
CV

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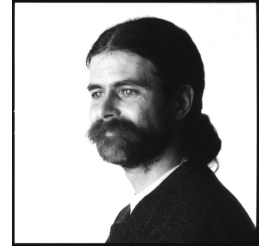
Germany

Born 22/11/1965 in Sonthofen, Germany

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Academic Positions

January 2003–Present

Research Associate

Clinic for Cardiothoracic Surgery, University Hospital of Regensburg, Germany

Directed a workgroup overseeing the work of two technicians

Projects:

- Develop a method to create small-caliber vessel grafts from human umbilical veins
- Develop a cryopreservation procedure for vessels and vessel grafts
- Investigate the effects of benzyl indazoles on human vessels

Achievements:

- Seeded human umbilical veins and decellularized scaffolds with human endothelial cells
- Developed a cryopreservation procedure for vessels (patent application in preparation)
- Analyzed the vasomotoric properties of human umbilical veins
- Elucidated mechanism of YC-1 induced contractions in human vessels

May 1999–May 2002

Research Instructor

The University of Texas Medical School at Houston, Houston, TX, USA

Projects:

- Analyze the structure and function of soluble guanylyl cyclase
- Analyze the cellular effects of soluble guanylyl cyclase using retroviral vectors

Achievements:

- Created a series of baculoviruses containing native human as well as point-mutated or fused guanylyl cyclase subunits
- Optimized the overexpression of soluble guanylyl cyclase in Sf9 cells using a bioreactor
- Created a series of retroviral vectors carrying the soluble guanylyl cyclase subunits

October 1995–April 1999

Research Associate

Institute of Aerospace Medicine, German Aerospace Center, Cologne, Germany

Projects:

- Overexpressed and purified soluble guanylyl cyclase
- Investigated the suitability of Jurkat cells for zero-g experiments

Achievements:

- Purified soluble guanylyl cyclase in milligram quantities with the highest specific activity at that time
- Established the overexpression of soluble guanylyl cyclase using the baculovirus/Sf9 system in a bioreactor

Sabbaticals

November 1998–February 1999

Research Fellow

Imgenex, San Diego, CA, USA

Cloned baculoviruses carrying the subunits of human soluble guanylyl cyclase

May 1996–July 1996

Research Fellow

Department of Biotechnology, Bayer AG, Wuppertal, Germany

Established the overexpression of soluble guanylyl cyclase using the baculovirus/Sf9 system in bioreactors

Education

January 1992–May 1995

Dr. rer. nat. / Ph.D. in Biology

Ludwig-Maximilians-Universität, Munich, Germany (thesis); RWTH University Aachen, Germany (defense)

Doctoral thesis entitled "The mechanism of nitric oxide release from organic nitrates in the vasculature"

November 1986–December 1991

Diploma / M.S. in Biology

Technische Universität, Munich, Germany

Scientific Skills

Tissue Engineering

- Operate perfusion devices for the engineering and maintenance of vessel grafts
- Seed scaffolds or cryopreserved vessels with isolated cells
- Cell culture
- Cryopreserve cells and tissues

Vascular Pharmacology

- Analyze vascular function in a myograph
- Analyze metabolic and paracrine function by means of ELISA and activity tests

Biotechnology

- Run bioreactors for the overexpression of proteins
- Clone and transfect expression vectors, e.g. for the baculovirus/Sf9 system

Enzymology

- Protein purification (low pressure and FPLC)
- SDS-PAGE
- Western Blot
- Radioactive and non-radioactive kinetic analyses
- Tagging overexpressed proteins by means of molecular biology

Computer skills

Install and run operating systems

- BSD-Unix
- Linux
- Windows

Programming and query languages

- C
- Perl
- Lisp
- SQL

Electronic Publishing

- HTML, XHTML, CGI programming
- SGML and XML markup languages
- DSSSL and XSL programming
- TeX/LaTeX
- Office and imaging programs

Last modified 26/12/2007.