

and devoid of intrinsic activity at the D<sub>2</sub>R. This original pattern, evidenced on recombinant human receptors, was confirmed *in vivo* in rodent models in which the drug was active at doses  $\leq 1$  mg/kg p.o. either as agonist or antagonist depending on the test.

Following successful preclinical and Phase I clinical studies, BP 897 is now submitted to clinical trials in order to assess the potential of this novel class of drugs in neuropsychiatry. The potential antipsychotic activity of BP 897 is consistent with i) the localisation of the D<sub>3</sub>R, ii) its enhanced expression in brain of schizophrenic patients, iii) association studies of a D<sub>3</sub>R polymorphism in schizophrenia, iv) occupancy of the D<sub>3</sub>R by all antipsychotics, v) efficacy of BP 897 in rodent schizophrenia "models". A double-blind placebo-controlled study of BP 897 in schizophrenic patients has been initiated.

Potential applications in drug abuse are consistent with i) localisation of the D<sub>3</sub>R, ii) efficacy of BP 897 in rodent models of drug seeking behaviours, i.e. cue-conditioned responses related to cocaine, morphine or nicotine.

Double-blind placebo-controlled clinical trials were initiated assessing relapse in tobacco smokers and alcohol abusers and are planned in cocaine addicts.

### S44.5

Eye movement disturbances and dopamine D3 receptor gene

J.K. Rybakowski<sup>1</sup>\*, A. Borkowski<sup>1</sup>, P. Czerski<sup>1</sup>, J. Hauser<sup>1</sup>.  
<sup>1</sup>Department of Adult Psychiatry, University of Medical Sciences, Poznan; <sup>2</sup>Department of Psychiatry, University Medical School, Bydgoszcz, Poland

Eye movement disturbances occur in a majority of patients with schizophrenia and in a proportion of their first-degree relatives and they have been postulated as a phenotypic marker of this illness. Molecular genetic studies of dopaminergic system may suggest a possible involvement of dopamine D3 receptor (DRD3) gene in some aspects of schizophrenia. The aim of the study was to measure an association between the intensity of eye movement disturbances (fixation and smooth pursuit) and the Ser9Gly polymorphism of DRD3 gene in 119 schizophrenic patients (74 male, 45 female). Eye trackings were measured by the infrared reflectometry method and the intensity of disturbances was quantified on 0–3 scale. The mean intensity of both kinds of disturbances was highest in Ser/Ser, significantly lower in Ser/Gly and lowest in Gly/Gly genotype. Ser/Ser genotype was more prevalent in patients with higher intensity of both fixation and smooth pursuit disturbances, and Ser/Gly genotype frequency was lower in patients with higher fixation disturbances. The results suggest that DRD3 gene polymorphism may be a contributing factor to eye movement disturbances, a phenotypic marker in schizophrenia.

## S45. Internet strategies for a non-governmental organisation

*Chairs:* C.B. Pull (L), N. Lindefors (S)

### S45.1

Information technology and future society

K. Olausson\*. *The Interactive Institute, Sweden*

The Interactive Institute, a national, interdisciplinary research institute working in the borderland between art, technique and

communication. Kenneth Olausson is president for the company which is free-standing, independent and is supported by funds from the Swedish industry, universities and college organizations and The Swedish Foundation for Strategic Research, who also own the Institute. The Institute is built gradually, shaped as studios around the country. Today there are studios in Stockholm, Malmö, Gothenburg, Umeå, Piteå, Visby and Växjö and approximately 150 researchers are today tied to the Institute.

The activities in a studio are characterized by innovative use of art and technique. Every studio has a unique aim, with the basic idea that a mixture of different disciplines creates totally new activity within research and development that no one earlier dared, which in return will lead to new products, services and companies. More information about The Interactive Institute can be found on <http://www.interactiveinstitute.se>.

### S45.2

Using Internet in clinical and epidemiology studies

J.-E. Litton\*. *Stockholm, Sweden*

The Internet clearly has a role to play in today's information age and will become increasingly important in our communications, our work life and our daily activities.

The medical use of the Internet presents enormous opportunities and challenges. Some of the promises that the Internet holds for medicine has been tentatively explored. However, the Internet potential as a mean in clinical and epidemiology studies remains largely untapped.

Using information technology in clinical and epidemiology studies new creative research strategies to advance digital forms can be used. It is not only web-forms on Internet that can be used, mobile phones, digital TV and PDA are others examples of items in the new electronic village that will give new possibilities in this studies. Not only new studies can be performed, the speed and access to database solutions using software like Extensible Markup Language (XML) will also change the way clinical and epidemiology strategies will be handled in next decade. XML is on its way to become a global standard for the representation, exchange, and presentation of information on the Web. More than that, XML is creating a standardisation framework, in terms of an open network of meta-standards and mediators that allows for the definition of further conventions and agreements in specific domains. This story of the evolution of a standardisation framework doubtlessly will end successfully in the case of XML, and I suggest that it should be considered as a generic model for standardisation processes in the future for clinical and epidemiology studies using new menus for digital forms.

### S45.3

Treatment of mental disorders via the Internet

G. Andersson<sup>1</sup>\*, P. Carlbring<sup>1</sup>, L. Strom<sup>1</sup>, V. Kaldö-Sandström<sup>1</sup>, L. Ekselius<sup>2</sup>. <sup>1</sup>Department of Psychology; <sup>2</sup>Department of Neuroscience/Psychiatry, Uppsala University, Sweden

Self-help treatment for mental disorders has gained increased popularity. Until recently, computer mediated therapies have been offered without any patient-therapist interaction. However, there now seems to have been a shift toward using the World Wide Web (WWW), to inexpensively administer self-help treatment instructions, in conjunction with some sort of text-based human interaction (e-mail). In our research program we have conducted seven randomized controlled trials for different conditions (e.g.,