**Psychobiologisches Kolloquium**
Prof. Dr. Markus Heinrichs

Herzliche Einladung zum Vortrag:

**PD Dr. Stefan Wüst** (Universität Regensburg)

## Sequence variation in *NPSR1* - Evidence for a sex-specific impact of neuropeptide S on endocrine and central stress responses

Donnerstag 02.05. 2013, 18 c.t. – 20 Uhr

Konferenzraum - Lehrstuhl für Biologische und Differentielle Psychologie,
Stefan-Meier-Str. 8, 3. OG


### ABSTRACT

While epidemiological and clinical studies clearly identified stress as a significant risk factor for several psychiatric and psychosomatic disorders, the neurobiological mechanisms mediating this link are still poorly understood. The brain neuropeptide S (NPS) system could be of major relevance for central stress regulation. I will present preliminary findings suggesting that the NPS system significantly influences stress responsivity and that sequence variation in *NPSR1* gene may contribute to sex differences in stress regulation. Following an imaging genetics approach, we subjected healthy volunteers to a recently developed social stress paradigm for scanner environments called Scan*STRESS*. Significant and sex-specific interactions between a common *NPSR1* SNP and the neural stress response in a cluster close to the parahippocampal gyrus were observed (whole head corrected). The pronounced difference in prevalence rates between females and males for stress-related disorders, including depression, anxiety and cardiovascular disorders, is undoubtedly a multifactorial phenomenon. However, growing evidence supports the view that several facets of our stress regulation can be considered as phenotypes with a sex-specific genetic architecture.


### KURZVITA DR. STEFAN WÜST

Stefan Wüst studied Psychology at the University of Trier, Germany. He received his Ph.D. in 1997 from the University of Magdeburg. He then moved back to Trier, where he received the Venia Legendi for Psychology in 2006. In 2008, he was appointed Deputy Director of the Genetic Epidemiology in Psychiatry Group at the Central Institute of Mental Health, Mannheim. Since 2011, Stefan Wüst is head of the Personality and Behavioral Genetics Laboratory at the University of Regensburg.