

(3) quantitative structural MRI brain volumes and (4) DNA characteristics from blood samples. Currently about 400 case-controls and 150 out of 700 potential sib-pair families have been investigated. Coded data are transferred to an IBM DB2 relational database suitable for multivariate and data mining exercises. Preliminary analyses of data indicate relationships between diagnosis and genes regulating monoaminergic pathways and specific chromosomal regions. MRI data indicate possible subgroups among patients with schizophrenia with reductions of white and gray cerebral volumes and vermian lobules. When further expanded, the HUBIN database will allow the validation of previous and new hypotheses concerning etiopathological aberrations among patients with schizophrenia.

### S01.3

The Italian Network for Research on Deficit Schizophrenia

S. Galderisi<sup>1\*</sup>, G.B. Cassano<sup>2</sup>, G. Invernizzi<sup>3</sup>, A. Rossi<sup>4</sup>, M. del Zompo<sup>5</sup>, M. Maj<sup>1</sup>. *1* Department of Psychiatry, University of Naples SUN; *2* Department of Psychiatry, University of Pisa; *3* First Psychiatric Clinic, University of Milan; *4* Department of Experimental Medicine, University of L'Aquila; *5* Department of Neuroscience, University of Cagliari, Italy

The concept of "deficit schizophrenia" (DS) was introduced to identify a relatively homogeneous subgroup of subjects with a diagnosis of schizophrenia characterized by the presence of enduring, primary negative symptoms.

A large multicenter study was carried out in Italy to test the hypothesis that DS represent a disease different from nondescript schizophrenia (NDS) by integrating historical, clinical, neuropsychological, neuromorphological and genetic data.

DS had less hostility, grandiosity and disorganized behavior than NDS subjects and a comparable severity of positive symptoms. They were characterized by a poorer premorbid adjustment during childhood and early adolescence, and were more impaired on general cognitive abilities. The deficit state was associated with an impairment of sequencing of complex motor acts.

Data analyzed so far confirm the pattern of historical, psychopathological and neuropsychological impairment previously reported in DS vs. NDS patients and, together with preliminary neuromorphological findings, seem to rule out the possibility that DS just represent the most severe form of the disease.

### S01.4

European First Episode Schizophrenia Trial (EUFEST)

R.S. Kahn\*. *For the EUFEST Study Group, University Medical Center Utrecht, The Netherlands*

The atypical antipsychotics have been shown to be at least as effective in treating and preventing recurrence of psychosis in schizophrenia without the concomitant emergence of these side effects. However, studies examining drug effects are usually conducted in highly selected samples, excluding patients with dual diagnoses (often drug use). Furthermore, the attrition rate in most of these studies is extremely high, which may be due to the double-blind nature of many of the designs. Thus the generalizability of the studies assessing the efficacy of the newer, atypical antipsychotics is limited at best. It has been argued that the beneficial effects of the new antipsychotics would fail to materialize when compared with low dose use of typical antipsychotics in (medication-naïve) schizophrenic patients. This European study will compare the one year outcome after treatment with various atypical antipsychotic medications (amisulpride, olanzapine, quetiapine) with that of a low dose (1–4 mg/day) of haloperidol, as measured by duration of

retention to allocated treatment. The study will be conducted in more than 10 European countries involving over 30 sites.

## S02. Helplessness and stress related disorders

*Chairs:* H.-J. Möller (D), F.A. Henn (D)

### S02.1

Loss of control and depression

H.-J. Möller\*. *Department of Psychiatry, University of Munich, Germany*

The concept of hopelessness/helplessness, focussing primarily on loss of control, might be an important interface between subjective experience of psychosocial stressors and the outcome in terms of depression or suicidal behaviour.

Life event research, which was very common in the last two decades, has demonstrated that different kinds of stressful life events are related to depression and suicidal behaviour indicating that apparently the quantitative amount of stressful life events is more important than specific "depression-related" stressors, a position that was formerly proposed particularly by psycho-dynamic therapists. Nevertheless, also life event research has demonstrated that different life events can have a different meaning for each individual patient. However, it must be underlined that not all people who have experienced a heavy life event burden react in such a way, but apparently genetic dispositions, personality traits, biographical experiences, coping patterns and social support are of importance in a complex theoretical model. In this model the construct of hopelessness/helplessness, which might be the final psychological subjective pathway of the interaction with stressful life events, seems of great relevance.

However, the hopelessness/helplessness concept for depression and suicide should not be over-generalised and the limitations of this concept should be taken into account. For example, evidence for this model in bipolar depression and suicide related to bipolar depression, and especially mixed states in bipolar depression, has not yet been demonstrated.

### S02.2

The consequences of loss of control in animal models

F.A. Henn\*. *University of Heidelberg, Central Institute of mental Health, Mannheim, Germany*

The presentation of adverse stimuli to animals under conditions in which they can not control the stimuli, i.e. end the stimuli, leads to symptoms of depression compared to animals that receive the same stimuli but have control over the end point. Experiments with a yoked cage design have shown that the lack of control by itself is the crucial factor in the development of subsequent helpless behavior. This has been examined in rats and it was found that when exhibiting learned helplessness the animals had also altered HPA axis activity, changes in NE and 5HT systems and a variety of behavioral changes including decreased sleep, weight loss, impaired learning, decreased libido. This occurred preferentially in animals that could not control the termination of the adverse stimuli even though the animals in the yoked cages received exactly the same biological stimulus. Thus the psychological factor of control can be shown to influence the neuroplasticity of the rat brain,