

Dr. Jochen Salber (male) received his diploma in chemistry from the RWTH Aachen University in 1995. The topic of his thesis was the investigation of allosteric transitions in hexameric insulin derivatives using circular dichroism spectroscopy. While preparing his PhD thesis (National Industrial Doctorate – NID) with the title “A critical analysis of the Chlorine-Hercosett™ shrinkproofing process as basis for the development of an alternative chlorine-free process” he started his studies in medicine. In 2001, he achieved his PhD from the RWTH Aachen and got several national and international appreciation of his work. From 2001 to 2006 he worked as postdoc in the research group of Prof. Dr. Doris Klee coordinating different projects in the biomaterials field (e.g. Synthesis of biodegradable polyesteramides, studying interactions between different types of stem cells and monocytes with biomaterial surfaces). He established a state of the art cell culture facility at DWI – Leibniz Institute for Interactive Materials to analyse cyto-, hemo- and immunocompatibility of biomaterials and modified implant surfaces according to DIN EN ISO 10993. 2006 he joined the research group of Prof. Dr. Jürgen Groll to investigate cellular behavior at the cell-biomaterial interface with a focus on cytomechanics and mechanotransduction. Additionally, he worked on the development of bioactivated, biodegradable scaffolds to enhance biocompatibility for tissue engineering and regeneration purposes. From 2006 to 2007 he prepared his practical year at the University Medical Centre of the RWTH Aachen University. In 2008 he achieved the license to practice medicine. 2008 he started working as resident in the clinic of surgery at the Berufsgenossenschaftliche Kliniken Bergmannsheil GmbH, Hospital of the Ruhr-University Bochum (RUB). In July 2014 he changed to the University Medical Centre Knappschafts-krankenhaus Bochum GmbH, Hospital of the RUB, as clinician scientist and worked half-time as operating surgeon in the department of orthopedics. Beyond that, he founded the clinical research group “Medical Biomaterials” at the Centre for Clinical Research (ZKF) at the RUB. His research is focused on the bio-evaluation of novel biomaterials, biomaterial surface modifications and class III medical devices according to DIN EN ISO norms, USP and JPMDA. Furthermore, he is interested in the development and efficacy analysis of strategies to prevent implant-associated and periprosthetic microbial adhesion, biofilm formation and infection. In vivo simulation of complex device-tissue interactions using biomechanical reaction (BMR) systems and in silico tools to minimize in vivo experimental errors is another hot topic his group is working on. Finally, Dr. Salber is working on bone and vascular tissue engineering to develop in vitro biocompatibility assays based on human tissue equivalents. 02/2018 he received his orthopedic surgery consultant degree.