



## Pre-Congress CME Course

### State-of-the-art - Psychiatric genetics and pharmacogenetics: an interactive educational workshop

October 12<sup>th</sup>, 2016. (12-16h)

Serbian Academy of Science and Arts

Belgrade

#### Lecturer

Prof. Dr. Thomas G. Schulze

Medical Center of the University of Munich

Professor & Director of the Institute of Psychiatric Phenomics and Genomics (IPPG)

#### Summary

Psychiatric genetics has made tremendous progress over the last two decades. Large-scale collaborative efforts and major developments in molecular biological technologies, in particular genome-wide association studies (GWAS) have helped identify well over a hundred vulnerability genes for schizophrenia at genome-wide and thus robust levels of significance. With an ever increasing sample size for GWAS in bipolar disorder or major depression totaling

several tens of thousands of patients and control individuals, the number of identified risk genes for these disorders is expected to rise as well. The polygenic background susceptibility identified by GWAS is complemented by studies interrogating rare genetic variation such as copy number variants (CNVs) or by whole genome sequencing approaches. Large consortia on pharmacogenetics or imaging genetics are adding to our knowledge of the genetic architecture of psychiatric illness.

Notwithstanding these scientific successes, the challenges facing the psychiatric genetic community are manifold: Can findings readily be translated from bench to bedside? How to communicate them to physicians, patients, their relatives, and the general public? What are the ethical, legal, and societal implications of genomic research?

Following an update on the state-of-the-art of psychiatric genetics, this workshop will discuss the aforementioned challenges. A critical appraisal of approaches like the use of polygenic scores or rare genetic variation for predictive purposes will be given. The usefulness of widely marketed direct-to-consumer tests including pharmacogenetic tests will be discussed. Finally, latest studies on people's attitudes towards genetic research in psychiatry and its introduction to clinical settings will be presented.

## Programme

Hours	Topic	Training Method*	Lecturer
12:30-13:15	Psychiatric genetics: overview	Lecture	TG Schulze
13:15-13:30	Q & A		TG Schulze & audience
	Infrastructure for psychiatric genetic research	Lecture	TG Schulze
14:00-14:15	Q & A		TG Schulze & audience
14:15-14:30		Break	
14:30-15:30	Phenotyping for pharmacogenetic studies	Practical exercises	TG Schulze & audience
15:30-16:00	Clinical relevance & ethical considerations	Seminar	TG Schulze & audience

### About the lecturer

Dr. Schulze's research focuses on genotype-phenotype relationship in psychiatric disorders. He coordinates a German-wide center grant on longitudinal psychosis research ([www.kfo241.de](http://www.kfo241.de) ; [www.PsyCourse.de](http://www.PsyCourse.de)) and spearheads an international study on the genetic basis of response to lithium treatment in bipolar disorder ([www.ConLiGen.org](http://www.ConLiGen.org)), comprising several research groups from Europe, the Americas, Asia, and Australia.

He has authored close to 200 papers. In addition to national German awards, he is the 2006 recipient of the Robins-Guze Award of the American Psychopathological Association (APPA) and the 2006 recipient of the Theodore-Reich-Award of the International Society of Psychiatric Genetics (ISPG). He is a member of the American College of Neuropsychopharmacology (ACNP) and in 2011 was elected Chair of the Section on Psychiatric Genetic of the World Psychiatric Association (WPA), which he is an Honorary Member of. Since 2012, he has held the office of Secretary of the ISPG. He is currently the immediate Past President of the APPA.

### Organization

The course is free for members of the Serbian Psychiatric Association and its Section for Young Psychiatrists. The deadline for the registration is **September 1<sup>st</sup>, 2016**. Please contact Dr. Milica Borovcanin ([milicaborovcanin@yahoo.com](mailto:milicaborovcanin@yahoo.com)) for the registration.

Maximal number of participants – 80.