

Laudation – Dr. Stephan Züchner

Dr. Stephan Züchner obtained his medical degree in 1998 from the Medical School at the University of Aachen in Germany, where he then did residency in Neurology and in Neuropathology. In 2003, he began his postdoctoral studies at the Center of Human Genetics at Duke University Medical Center, where, in 2004, he achieved Assistant Professor status. In 2007, he moved to the University of Miami Miller School of Medicine as a tenured Associate Professor to work as the director of the Center for Human Molecular Genomics, Hussman Institute for Human Genomics. In 2012 he was promoted to rank of Professor and also was asked to function as the interim Chair of the Dr. John T. Macdonald Foundation Department of Human Genetics, University of Miami Miller School of Medicine. In 2015 he accepted the position as permanent Chair of the Department for Human Genetics and was also named the Co-Director of the Hussman Institute for Human Genomics.

Dr. Züchner is a neurologist and molecular biologist with extensive experience in the mapping of Mendelian diseases and cloning of causal genes. Dr. Züchner's lab has discovered several dozen important genes for a number of diseases. It has identified genes for Mendelian neurodegenerative disorders and also evaluated risk factors for complex genetic conditions, including Alzheimer and Parkinson disease, and obsessive-compulsive disorder.

His current work focuses on molecular neurogenetics and psychiatric genetics. He is pursuing large-scale exome and genome analysis in multiple neurodegenerative disorders and develops innovative new software tools that allow real time shared analysis of large amounts of genomic data.

Dr. Züchner has had a scientific cooperation with the researchers of Semmelweis University for several years. In 2005, his first publications with Dr. Mária Judit Molnár got released on the achievements of their research in the Klinikum der RWTH of the years between 1998 and 2000. The Institute of Genomic Medicine and Rare Disorders organized a symposium at the Budapest Congress of the European Neurology Society, where he was invited as a Guest of Honor. The topic of the symposium was the personalized medicine, which was the focus of the research at the Semmelweis University at the same time.

The Dr. John T. Macdonald Foundation Department of Human Genetics, University of Miami Miller School of Medicine, directed by Dr. Züchner, and the Institute of Genomic Medicine and Rare Disorders has had several joint research projects. In 2013 a PhD student of the Institute of Genomic Medicine and Rare Disorders spent a three-month study at Dr. Züchner's Institution. This three month period has strengthened the cooperation between the two Institutes in the field of next generation sequencing. Since then the University of Miami Miller School of Medicine, provides for the researchers of Semmelweis University his software for NGS data analysis. This GENESIS Project functions as the cloud computing genomic collaboration of the two Universities.

Dr. Züchner is the leader and co-author of more than 160 publications, his cumulative impact factor exceeds 1.200, having more than 5000 citations. He functions as an editor at the Journal of Neuromuscular Diseases, and as a reviewer at more than 20 highly recognized journals. Currently, he is the principal researcher or co-investigator of more than 15 academic grants. In the last 5 years, he has been the principal or co-researcher of 11 completed major research projects. Having more than 20 PhD students and students from the Students' Scientific Association proves his outstanding achievement and establishment of a new school of thought.