

Prof. Tanja Schmidt

*Turnhallenstr. 13, D-91602 Dürrewangen, Germany
Phone: +49-9856-237561, Mobile: +49-175-3748927
E-Mail: tanja.schmidt@tanjaschmidt.eu*

CURRICULUM VITAE

EDUCATION

1998 -2000	Dipl.-Ing. (FH) “Medical Engineering”	University of Applied Sciences, Furtwangen, Germany	Medical Engineering, Mechanical Engineering, Control Engineering
1988 -1995	Licence to practice Medicine; State examination Medicine	University of Heidelberg, Germany, Université Claude Bernard Lyon 1, France	Medical School Special interests: General and Orthopaedic Surgery, A&E, Internal Medicine, Neurology

PROFESSIONAL EXPERIENCE

2010 – (ongoing)	Professor Biomedical Engineering	University of Applied Sciences – Hochschule Ansbach, Ansbach, Germany	Teaching areas: Diagnostic Systems, Therapeutic Systems, Biostatistics, Anatomy, Physiology
2004 – (ongoing)	Freelance Consultant	Self-Employed	Clinical Evaluations of medical devices, planning and analysis of clinical trials with medical devices, Regulatory affairs, Biocompatibility
2001 – 2003	Researcher, Assistant Physician	University of Heidelberg, Dep. of Cardiac Surgery SFB 414	Collaborative research center 414: Information Technology in Medicine - Computer and Sensor- Aided Surgery Cardiac Surgery, Computer- and Sensor-aided surgery, Control-Engineering in Medicine
1997- 2000	Freelance Consultant	Self-Employed	Scientific Consultant in Pharmaceutical and Medical Devices Clinical Research, Biostatistics
1996-1997	House Officer	Pontefract General Infirmary, Pontefract, UK and Stobhill Hospital, Glasgow, UK	House Officer in General Surgery and Internal Medicine
1996	Researcher	CRO PD Dr. Wolf, Heidelberg, Germany	Medical Writing, Study Design, Biostatistics, Regulatory Affairs, Systematic Reviews, Clinical Data Appraisal.

EXPERT OPINIONS EUROPEAN COMMISSION

- 2009 External opinion (HTA report) for the Scientific Committee on Emerging and Newly Identified Health Risks (SCENIHR) of the European Commission (Reprocessing of Single Use Medical Devices)
- 2011 Evaluator for research proposals in European Research Project Foundation Programmes of the European Commission (Framework programme for research, technological development and innovation 2009 2010 of the research promotion foundation)

EXPERT OPINIONS

INDEPENDENT EXPERT OPINIONS FOR SUBMISSION TO NOTIFIED BODIES AND OTHER REGULATORY AUTHORITIES, SPONSORED BY LEGAL MANUFACTURERS

Expert opinions acc. to 93/42/EWG and MEDDEV

- Clinical Evaluations acc. to MEDDEV 2.7/1
- Biocompatibility Analysis (EN ISO 10993)
- Risk analysis and Evaluation (EN ISO 14971)
- Risk Classification of Medical Devices (93/42/EWG / MEDDEV 2.4/1)

Clinical Research on Medical Devices (EN ISO 14155, MPG, 93/42/EWG)

- Clinical and statistical design of clinical investigations on medical devices
- Design of Study protocol, Investigator's Brochure, CRFs
- statistical analysis
- Clinical and biometrical reports

Systematic Literature Research and evaluation, Metaanalysis

- HTA Reports
- Expert Opinions
- „state of the art“ Reports“
- Validation of diagnostic and treatment methods with medical devices

Sponsors:

- sfm medical devices GmbH
- Waldemar Link GmbH & Co. KG
- nes AG
- Dr. August Wolff GmbH & Co. KG Arzneimittel
- B.Braun Melsungen AG
- Vascular Innovations Co., Ltd.
- Ethicon Endo-Surgery (Europe) GmbH
- Fa. Linde AG
- joimax® GmbH
- Heraeus Medical GmbH Deutschland
- Fresenius Kabi Deutschland GmbH

MEMBERSHIPS IN LEARNED SOCIETIES:

