decisions (e.g., when to discharge a patient or whether to increase drug dosage) exclusively on patients' reports of their symptoms.

#### S17.02

Kinematic analysis of facial expression behaviour in psychiatric patients

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**Background:** There is a long tradition to develop valid instruments for the exact assessment of psychomotor dysfunctions in psychiatry. However, progress is hampered by the complexity of emotionally driven movements in psychiatric patients.

**Methods:** Methods used up to now either remains unspecific due to only qualitative measurements or focus on the neurophysiological aspects too much.

**Results:** Thus, the results accomplished so far are only very general unspecific concerning different groups of psychiatric patients. In this lecture, an own method are presented which are aimed to avoid the two poles above mentioned. Kinematic analyses of facial expressions provide quantitative and quite specific informations about psychomotor dysfunctions of psychiatric patients and the effects of psychotropic substances.

**Conclusions:** Thus, this methods are well suitable for relating them to other neurobiological parameters in order to contribute to the pathophysiological understandig of psychomotor symptoms and nonverbal behaviour in psychiatric patients.

#### S17.03

Poor nonverbal communication, negative interpersonal events, and recurrence of depression

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Background and Aims: Negative interpersonal events and social stress are well identified risk factors for the onset and course of depression. The mechanisms that explain why depression-prone people get entangled in these negative interactions, however, are insufficiently understood. In previous studies we have demonstrated that the more similar the nonverbal involvement behavior of depressed patients and of interviewers becomes during a baseline interview the more favorable the subsequent course of depression will turn out to be. Such nonverbal similarity has been shown to play a role in rapport and in satisfaction with interactions. We hypothesize that 1) lack of nonverbal similarity also underlies the occurrence of negative interpersonal events and 2) these events mediate the association between lack of nonverbal similarity and recurrence of depression.

**Methods:** From videotaped baseline interviews we registered the nonverbal involvement displays of 101 remitted depressed patients and of interviewers. The patients were followed up to 2 years.

**Results:** Lack of nonverbal similarity (cox regression: p=.031) and interpersonal events (cox regression: p<.001) predict recurrence of depression. Lack of similarity also predicts interpersonal events (cox regression: p=.003). The events mediated the association between convergence and recurrence of depression.

**Conclusion:** The findings indicate that nonverbal communication underlies the stressful events that in turn provoke a (new) depressive episode.

## S17.04

Non-verbal behaviour and social cognition in schizophrenia spectrum disorders

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**Background and Aims:** Several studies have consistently shown that patients with schizophrenia spectrum disorders (SSD) display less expressive behaviours during social interaction. There is, however, a paucity of research into the underlying emotional or cognitive abnormalities in SSD. It is theoretically conceivable that patients engage less in social interaction, because they misinterpret intentions and dispositions or overattribute desires and thoughts to their interlocutors.

**Methods:** We tested the hypothesis that the non-verbal behaviour of patients with SSD correlates with their understanding of other people's thoughts and intentions, known as "theory of mind" (ToM) and with their ability to decipher emotional expressions from faces. Standard ToM picture stories and pictures of facial affect were given to a group of 50 patients with SSD. The patients' nonverbal behaviour was measured using the Ethological Coding System for Interviews (ECSI; Troisi, 1999). In addition, intelligence, executive functioning and psychopathology using the PANSS were assessed.

**Results:** Preliminary results suggest that patients' nonverbal behaviour correlates with ToM, emotion recognition, verbal intelligence and cognitive flexibility.

**Conclusions:** These findings point to an important link of social cognitive abilities with the actual non-verbal behaviour of patients with schizophrenia.

# Symposium: Psychopathology and classification - married or divorced?

#### S16.01

Psychopathology and classification: Married or divorced

M. Musalek. Anton Proksch Institute, Vienna, Austria

Psychopathology is a science of methods in psychiatry for evaluation of abnormal mental states and mental disorders based on psychic alterations. Different methodological approaches have been used to enlight the phenomenology, pathogenesis, significance and nosological position of psychiatric disorders resulting in an enormous amount of knowledge concerning explanation and understanding of mental disorders. But the more the monstrous contemporary classification systems, e.g. ICD-10 and DSM-IV gained importance in the last decades, the smaller the interest in accurate phenomenological and psychopathological analyses and knowledge became. The main requirement for diagnostics and classification systems is its clinical relevance with respect to treatment and prognosis. Various empirical studies showed that classical categorical classification systems of mental disorders were of minor value concerning pathogenesis-oriented treatment approaches. A possible alternative to the classical categorical approach may be a dimensional approach. Such diagnostics focus on the constellation of conditions of single psychopathological phenomena and/or symptoms and its meaning for the patient suffering from them. According to the results of recent phenomenological and psychopathological studies the pathogenesis of a mental disorder has to be considered as a multidimensional process in which various mental, physical and social factors and their meanings for the sufferer act as predisposing,

triggering, and disorder-prolonging factors. Effective treatment strategies have to be based on an accurate differential diagnosis concerning the complex constellation of conditions underlying and establishing the dynamic process of a disorder and its meaning

## S16.02

Pychopathology and classification - married or divorced

G. Stanghellini. Department of Biomedical Sciences, University of Chieti, Florence, Italy

Qualitative analyses is a phenomenological-oriented framework for psychopatological research useful in hypothesis formulation and exploratory studies, as well as in assessement of real world, first-personal experiences of laboratory findings or sub-personal impairments. Its aim is a wide range understanding of the patient's morbid subjectivity, not constrained in a priori fixed schemata.

