Chairperson(s): Miquel Casas (Barcelona, Spain), Antoni Gual (Barcelona, Spain) 14.15 - 15.45, Holiday Inn - Room 8

M. Dahlin, P. Vaglum, J. O. Røvik, I. Bjelland, N. T. Grønvold, Ø. Ekeberg. Norra Stockholms psykiatri/Kar Psykiatri, Stockholm, Sweden

M. Casas. Unitat de Psychiatria Hospital, Barcelona, Spain P. Lusilla. Impaired Physicians Program (P, Barcelona, Spain R. Tyssen. Department of Behavioural Scie, Oslo, Norway

Addictions have been described as a major cause of impairment in physicians. The high prevalence of addictive behaviours in doctors has been attributed to different reasons: stress, burn-out, selfmedication, etc. This symposium aims at reviewing the characteristics of addictive behaviours across the lifespan of physicians, including the initial years at the medical school. Few studies have addressed the question of previous drug use among medical students and young doctors. That's why the first presentation (Alcohol use and illicit drug exposure among Swedish medical students and first-year interns) addresses the topic of drug use among medical students in Sweden. The transition from medical school to clinical work and its relevance concerning the use of drugs will be described in the second presentation, that focuses in alcohol consumption during the first ten postgraduate years of clinical work in Norwegian doctors (Use of alcohol and depression among Norwegian doctors: a 10-year longitudinal study). The third presentation describes epidemiological data on substance misuse among a large sample of anaesthesiologists, one of the medical specialties where higher rates of substance abuse have been reported (Substance misuse in a sample of 3700 French anaesthesiologists). Finally, the influence of addictive behaviours in the severity of impairment is analyzed in a sample of inpatient sick physicians from Spain (Sick physicians: How relevant are addictive behaviours for impairment). Those four studies offer a wide perspective on the use of drugs in different European countries and in different life stages of physicians.

Sunday, April 3, 2005

# C-01. Educational course: Early recognition and early diagnostics of addiction

Course director(s): Michael Musalek (Wien, Austria) 08.30 - 12.00, Hilton - Salon Bialas

Concluding the literature on early recognition and early diagnostics in addictions we may take as an ascertained fact that early recognition of addiction is an utmost important condition of successful treatment: the earlier the valid diagnosis, the better the prognosis. But in early recognition as well as in early diagnostics we are confronted with various problems that are difficult to solve. Examples of this are the almost entire lack of widely accepted early diagnostic criteria, the diagnostic uncertainty in the transient area between health and illness resulting in the risk of false positive and false negative valuations, the instability of diagnostic criteria – and all that in connection with the stigmatization caused by the diagnosis of addiction. To make matters worse, early recognition usually is the task of people not

trained in the field of addiction (e.g. non-psychiatric-medical professionals, nurses, social workers, probation-officers and judical officers, teachers, priests, relatives, employees, frie4nds, etc.). To cut the Gordian knot of early recognition, first, we need the development of valid and reliable criteria for early diagnosis of addiction; second, a close multi-professional cooperation and the development of liaison institutions with intensive and extensive educational activities: and last not least, the establishment of a "pentalogue" between all groups closely involved in prevention activities as psychiatrists, patients, relatives, industry representatives, and politicians. In the first three parts of the course after a short general introduction the various definitory and diagnostic approaches including modern dimensional diagnostics and their value in clinical practice will be discussed. Research on the pathogenesis of addictions showed that addictive disorders are caused by complex interactions of various mental, physical and social factors. But addictions cannot be longer reduced to psychopathological manifestations once established and therefore persisting. The addictive behaviour is a dynamic process which only persists if disorder maintaining factors become active. These disorder maintaining factors are not necessarily corresponding with the addiction's predisposing and triggering factors. As addictions represent nosological nonspecific syndromes with a multi-factorial pathogenesis modern integrative treatment approaches (including psycho-pharmacological, psychotherapeutic and socio-therapeutic methods) have to be based on an early multidimensional differential-diagnosis of all the predisposing, triggering, and disorder maintaining factors. In this context the disorder maintaining factors provide the basis for effective, pathogenesis-oriented treatment of the actual symptomatology, whereas the predisposing and triggering factors provide informations for planning prophylactic long-term treatment. The main focus of fourth part of the course is dedicated to the manifold problems concerning multi-professional approaches in the management of patients with addiction disorders in general and in the field of early recognition of addiction in particular. The final part of the course will focus on various involuntary (and sometimes even unexpected) side-effects of early recognition of addictions (e.g. effects of stigmatization) and the possible solutions of the manifold problems we are confronted with in early diagnostics.

Tuesday, April 5, 2005

# C-15. Educational course: Alcohol dependence

Course director(s): Karl Mann (Mannheim, Germany) 14.15 - 17.45, Hilton - Salon Bialas

Objective: The participants of this course will learn about new findings on the development, maintenance and treatment of alcohol dependence. A brief review on prevalence rates and diagnostic criteria distinguishing between dependence, harmful use and at risk consumption will be followed by a review of the neurobiology of alcoholism. Neurobiology research indicates dispositional factors including neuroadaptation and sensitisation in the development and maintenance of addiction. The treatment part includes a discussion of the pharmacotherapy of alcohol withdrawal as well as the rational for treating alcoholics with anti-

craving substances. Furthermore new approaches in the psychotherapy of people with alcohol problems will be outlined. Hereby we focus on technique and evidence based efficacy of Brief Interventions. The participants will be invited to an interactive style of learning and discussing. Examples of case vignettes can be presented to illustrate early diagnosis and intervention including modern techniques such as motivational enhancement therapy (MET), cognitive behavioural therapy and dialectic behavioural treatment according to M. Linehan.

