

**Affiliation:** Physiology  
Institute of Theoretical Medicine  
Faculty of Medicine  
University of Augsburg  
Augsburg  
Germany



E-mail: [rudolf.schubert@med.uni-augsburg.de](mailto:rudolf.schubert@med.uni-augsburg.de)

Web: <https://www.uni-augsburg.de/de/fakultaet/med/profs/physiologie/>

### Education and Academic Positions

03/2019	Univ.-Prof.; Chair, Physiology, Faculty of Medicine, University of Augsburg
2019	Master Medical Education (Heidelberg)
8/2008-02/2019	Univ.-Prof.; Head, Section of Cardiovascular Physiology, Medical Faculty Mannheim, University Heidelberg
2000	Appointment as "Privatdozent"
2000	Degree: PhD, Faculty of Health Sciences, University of Aarhus, DK
1999	Degree: Dr. med. habil., Medical Faculty, University of Rostock
1995	Licence to practice medicine
1993-1995	Internship, Medical Faculty, University Rostock
1993	Specialisation "Facharzt für Physiologie"
1990-1993	Study of Medicine, Medical Faculty, University of Rostock
1989	Degree: Dr. med., Medical Faculty, University of Rostock
1988-2008	Doctoral student, PostDoc and senior researcher at the Department of Physiology, University Rostock
1988	Degree: Dipl.-Biophys., Pirogov University of Medicine, Moscow; Ministry of Public Health, GDR
1982-1988	Study of Biomedicine (theoretical medicine/ medical biophysics), Pirogov University of Medicine, Moscow, USSR

### Fields of Specialisation

My research is focussed on physiological regulatory mechanisms and related pathophysiological processes (diabetes, hypertension) in the circulatory system. In particular, 2 main topics are studied: (i) the role of smooth muscle potassium channels in autoregulatory mechanisms of the circulatory system (myogenic and perivascular fat mediated autoregulation), (ii) mechanisms of functional and structural plasticity, i.e. initiation and progression of adaptive remodeling processes in the vascular wall especially during postnatal development. In addition, the implementation of scientific thinking in medical education is investigated.

**Keywords:** Circulatory physiology, myogenic autoregulation, mechanisms of vessel dilation and constriction, smooth muscle function, calcium homeostasis, calcium sensitivity mechanisms, protein kinase-mediated signal transduction, ion channels; scientific thinking in medical education