DGBMT - German Society for Biomedical Engineering in VDE

CURAC - German Society for Computer and Robotic Assisted Surgery

LIST OF PUBLICATIONS

- Albers J, Schmidt T, Hassfeld S, Heid F, Vahl CF (2007): Sternotomie und Kraniotomie mithilfe autonomer Roboter. *Z Herz- Thorax- Gefäßschir.* 21(6): p. 266-272
- Günther F, Kayhan N, Schmidt T, Steinitz A, Krempien R, Vahl CF (2005): Akuteffekte von Photonenstrahlung auf den kontraktilem Apparat von Vorhofmyokard. *Z Herz- Thorax- Gefäßschir* 19: 114-125
- Bender F, Reinerth G, Kayhan N, Schmidt TM, Schuppe A, Hagl S, Vahl CF (2004): Verkürzung und Kraftentwicklung in gehäutetem, menschlichem Myokard von Patienten mit chronischem Vorhofflimmern. *Z Herz- Thorax- Gefäßschir* 18(2):101-11.
- Albers J, Heggemann F, Schmidt T, Bahner ML, Boese JM, Vahl CF, Hagl S (2003): Multidetector-computed tomography for coronary artery operation planning: evaluation of the method. *Int Congr Ser (Proceedings of Comp Ass Radiol Surg)* 1256: 742-746
- Albers J, Schmidt T, Bender F, Vahl CF, Hagl S (2002): Dynamic three-dimensional visualization of intramyocardial texture. *Transpl Proc* 34: 2194-2198
- Kayhan N, Schmidt TM, Bonz A, Sonnenberg K, Vahl CF, Hagl S (2002): Effects of Trifluoperazine on the Contraction Kinetics of the Isolated Intact Tracheal and Pulmonary Artery. *Smooth Muscle. Thorac Cardiovasc Surg* 50: 49-54
- Meyrowitz G, Schmidt TM, Naujokat E, Albers J, Kiencke U, Vahl CF, Hagl S (2002): Mehrgrößenregelungssysteme für die extrakorporale Zirkulation. *Biomedizinische Technik* 47, Ergänzungsband 1, Teil 2: 915-918
- Zwick N, Ell N, Kayhan N, Schmidt T, Kewitz S, Schöls W, Hagl S, Vahl CF (2001): Kraft-Frequenz-Beziehung und intrazelluläres Calcium bei Patienten mit chronischem Vorhofflimmern. *Z Herz-, Thorax-, Gefäßschir* 15: 205-213
- Rietbrock N, Hamel M, Hempel B, Mitrovic V, Schmidt T, Wolf GK (2001): Wirksamkeit eines standardisierten Extraktes aus frischen Crataegus-Beeren auf Belastungstoleranz und Lebensqualität bei Patienten mit Herzinsuffizienz (NYHA II). *Arzneimittel-Forschung* 51(10):793-8
- Wolf GK, Schmidt T (1999): Prüfplan und Auswertungsmethode für Studien zu physikalischen Therapieverfahren. *Akt Dermatol* 25: 95-98
- Breithaupt-Groegler K, Ling M, Schmidt T, Wolf GK, Belz GG (1996): Effects of Chronic Garlic Intake on Aortic Stiffness. *Phytomedicine* 3: 139
- Ling M, Breithaupt-Groegler K, Schmidt T, Wolf GK, Belz GG (1996). Chronic intake of standardized garlic powder preparation improves aortic elastic properties. *European Journal of Clinical Pharmacology.* 50(6): 548

SCIENTIFIC LECTURES AND POSTER PRESENTATIONS

- Reinerth G, Seemann G, Reumann M, Schmidt T, Dössel O, Vahl CF (2004): Simulation der Elektrischen Aktivität der Ventrikel bei Biventrikulärer Stimulation. *Z Kardiologie* 93: 3
- Schmidt TM, Meyrowitz G, Naujokat E, Albers J, Kiencke U, Vahl CF (2003): Heat exchange during cardiopulmonary bypass. *Computer Assisted Radiology and Surgery, 17th International Congress, London/UK, 2003*
- Schmidt TM, Meyrowitz G, Bauer C, Kiencke U, Vahl CF (2003) A Mathematical Model of a Heat-Exchanger for cardiopulmonary bypass. 2. Jahrestagung der Deutschen Gesellschaft für Computer- und Roboterassistierte Chirurgie, Nürnberg, 2003.
- Schmidt TM, Naujokat E, Barho J, Albers J, Kiencke U, Vahl CF (2003): Evaluation of a mathematical model for blood gases and acid-base status during extracorporeal circulation. 4th International Symposium on the Pathophysiology of Cardiopulmonary Bypass, Munich, 2002
- Schmidt TM, Albers A., Vahl CF, Hagl S. (2002) Hyperamylasämie und Pankreatitis nach kardiopulmonalem Bypass. 6. Deutscher Interdisziplinärer Kongress für Intensivmedizin und Notfallmedizin, Hamburg, 2003
- Schmidt TM, Naujokat E, Albers J, Kiencke U, Vahl CF (2002): Modellierung der extrakorporalen Zirkulation. 36. Jahrestagung der Deutschen Gesellschaft für Biomedizinische Technik im VDE, Karlsruhe, 2002
- Schmidt TM, Meyrowitz G, Naujokat E, Albers J, Kiencke U, Vahl CF, Hagl S (2002): Mehrgrößenregelungssysteme für die extrakorporale Zirkulation. 36. Jahrestagung der Deutschen Gesellschaft für Biomedizinische Technik im VDE, Karlsruhe, 2002
- Schmidt TM, Albers J, Vahl CF, Hagl S (2002): Modellierung und Simulation des Herz-Kreislauf-Systems. 68. Jahrestagung der Deutschen Gesellschaft für Kardiologie, Mannheim, 2002
- Schmidt TM, Wolf GK (1994): Auswertung klinischer Studien mittels Rang-Kovarianz-Analysen. 40. Biometrisches Kolloquium der Deutschen Region der Internationalen Biometrischen Gesellschaft - Interregionales Kolloquium. Münster, 1994