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PROFESSOR OF CARDIAC SURGERY
REFERENCE AND TRANSLATION CENTER FOR CARDIAC STEM CELL THERAPY (RTC)
DEPARTMENT OF CARDIAC SURGERY
UNIVERSITY MEDICINE ROSTOCK
GERMANY

CURRICULUM VITAE

SURNAME: Steinhoff **FIRST NAME:** Gustav

BIRTHDATE: 1958-09-15 **CURRENT INSTITUTE:** RTC , Cardiac Surgery
University Medicine
Rostock

ACADEMIC BACKGROUND

From-Until	Institution	Area of Specialization	Degree
Since 2000	RTC, Cardiac Surgery, University Medicine Rostock	Cardiac regeneration and tissue engineering, cardiac surgery	Univ.-Prof.
1987-1993	Hannover Medical School	Transplantation surgery	Priv.-Doz.
1985 - 1987	Hannover Medical School	Transplantation surgery/immunology	MD
1977 - 1984	Erasmus University Rotterdam; NL	Medical Study	Graduation in Medicine

Major research interests

Regenerative Medicine, Tissue engineering, Stem Cell Therapy

PREVIOUS EMPLOYMENT (Start with present position)

From-Until	Institution	Research Area	Title
Since 2000	RTC, University Medicine Rostock	Cardiac Surgery, Cardiac regeneration and Tissue engineering	Univ.-Prof.
1996-2000	Hannover Medical School	Staff surgeon Cardiothoracic surgery	Assistant Prof.

1993-1996	University of Kiel	Staff surgeon Cardiothoracic and vascular surgery	Dr. med. Habil
1887-1993	Hannover Medical School	General Surgery	Dr. med. habil.
1985 -1987	<i>Hannover Medical School</i>	<i>Transplantation Surgery/Immunology</i>	<i>MD</i>

Selected publications 2010-2018

Textbook

Regenerative Medicine - From Protocol to Patient

Editor: Gustav Steinhoff

Springer Netherlands

First edition 2011

ISBN 978-90-481-9074-4; 1032 p.

Second edition 2013

ISBN 978-94-007-5690-8; 1220 p.

Third edition 2016; Vol. 1-5; 1837 p.

Vol. I: ISBN 978-3-319-27581-9; 373p.

Vol. II: ISBN 978-3-319-27608-3, 455p.

Vol. III: ISBN 978-3-319-28272-5; 244 p.

Vol. IV: ISBN 978-3-319-28291-6; 369p.

Vol. V: ISBN 978-3-319-28384-5, 396 p.

Original publications

Intramyocardial angiogenetic stem cells and epicardial erythropoietin save the acute ischemic heart.

Klopsch C, Skorska A, Ludwig M, Lemcke H, Maass G, Gaebel R, Beyer M, Lux C, Toelk A, Müller K, Maschmeier C, Rohde S, Mela P, Müller-Hilke B, Jockenhoevel S, Vollmar B, Jaster R, David R, **Steinhoff G**.

Dis Model Mech. 2018 Jun 22;11(6). pii: dmm033282. doi: 10.1242/dmm.033282

Cardiac Function Improvement and Bone Marrow Response -: Outcome Analysis of the Randomized PERFECT Phase III Clinical Trial of Intramyocardial CD133₊Application After Myocardial Infarction.

Steinhoff G, Nesteruk J, Wolfien M, Kundt G; PERFECT Trial Investigators Group, Börgermann J, David R, Garbade J, Große J, Haverich A, Hennig H, Kaminski A, Lotz J, Mohr FW, Müller P, Oostendorp R, Ruch U, Sarikouch S, Skorska A, Stamm C, Tiedemann G, Wagner FM, Wolkenhauer O.

EBioMedicine. 2017 Aug;22:208-224. doi: 10.1016/j.ebiom.2017.07.022. Epub 2017 Jul 29.

Non-viral magnetic engineering of endothelial cells with microRNA and plasmid-DNA-An optimized targeting approach.

Voronina N, Lemcke H, Wiekhorst F, Kühn JP, Rimbach C, **Steinhoff G**, David R.

Nanomedicine. 2016 Nov;12(8):2353-2364. doi: 10.1016/j.nano.2016.06.015.

Impact of short-term liquid storage on human CD133(+) stem cells.

Lux CA, Mark P, Klopsch C, Laupheimer M, Tu-Rapp H, Li W, Ma N, **Steinhoff G**, David R.

Cell Transplant. 2015;24(11):2409-22. doi: 10.3727/096368914X681577.

Improved transfection in human mesenchymal stem cells: effective intracellular release of pDNA by magnetic polyplexes.

Delyagina E, Schade A, Scharfenberg D, Skorska A, Lux C, Li W, **Steinhoff G**.

Nanomedicine (Lond). 2014 May;9(7):999-1017. doi: 10.2217/nnm.13.71.

Innovative strategy for microRNA delivery in human mesenchymal stem cells via magnetic nanoparticles.

Schade A, Delyagina E, Scharfenberg D, Skorska A, Lux C, David R, **Steinhoff G**.

Int J Mol Sci. 2013 May 23;14(6):10710-26. doi: 10.3390/ijms140610710.

Validating intramyocardial bone marrow stem cell therapy in combination with coronary artery bypass grafting, the PERFECT Phase III randomized multicenter trial: study protocol for a randomized controlled trial.

Donndorf P, Kaminski A, Tiedemann G, Kundt G, **Steinhoff G**.

Trials. 2012 Jul 2;13:99. doi: 10.1186/1745-6215-13-99.

Patterning human stem cells and endothelial cells with laser printing for cardiac regeneration.

Gaebel R, Ma N, Liu J, Guan J, Koch L, Klopsch C, Gruene M, Toelk A, Wang W, Mark P, Wang F, Chichkov B, Li W, **Steinhoff G**.

Biomaterials. 2011 Dec;32(35):9218-30. doi: 10.1016/j.biomaterials.2011.08.071.

Hypoxic/normoxic preconditioning increases endothelial differentiation potential of human bone marrow CD133+ cells.

Ong LL, Li W, Oldigs JK, Kaminski A, Gerstmayer B, Piechaczek C, Wagner W, Li RK, Ma N, **Steinhoff G**.

Tissue Eng Part C Methods. 2010 Oct;16(5):1069-81. doi: 10.1089/ten.TEC.2009.0641.

Review

Stem cells and heart disease - Brake or accelerator?

Steinhoff G, Nesteruk J, Wolfien M, Große J, Ruch U, Vasudevan P, Müller P.

Adv Drug Deliv Rev. 2017 Oct 1;120:2-24. doi: 10.1016/j.addr.2017.10.007. Epub 2017 Oct 18. Review.

10 years of intracoronary and intramyocardial bone marrow stem cell therapy of the heart: from the methodological origin to clinical practice.

Strauer BE, **Steinhoff G**.

J Am Coll Cardiol. 2011 Sep 6;58(11):1095-104. doi: 10.1016/j.jacc.2011.06.016. Review.