### SS-15-02

V. Kumari. Institute of Psychiatry, London, United Kingdom

### SS-15-03

W. Fleischhacker. Psychiatrische Univers.-Klinik Innsbruck, Innsbruck, Austria

### SS-15-04

T. Sharma. Clinical Neuroscience Research, Dartford, United Kingdom

Monday, April 4, 2005

# W-09. Workshop: Schizophrenia, thalamus and the cortex: Molecular and functional neuroimaging studies

Chairperson(s): Peter Danos (Giessen, Germany), Mirjam Talvik (Stockholm, Sweden) 14.15 - 15.45, Holiday Inn - Room 4

- M. Talvik. Karolinska Hospital, Stockholm, Sweden
- V. Kumari. Institute of Psychiatry, London, United Kingdom
- R. Schloesser. University of Jena, Jena, Germany
- P. Delamillieure. CNRS, University of Caen et Pa, Caen, France
- M. Kromkamp. University Medical Center of U, Utrecht, Netherlands

Dr Talvik's (Karolinska Hospital, Stockholm, Sweden) PET examinations of drug-naive patients with schizophrenia indicate a lower dopamine D2 receptor binding in the right thalamus as compared to control subjects. This preliminary result has recently been confirmed by two other PET groups. Taken together this new in vivo data adds to results from studies using different methods that all indicate an aberrant thalamic dopamine system in schizophrenia. Dr. Kumari's (Institute of Psychiatry, London, UK) presentation will focus on the role of thalamus as a 'sensory filter' and on schizophrenia as a 'disorder of deficient sensory gating' as assessed with prepulse inhibition of the startle response. Prepulse inhibition provides a crossspecies neuropsychological model of sensorimotor gating, serving to prevent the interruption of ongoing perceptual and early sensory analysis. There is reliable evidence for deficient prepulse inhibition in schizophrenia patients and recent neuroimaging evidence demonstrates that thalamic abnormalities play a critical role in this aspect of schizophrenia. Dr. Schloesser (University of Jena, FR Germany) will highlight the connectivity between thalamic and cortical areas during working memory performance in schizophrenic patients and healthy subjects using functional MRI and structural equation modeling. Dr. Delamillieure (University of Caen and Paris V. France) will focus on the results of proton magnetic resonance spectroscopy of the thalamus in schizophrenia. The purpose of these studies is to show the utility of this technique in the understanding of the pathophysiology of schizophrenia. Dr. Kromkamp's (University of Utrecht, Netherlands) studies suggest a shared vulnerability to develop psychosis in thalamic circuits in schizophrenia and bipolar disorder. Homeobox genes involved in development and differentiation of the brain could play an important role in these disorders.

Sunday, April 3, 2005

### C-03. Educational course: How to develop a programme against stigma and discrimination because of schizophrenia

Course director(s): Norman Sartorius (Genf, Switzerland) 08.30 - 12.00, Hilton - Salon Studer

The descriptions of the work needed to develop a programme in a setting will serve to illustrate various ways of starting programmes, overcoming obstacles, building teams and evaluating the results of the work done. The course will be interactive, allowing participants who have an interest in starting programmes to obtain advice and guidance from the faculty. Materials that have been developed during the WPA Global Programme Against Stigma and Discrimination because of Schizophrenia will be made available to the participants.

Tuesday, April 5, 2005

# C-12. Educational course: Cognitive dysfuction in schizophrenia - Brief clinical assessments and treatment strategies

Course director(s): Tonmoy Sharma (Dartford, United Kingdom), Veena Kumari (London, United Kingdom) 08.30 - 12.00, Hilton - Salon Bialas

Schizophrenia, the most severe form of psychopathology, affects about 1% in the general population. Cognitive impairment is a central feature of this illness and causes poor functional outcome, including deficits in social, occupational, and self-care activities. The cost borne by the society in terms of social welfare administration and criminal justice, the time spent by unpaid caregivers, and the great loss of productivity due to the illness itself, are perhaps greater than the direct costs, such as, hospitalization. Functional deficits in schizophrenia are most strongly predicted by the current severity of cognitive impairment, followed by the severity of negative symptoms. Severity of positive symptoms is not strongly associated with the level of functional impairments, even in those with very poor outcome schizophrenia. There is thus an urgent need to find strategies for improving cognitive functioning in schizophrenia. Whilst atypical antipsychotics have been found to have greater effects on cognitive and negative symptoms than conventional antipsychotics, patients with schizophrenia still have lingering deficits. The proposed course will concentrate on the recent advances of the techniques that enable us to characterize cognitive deficits in schizophrenia clinically and possible methods both psychological and pharmacological in its treatment.

Wednesday, April 6, 2005

### C-19. Educational course: Delusions - diagnosis and treatment