Tuesday, April 5, 2005

# O-09. Oral presentation: Substance-related disorders

Chairperson(s): Mats Berglund, Ulrich Preuss (Greifswald, Germany) 16.15 - 17.45, Holiday Inn - Room 7

## O-09-01

Genetic variants of the glutamate system and their role in alcohol dependence withdrawal

U. Preuss. Johanna-Odebrecht-Stiftung Psychiatry, Greifswald, Germany

Objective: Upregulation of glutamatergic neurotransmission resulting from chronic ethanol intoxication may cause a hyperexcitable state during alcohol withdrawal which may lead to seizures and delirium tremens. The aim of our study was to evaluate the association between a history of alcohol withdrawal-induced seizures and delirium tremens, and a number of polymorphism of candidate genes of the glutamate system (Kainate GRIK 3, NMDA GRINR2A, mGluR5, 7, 8, Glutamate transporter EAAT1) in a sample of well-characterized alcoholics compared to controls.

Methods: 291 patients meeting DSM-IV alcohol dependence criteria and 611 controls, all of German descent, were investigated. Polymorphisms of candidate genes were determined using PCR (Polymerase Chain Reaction) of lymphocyte DNA. Characteristics of alcohol withdrawal, including delirium tremens and seizures, were obtained using the SSAGA (Semi-Structured Assessment for the Genetics of Alcoholism).

**Results:** A number of significant relationships between genetic variations of glutamatergic genes with alcohol withdrawal (EAAT1, mGluR5, GRIN2A) and delirium tremens (GRIK3) were detected.

Conclusion: The results are suggestive for a significant role a profile of glutamatergic gene variants increasing the risk for alcohol withdrawal and its complications. However, further investigation of the variant's pathophysiological role is warranted.

#### O-09-02

Neuroendocrinology of alcohol seeking behaviour, craving and relapse

F. Kiefer, K. Wiedemann. University of Heidelberg Central Inst. Mental Health, Mannheim, Germany

**Objective:** Alcohol intake is known to modulate plasma concentrations of neuroendocrine peptides. However, recent results suggest that the endocrine system may not only respond passively

to alcohol intake, but that -vice versa- it also actively modulates alcohol intake behaviour.

Methods: Review of recent data on neuroendocrine aspects of alcohol addiction.

Results: The most coherent body of data concerns the hypothalamo-pituitary-adrenocortical (HPA) axis, with low corticotropin releasing hormone (CRH) being associated with more intense craving and increased probability of relapse after acute detoxification. Leptin,  $\beta$ -endorphin and ANP, which indirectly regulate the HPA system, also may modulate the intensity of craving or the intensity of the alcohol withdrawal syndrome.

Conclusion: Although most of the currently available data demonstrates association rather than causality between neuroendocrine changes and alcohol-related behaviours, they do provide testable hypotheses and open up perspectives of treating alcohol dependence via manipulation of the neuroendocrine axis.

### O-09-03

Longterm follow-up of 180 chronic alcoholics during and after comprehensive integrated outpatient treatment: Relation of deterrent medication and outcome

H. Krampe, S. Stawicki, T. Wagner, C. Bartels, C. Aust, E. Ruether, W. Poser, H. Ehrenreich. MPI for Experimental Medicine Clinical Neuroscience, Goettingen, Germany

Objective: (1) To perform 9-year follow-up of abstinence, lapse and relapse in 180 chronic alcoholics who participated in the Outpatient Longterm Intensive Therapy for Alcoholics (OLITA); (2) To investigate the role of supervised DM intake in relapse prevention and as an adjunct for maintenance of longterm abstinence.

Methods: This prospective open treatment study evaluates longterm course of drinking outcomes and DM use of 180 chronic alcoholics consecutively admitted between 1993 and 2002. Subsamples are compared regarding (1) placebo-DM versus verum-DM (disulfiram/calcium carbimide), (2) coped lapses versus finally detrimental lapses versus malignant relapses, (3) DM use for 13-20 months versus DM use for > 20 months.

Results: During 9-year follow-up, cumulative probability of not having relapsed was .52, of not having consumed any alcohol .26. Despite longterm use, disulfiram/calcium carbimide were well tolerated. Patients on placebo-DM showed higher cumulative abstinence probability than patients on verum (S=.86 versus S=.49, p=.03). Successfully coped lapses occured later than detrimental lapses and malignant relapses (p<.001); patients with coped lapse had more days of DM intake and more subsequent days without DM than patients with detrimental lapse and with malignant relapse (p<.001). Cumulative abstinence probability was S=.75 for patients with longterm intake compared to S=.50 for patients who stopped DM between months 13 and 20 (p<.001).

Conclusion: The abstinence rate of over 50% strongly supports the concept of comprehensive, longterm outpatient treatment of alcoholics. Supervised, guided intake of DM, also over extended periods, can be employed as a predominantly psychologically acting pivotal ingredient of successful alcoholism therapy.

### O-09-04

Alcohol abuse among adolescents and its socio-economic parameters I. Licanin, A. Redzic, J. Delilovic, M. Spremo. *Psychiatric Clinic University Hospital, Sarajeva, Bosnia and Herzegovina*