

# ***Colloquia in Membrane Transport***

Venue: Medical University Vienna, Center for Physiology and Pharmacology,  
Institute of Pharmacology, Waehringstrasse 13a, 1090 Vienna,  
**"Big Lecture Hall Pharmacology".**

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Friday	09.05.2014 15:30 s.t.	<b>Wolfgang Sadee</b> (host: H. Sitte) Felts Mercer Professor of Medicine and Chair, Pharmacology Director, Program in Pharmacogenomics The Ohio State University Columbus OH 43210-1239 USA
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***"Search for Non-coding Genetic Variants Relevant in Disease and Therapy"***

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Abstract. Noncoding variants in the human genome facilitate adaptation in a changing environment, but the vast majority of noncoding variants remains unknown. With widely diverse effects, only a small fraction of variants is likely to affect clinically relevant phenotypes. This is a critical challenge to understanding the genetics of complex disorders and treatments. We have developed an integrated computational and experimental approach to characterize and prioritize causal variants, with a focus on variants having clinical relevance. Such variants affect key genes in network hubs, tend to be under evolutionary constraints, and participate in epistatic interactions. I will present examples of noncoding variants in drug transporters, enzymes, and receptors with clinical relevance.