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Short CV

Christian Baumgartner, PhD has been Professor and Head of the Institute of Health Care Engineering with European Testing Center of Medical Devices at Graz University of Technology, Austria. He received his MSc (1994) and PhD degree (1998) from Graz University of Technology, Austria, his habilitation degree in Biomedical Engineering from UMIT, Tyrol, Austria (2006). Diploma in organ and conducting (1998) from the Conservatory of Graz, Austria. From 1998-2002 Dr. Baumgartner held a R&D systems engineer position at Tecan.com, where he co-developed confocal fluorescence laser scanning systems for microarray applications. From 2007-2008, he joined the Barnett Institute of Chemical and Biological Analysis, Northeastern University and Harvard Medical School, Boston, MA, where Dr. Baumgartner worked in the field of bioinformatics for biomarker discovery. In 2009, he was appointed Full Professor and Director of the Institute of Electrical and Biomedical Engineering at UMIT Tirol. Since 2015 he is the Head of the Institute of Health Care Engineering with European Testing Center of Medical Devices at Graz University of Technology, Austria. Dr. Baumgartner is the author of more than 200 publications in refereed journals, books and conference proceedings, and patents and is a reviewer for more than 40 scientific journals. He served as a deputy editor of the Journal of Clinical Bioinformatics, is Associate Editor of Frontiers in Physiology-Computational Physiology and Medicine, section editor of Sensors (section biomedical sensors), co-section editor of IMIA Yearbook of Medical Informatics (sensors, signals and imaging informatics), and is an editorial board member of Cell Biology and Toxicology and Methods of Information in Medicine. He teaches and has taught more than 20 courses in physics, biology, electronics and electrical engineering, computer science, biomedical engineering, and medical device act. His main research interests include biomedical sensors, cellular electrophysiology and signal processing, biomedical modeling and simulation, clinical bioinformatics, machine learning and computational biology, and medical device development, safety and regulatory affairs.

SELECTED PUBLICATIONS IN:

Computational and Experimental Electrophysiology

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Research outputs

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Shedding Light on Cardiac Excitation: In Vitro and In Silico Analysis of Native Ca²⁺ Channel Activation in Guinea Pig Cardiomyocytes using Organic Photovoltaic Devices

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A System Theory Based Digital Model for Predicting the Cumulative Fluid Balance Course in Intensive Care Patients

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