Dr. Karl Mann

Most of Dr. Karl Mann's research can be described as "translational". This translation happens from basic science to clinical research, then from clinical research to clinical practice, and finally from all of these to the world of scientific/clinical administration and policy. As a trained clinician and psychiatrist, Dr. Mann always kept his focus on how research could improve diagnosis and treatment for individuals suffering from Alcohol Use Disorder and other addictions.

Karl Mann studied Medicine in Mainz, Innsbruck and Vienna. As a medical student he served two terms as Medical Extern in Concord New Hampshire (US). He received his MD at Mainz University in 1977 followed by a Research fellowship in Paris 1978-1979. In 1985 he finished his Residency in Psychiatry and Neurology (Board Certification) at the University of Tubingen, and subsequently developed an Addiction Treatment and Research Center at that institution. In 1999, Dr. Mann was appointed as the first Chair of Addiction Research in Germany at the University of Heidelberg. He held the position of a full University Professor until 2014. Additionally, he became the Medical Director of the Department for Addictive Behaviors and Addiction Medicine of the Central Institute of Mental Health, Mannheim, and served as Deputy Director at this institution (2006-2014). As Emeritus Professor he was appointed Senior Professor for Addiction Research by the Rector of Heidelberg University in 2016.

He used these positions and the resources available to them, to build an internationally recognized alcohol/addiction research program. This served as a basis for the training of the next generation of addiction researchers, several of whom developed their own international reputation and University position (Andreas Heinz, Anil Batra, Michael Smolka, Gunter Schumann, Falk Kiefer, Sabine Vollstaedt-Klein, Sabine Loeber, Tagrid Lemenager, Mira Fauth-Buehler, Ulrich Zimmermann). Since Germany has no National Institute for Drug Research to fund addiction research, Dr. Mann was instrumental in convincing the Federal Government to establish a special program for several consecutive funding periods with the last one forming four "research-consortia" named the "German Addiction Research Network," which he subsequently coordinated.

Overall, Dr. Mann published over 500 papers and 20 books. In clinical neuroscience his group used PET and BOLD fMRI as well as MRS procedures. Their translational work regarding alcohol cue and craving effects was applied to prediction of relapse, specifically to naltrexone efficacy in clinical trials. In the course of this work, his group identified important aspects of alcohol effects on the brain dopamine and opiate systems, including their role in craving and relapse. This highly translational work set the stage for a new era of addiction neuroscience using modern brain imaging technology.

Dr. Mann designed and participated in medication development trials for AUD. He studied acamprosate, naltrexone, d-cycloserine, topiramate, rimonabant, and galantamine. His study on nalmefene contributed to the approval of this drug by the European Medicine Agency. Another noteworthy accomplishment was to acquire support for and lead the PREDICT study - a German multisite clinical trial using the instruments of the US-COMBINE Study allowing for the first direct comparison between a European and a US trial in AUD. This large trial spurred many other research endeavors most prominently on personalized medicine,

also including pharmacogenetics, neuroimaging of treatment response, and the establishment of a relationship between reward and/or relief drinking and treatment response.

Other Areas: Dr. Mann is interested in many more aspects of addiction research. He contributed to the alcohol literature in a number of other ways from psychotherapy, psychometrics (e.g. craving), psychophysiology, and experimental procedures, to sex/gender/adolescent issues, to evidence-based treatment guidelines.

Importantly, Dr. Mann has seen his mission not only in fostering discovery, but also in advancing advocacy and coordination for alcohol treatment and research, culminating in a strong desire for international cooperation in these endeavors. He expended considerable energy in unifying alcohol and addiction research in Germany and in Europe and played a significant role within the international community. He co-founded the European Psychiatric Association (EPA) section on Alcoholism and Drug Addiction in 1990 and served as chair of that entity 2002-2004. He was President of the German Society for Addiction Research and Addiction Therapy (2006 – 2010), and then expanded his reach by founding the European Federation of Addiction Societies (www.eufas.net) of which he was the first president (2010 – 2014). He culminated his ascending leadership role as President of the International Society for Biomedical Research on Alcoholism (ISBRA: 2010 – 2012) where he ran several international meetings.

Apart from alcohol research he has played a salient role as a member of the WHO working group on "addiction diagnosis" for ICD-11, where he was the spokesperson for behavioral addictions and advocated including gaming disorders (in addition to gambling disorders) as a full diagnostic entity in ICD-11. This was supported by the working group and was adopted by the World Health Assembly in 2020.

Finally, Karl Mann was invited to be the only European founding academic member of the Alcohol Clinical Trial Initiative (ACTIVE), an international Public-Private Partnership including NIAAA, NIDA, the FDA and EMA (European Medicines Agency), along with academicians and pharma representatives, whose goal is to standardize and improve medication trials for AUD. He has played a consistently positive role in introducing the EMA to this mission and helping define the WHO risk drinking metric as an outcome marker for clinical trials. Through these continuing efforts, a bridge is being built between the US and European regulatory agencies in order to regulate and approve new medications for AUD more efficiently.