We describe the basic principles of this method applied to psychopathological research. The qualitative approach to anomalous experience is concerned with bringing forth the typical feature(s) of actual personal experiences. A three-step procedure is described entailing assessement of subjective experiences, positing of subjective experiences within personal narratives and finally the construction of trans-personal prototypes. Qualitative research method is based on systematic but flexible interrogation of initially unstructured phenomena; it requires maximum elasticity in generating new categories from phenomena and enhances dense conceptual development and dialectical process between phenomena and the clinician's conceptualizations. It promotes also clinical setting as a source of relevant data of research; it also allows knowledge of single patients deeper than the experimental setting and may promote s a more circunstantiated comprehension of them.

# Symposium: Current issues on genetics of suicidal behaviour

## S30.01

Genetic findings in the HPA-axis in suicide attempters

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According to a stress-vulnerability model, genetic set-up, as well as environmental exposure to psychological stress, contributes to a person's predisposition for suicidality, as well as to Major Depression (MD). The main neurochemical findings on suicidality have suggested alterations in neurosytems which are usually implicated in MD; a lowered serotonergic (5HT) activity, depletion of the noradrenergic (NA) system and dysregulation of the hypothalamic-pituitary-adrenal (HPA) axis. Whereas the genes of e.g. the 5HT system and of the key NA-biosynthesis enzyme, tyrosine hydroxylase, have been studied extensively in this context the genes in the HPA axis have only begun to be investigated recently.

Our group was the first to study the genetic variation in the CRHR1 gene in connection to depression and stress among suicidal individuals. We reported also findings that genetic variation in a transcription factor of the POMC gene, TBX 19, which is regulated by CRH, showed association and linkage to the anger/hostility personality trait and suicidality. Those results suggest that genetic variation in the CRH-mediated regulation of the HPA axis is a factor of

importance in suicidality and, as other have shown as well, for major depression.

During symposiums the results obtained from the replication analyses of single nucleotide polymorphisms (SNPs) in candidate genes, in 1000 family trios with suicide attempter offspring, by using the transmission disequilibrium test both in a two-stages screening/replication sample design and in detailed reanalysis in the entire sample, will be discussed.

#### S30.02

Role of BDNF gene in suicidal behaviours

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Background and Aims: Brain Derived Neurotrophic Factor (BDNF) has been implicated in neuronal survival and plasticity and reported as being involved in various mental illnesses, including attempted and completed suicide. Evidence from postmortem studies has also shown an altered expression of BDNF in suicide victims brains. We previously investigated the impact of the Val66Met polymorphism of the BDNF gene in determining a suicide attempt in depressed patient and found an association between the BDNF variant and history of early maltreatment in depressed patients with suicide attempts. We then conducted a study on post-mortem brains of suicide completers and their controls to further test the hypothesis of an involvement of BDNF in suicide-related neurobiological processes.

**Methods:** 535 specimens of brain from subjects dead either by suicide (N=271) and by other cause (N= 261) were genotyped for the Val66Met and Prom 281 CA polymorphisms of the BDNF gene.

**Results:** No associations were found between either the first or the second variant of the BDNF gene and the suicidal behaviour.

**Conclusions:** as the case for other candidate genes, results from genetic studies of the BDNF gene are conflicting and arduous to replicate. Based on the analysis of bias in the study design and procedures, assimilation of methodology and increase in sample size could be helpful in addressing the result variability in such studies.

## S30.03

Role of serotonergic pathways on suicidal behaviour: Relationship with the impulsivity of the suicide attempt

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Suicidal behaviour is a serious problem world-wide. However, the number of risk factors and the complex nature of their interactions do not allow sufficiently accurate prediction of whether a given individual is likely to try to commit suicide. Several lines of evidence suggest that suicidal behaviour has a genetic component.

In recent years, a growing number of molecular genetic studies have focused on the serotonin system, suggesting that this system may be involved in the pathogenesis of suicidal behaviour, aggression, and impulsivity. Post-mortem studies have reported fewer serotonin transporter (5-HTT) binding sites and greater expression of serotonin 2A (5-HT2A) receptors in the brains of suicide victims compared to control subjects, partly due to functional polymorphisms that affect the expression of these genes.