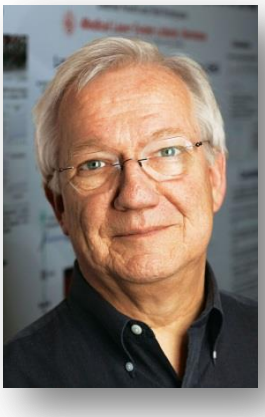
Short Biography



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Reginald Birngruber was born in Munich, Germany. He received the B.S. degree in Electrical Engineering from the University of Applied Sciences, Munich, Germany in 1963, the diploma degree in Physics from the Technical University, Munich, Germany in 1971, the Ph.D. degree in Physics from the Johann Wolfgang Goethe University, Frankfurt, Germany, in 1978 and the M.D. habilis degree of Medical Biophysics from the Ludwig Maximilians University Munich, Germany in 1985.

From 1972 to 1980, he was a Research Member in the Department of Coherent Optics, Gesellschaft für Strahlen- und Umweltforschung, Munich, a National Laboratory for Environmental- and Radiation Research. From 1985 to 1992 he was a Professor of Medical Biophysics at Ludwig Maximilians University, Munich. He became a Visiting Professor at Harvard University and the Division of Health Sciences and Technology, Massachusetts Institute of Technology, Cambridge, MA, in 1991. As Co-Director of the Medical Laser Application Program of the Wellman Laboratories of Photomedicine at Massachusetts General Hospital, he was responsible for research in the basics of ultrafast laser pulse-tissue interaction, confinement of photo-thermal and photochemical tissue effects and clinical laser applications.

Since 1992 he has been full professor of Medical Biophysics at the University Luebeck. From 1992 to 2010 he was CEO and CRO of the Medical Laser Center Luebeck GmbH and from 2005 to 2010 director of the Institute of Biomedical Optics of the University Luebeck. He conducted research and development in the entire field of lasers in medicine and biology.

Since 1991 he is a member of the Affiliated Faculty of the Wellman Center for Photomedicine, Massachusetts General Hospital, Harvard Medical School, Boston, USA.
From 2004 to 2010 he was a scientific consultant of the Medical Gas R&D Program at Air Liquide S.A. Paris, France.

Reginald Birngruber has published more than 350 articles in laser biomedicine and related fields (Hirsch-factor of 41), among them classical papers on laser tissue interaction in laser safety, the first paper on femtosecond laser effects in biological tissue, basic studies on ultra-short laser pulse mechanisms in ocular tissue, the introduction papers on micro-photocoagulation (SRT) and photodynamic therapy in ophthalmology, a comparative paper on mid-infrared laser ablation of corneal tissue, and first studies on laser effects investigated in vivo by OCT. Recently he was co-author of the first study to investigate the alveolar dynamics using 4-dimensional OCT.

Reginald Birngruber has no projects that are solely his, but makes his experience, expertise, and contacts available to many: currently these include basic mechanisms of photo-thermal and photo-ablative tissue effects, structural and functional optical tissue diagnostics and therapy control.