## Interview with a scientist

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### Dr. Karl Mann

- Affiliation: Central Institute for Mental Health Mannheim, University of Heidelberg
- Background academics: Emeritus Professor
- Area of research: Addiction Research

# 1) How did your interest grow in the area of alcohol research?

"In that case you should join the addiction unit". This was my mentor's recommendation when I was expressing, "something with behavior change and brain function" as my field of future research, just after having received my board certification in Neurology, Psychiatry and Psychotherapy. By no means had I ever thought of addiction, but after learning about its many implications in research and treatment, I decided to stay and never regretted it.

# 2) What were the challenges you found during the early stage of your career as a scientist, and how did you overcome that?

The lack of funding. This certainly sounds familiar to members of ISBRA around the world, but other than in the US where the annual addiction research budget amounts to roughly 2.5 billion dollars (NIDA and NIAAA together), zero funding for addiction had ever been granted in Germany before the 1980s. Consequently, no skilled researchers and no sound scientific methodology were available. Therefore, our first and foremost challenge was to organize a lobbying campaign, an en-

deavor which definitely is not a core capacity of researchers (although there are a few noteworthy natural talents). In short, this campaign was able to generate federal funding. The aim was to build capacity in recruiting young researchers and bringing scientific methodology up to international standards. Today, addiction research in Germany is competitive and currently represents the only nationwide research consortium ("Sonderforschungsbereich") in all of psychiatry.

# 3) What, in your view, is your highest achievement, careerwise?

Having organized an addiction research cluster at the University of Tubingen in the early 1990s, the University of Heidelberg recruited me in 1999 as full professor and chairperson to the first (and still only) department for addiction research in Germany, located at the Central Institute for Mental Health in Mannheim (CIMH). My greatest achievement was to recruit talented colleagues, who meanwhile have all succeeded in finding their own academic positions (such as Andreas Heinz, Falk Kiefer, Sabine Lober-Steins, Sabine Vollstaedt-Klein, Mira Fauth-Buhler, Eva Hoch, Tagrid Lemenager, Anil Batra, Michael Smolka, Ulrich Zimmermann, Derik Herrmann and others). In collaboration with colleagues from 15 other research departments and divisions at CIMH (Marcella Rietschel, Rainer Spanagel, Gabriele Ende, Wolfgang Sommer, Gunter Schumann), we established an internationally competitive addiction research center (see also Mann 2008).

# 4) What are some of the most important discoveries you have made in your research using neuroimaging methods to understand the effects of alcohol use disorder?

When I received the "Jellinek Award for Biological and Medical Studies" (jellinekaward.org) in 2020, it was for "outstanding contributions to our understanding of the human neurobiology and personalized pharmacotherapy of Alcohol Use Disorders". If one wanted to name two single publications, it could be "Low μ-Opioid Receptor Status in Alcohol Dependence Identified by Combined Positron Emission Tomography and Post-Mortem Brain Analysis" (Hermann et al. 2017; courtesy of the New South Wales Brain Bank in Australia). The other one being, "Extending the treatment options in alcohol dependence: a randomized controlled study of as-needed nalmefene", which contributed to the approval of a novel compound in the treatment of AUD (Mann et al. 2013). It goes without say, that I am much indebted to the abovementioned colleagues. Having been responsible for both the necessary research equipment and the treatment units have proven to be keys for success. Indeed, no discovery would have happened without the many patients who participated in

those studies. For clinical scientists like myself, research has to serve the individual who suffers from addiction. In that respect, our evidence-based treatment guidelines for alcohol- and tobacco-related problems involving multiple systematic reviews and consensus-based recommendations with about 50 different learned societies serve as an example (Mann et al. 2017). Recent work on "treatment goals beyond abstinence" by the AC-TIVE group (American Society of Clinical Psychopharmacology's Alcohol Clinical Trials Initiative) would be another one (Mann et al. 2017; Witkiewitz et al. 2020).

#### 5) How did you get involved with the societies for research on alcohol, and how do you think global academic organizations can fuel the development of research?

Going international is the most inspiring part of our profession: teaming up with colleagues from abroad, exchanging ideas, searching solutions together, traveling to places like San Francisco, Tokyo, Sydney, Paris, Hong Kong and many more, everything that amounts to being "part of the Invisible College of Scientists". But this kind of fun requires organization.

Never since 1993 have I ever missed an ISBRA or RSA conference, similarly with meetings as a WHO consultant. Coming back to the need to lobby for our research and for the afflicted individuals, many colleagues in Europe regret a complete lack of counseling possibilities for research priorities by national governments and the European Union in Brussels. Creating the European Federation of Addiction Societies (EUFAS.net) in 2010 is only one example of how we try to overcome this dilemma through international academic organizations.

# 6) What is the take home message you want to convey to the young investigators?

If you like wide open space, lots of

opportunities, and multiple chances for success, go for it, go for addiction research. It is like the North American Continent in the 1830s, many directions to move and unknown territories to discover.

You have a wide range of research topics to choose from, new methods can be applied for deeper insights into an uncharted landscape. And, most importantly, you can make a difference to many who suffer from addiction problems worldwide. You can pursue your goals independently, all by yourself, or enjoy global partnership. In both cases, do not hesitate to become a member of ISBRA and your national addiction society. You'll love it.

#### References:

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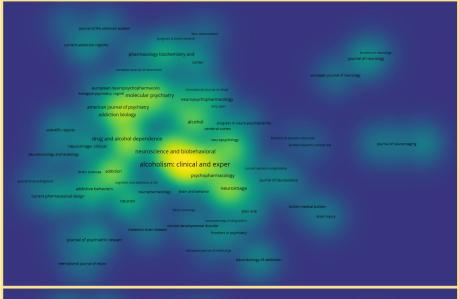
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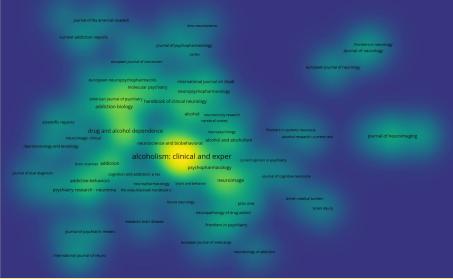


Figure 3: Journals by publication count and citation count. For more information go to "Figure Legends" section at page 17.