

IUIS Council Member Description

Personal description by the Candidate:

I am the director of the Institute of Medical Microbiology and Hygiene at the University Medical Centre of the Johannes Gutenberg-University, Mainz. From 2008 - 2018 I held a position as a W3 professor at Hannover Medical School and director of the TWINCORE Institute of Infection Immunology. Previous positions included a group leader position at the Institute for Medical Microbiology, Immunology & Hygiene, Technical University Munich, Germany and a post doc position at the Howard Hughes Medical Institute (HHMI), Skirball Institute of Biomolecular Medicine, NY University Medical Centre, New York. My main research interest is investigating novel vaccination strategies with a special focus on dendritic cells and regulatory T cells. My work has led to the discovery of CpG Oligonucleotides as potent adjuvants and activators of dendritic cells. The development of the DEREK mouse model allowed proving the role of regulatory T cells during infection and immunity and shedding light on their development and relevance for maintenance of peripheral tolerance. Only recently, my team discovered a new mechanism of immune modulation of pro-inflammatory T helper 17 cells using small natural compounds that interfere with fatty acid metabolism and allow the generation of anti-inflammatory Foxp3+ regulatory T cells.

I am an elected member of the advisory board of the German Society for Immunology (DGfI), and member of various national and international immunological societies. I consider the Education Committee (EDU) as one of the most important IUIS subcommittees, and it would be an honour for me to continue our efforts here as a Council member. Unfortunately, due to the SARS-Cov2 pandemic many courses could not be realized and I am looking forward to our first of IUIS on-site course in September 2022 in Argentina. For the next term, we hope to provide many more face-to-face courses in order to contribute to dissemination of immunology and implementation of effective laboratory practice in the developing world.

Education, mentoring and internationalization are very important to me. Since 2006 I have been a mentor of the German National Scholarship Foundation. From 2014 – 2018 I was a member of the International Council of Hannover Medical School with the main goal to improve our internationalization strategy, an important task I now also took over in the Senate Committee for Internationalisation of the Johannes Gutenberg-University Mainz. I was also the initiator and organizer of an international Summer Academy in Immunology (“LISA”) in Hannover, Germany from 2011 – 2017, where we invited more than 300 students from over 50 different countries to study in Germany, an initiative I now try to implement in Mainz with a focus on systems immunology. Finally, I founded a new binational Master program on infection biology (“AMIBA”) as a joint program between the National and the Catholic University of Córdoba, Argentina, and Hannover Medical School.

