: Prof. Dr. David **FIRST NAME:** Robert

BIRTHDATE: 1967-05-11 **CURRENT INSTITUTE:** RTC der Universität Rostock

ACADEMIC BACKGROUND

From- Until	Institution	Area of Specialization	Degree
Since 2016	RTC, Universitätsmedizin Rostock	Cardiovascular repair strategies	Univ.-Prof. permanent
Since 2012	RTC, Universitätsmedizin Rostock	Cardiovascular repair strategies	Univ.-Prof. Tenure track
2001-2012	Medizinische Klinik und Poliklinik I, Klinikum Großhadern	Stem cell based cardiovascular repair	Priv.-Doz.
1998 - 2001	University of Ulm	<i>Xenopus</i> embryology	Postdoc
1994 - 98	Max-Planck-Institute for Developmental Biology, Tübingen	<i>Xenopus</i> embryology	PhD
1987 - 93	Technical University of Munich	Cell Biology	Dipl. Biol.

Major research interests

Cardiovascular programming and reprogramming
Targeted cardiovascular gene transfer
Novel imaging technologies

PREVIOUS EMPLOYMENT (Start with present position)

From- Until	Institution	Research Area	Title
Since 2012	RTC, Universitätsmedizin Rostock	Cardiovascular stem cell biology	Univ.-Prof.
2001 - 2012	Medizinische Klinik und Poliklinik I, Klinikum Großhadern	ES cell based cardiovascular repair	Dr. habil.
1998 - 2001	University of Ulm	Type II cadherins during early <i>Xenopus</i> development	Postdoc
1994 - 98	Max-Planck-Institute for Developmental Biology, Tübingen	Nuclear orphan receptors during early <i>Xenopus</i> development	PhD

Selected Publications:

Lemcke H, David R. Potential mechanisms of microRNA mobility. *Traffic* 2018 Dec;19(12): 910-917.

Müller P, Lemcke H, David R. Stem Cell Therapy in Heart Diseases - Cell Types, Mechanisms and Improvement Strategies. *Cell Physiol Biochem*. 2018;48(6):2607-2655.

Lemcke H, Voronina N, Steinhoff G, David R. Recent Progress in Stem Cell Modification for Cardiac Regeneration. *Stem Cells Int*. 2018 Jan 16;2018:1909346.

Yavari A, Bellahcene M, Bucchi A, Sirenko S, Pinter K, Herring N, Jung J J, Wolkenhauer O, David R, et al., Ashrafian H. The $\gamma 2$ subunit of AMP-activated protein kinase regulates mammalian heart rate. *Nature Communications* 2017 Nov 2;8(1):1258.

Hausburg F, Jung JJ, Hoch M, Wolfien M, Yavari A, Rimbach C, David R (Re-) Programming of Subtype specific Cardiomyocytes. *Adv. Drug Deliv. Rev.* 2017 pii: S0169-409X(17)30186-2.

Müller P, Gaebel R, Lemcke H, Wiekhorst F, Hausburg F, Lang C, Zarniko N, Westphal B, Steinhoff G, David R. Intramyocardial fate and effect of iron nanoparticles co-injected with MACS® purified stem cell products. *Biomaterials*. 2017 Aug;135:74-84.

Voronina N, Lemcke H, Wiekhorst F, Kühn J-P, Rimbach C, Steinhoff G, David R. Non-viral magnetic engineering of endothelial cells with microRNA and plasmid-DNA – an optimized targeting approach. *Nanomedicine*. 2016 Jul 4. pii: S1549-9634(16)30088-0.

Dusl, M., J. Senderek, J. S. Muller, J. G. Vogel, A. Pertl, R. Stucka, H. Lochmuller, R. David* and A. Abicht* (2015). A 3'-UTR mutation creates a microRNA target site in the GFPT1 gene of patients with congenital myasthenic syndrome. *Hum Mol Genet*. 2015 Jun 15;24(12):3418-26. *shared senior authorship

Hausburg, F., S. Naß, N. Voronina, A. Skorska, P. Muller, G. Steinhoff and R. David (2015). Defining Optimized Properties of Modified mRNA to Enhance Virus- and DNA- Independent Protein Expression in Adult Stem Cells and Fibroblasts. *Cell Physiol Biochem* 35(4): 1360-1371

Jung, J., C. Rimbach, B. Husse, S. Krebs, J. Stieber, G. Steinhoff, A. Dendorfer, W.-M. Franz and R. David (2014). Programming and Isolation of Highly Pure Physiologically and Pharmacologically Functional Sinus-Nodal Bodies from Pluripotent Stem Cells. *Stem Cell Reports* Vol. 2 (Issue 5): p592-605

Kriegmair MC, Frenz S, Dusl M, Franz WM, David R*, Rupp RA* (2013) Cardiac differentiation in Xenopus is initiated by mespa. *Cardiovascular Research* 97:454-463 doi:10.1093/cvr/cvs354 *shared senior authorship

Lang C, Lehner S, Todica A, Boening G, Franz WM, Bartenstein P, Hacker M, David R (2013) Positron emission tomography based in-vivo imaging of early phase stem cell retention after intramyocardial delivery in the mouse model. *European Journal of Nuclear Medicine and Molecular Imaging* doi:10.1007/s00259-013-2480-1

David R, Brenner C, Stieber J, Schwarz F, Brunner S, Vollmer M, Mentele E, Müller- Höcker J, Kitajima S, Lickert H, Rupp R, Franz WM. MesP1 drives vertebrate cardiovascular

differentiation via Dkk-1 mediated blockage of wnt- signalling. ***Nature Cell Biology*** 2008
Mar;10(3):338-45.