Autobiographical memory retrieval (AMR) engages a set of processes including episodic and semantic memory, visual imagery, self-reflection, emotion, and executive functions. Neuroimaging studies have shown that a large left lateral and medial neural network is associated with AMR: hippocampus and parahippocampal regions, temporo-parietal junction, retrospenial cortex, medial and lateral prefrontal cortex. Among this neural network two regions have been the main focus of interest: the hippocampus and the medial prefrontal cortex (MPFC).

Classical models suggest that the hippocampus contributes temporary to the consolidation of memory. Long-term remote memories could be accessed directly via the neocortex and independently of the hippocampus. Neuroimaging findings support an alternative model and suggest that medial temporal structure binds neocortical representation into a memory trace. The activation of hippocampal region may be independent of age of acquisition of the event but may depend on the vividness, amount of detail and emotionality of the event recalled.

Autobiographical memory and the self are closely linked. Numerous imaging studies have implicated the MPFC in self-referential processing during AMR. The MPFC could be related to the retrieval of personal semantic knowledge as well as episodic personal knowledge. The MPFC is also involved in emotion regulation, social cognition and theory of mind. Taken together these findings suggest that within the AMR network, MPFC and hippocampus are good brain targets for understanding the pathophysiology of schizophrenia.

## S51.02

Evidence of long-term memory impairment in schizophrenia

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Abstract not available at the time of printing

### S51.03

Long-term memory and visuospatial navigation

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Background and Aims: Long-term memory is normally assessed with traditional measures such as the Wechsler memory scale. However, these measures might not fully capture individuals' daily experiences. Long-term memory system has three separate information components: 1) encoding; 2) storage; and 3) retrieval. These three processes are thought to occur in the hippocampal formation. One of the main functions of the hippocampus is to construct and maintain spatial maps of the environment. In fact, when the hippocampus is selectively lesioned, humans present severe spatial memory deficits. The right hippocampus is involved in allocentric object location memory (objects that are part of the environment) and finding one's way through complex environments. This part of the hippocampus is activated during physical navigation. The left hippocampus is activated during the retrieval of memory of navigation. It seems that the visuospatial model requires the encoding, binding and retrieval of an event and its context. Given these findings, visuospatial navigation tasks likely explore long-term memory. In fact, visuospatial navigation can be considered as a valid surrogate for long-term memory and a good probe to activate the hippocampal formation. Neuroimaging studies have greatly improved the literature by providing confirmatory evidence that the hippocampus, together with the parahippocampal and posterior parietal cortices, are engaged in visuospatial navigation. Further, there is evidence from neuroimaging studies that the hippocampus is involved during complex navigational situations. The usefulness of visuospatial navigation as a measure of longterm memory will be discussed.

#### S51.04

Exploring long-term memory and the hippocampus using functional magnetic resonance imaging

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During the past few decades, the schizophrenia cognitive literature has focused mainly on executive functions, a cluster of cognitive brain functions involved in attention, planning, sequencing, decision making, initiating and inhibiting behaviors which are associated with the prefrontal cortex. Emerging evidence, however, indicates that long-term memory, associated with the temporal lobes, is an equally, if not more salient feature of the impaired cognitive profile of schizophrenia. Evidence of impaired encoding relative to spared post-encoding, and an apparent dissociation between the levels of impairment of explicit and implicit memory processes, provides further indication that the long-term memory deficits of schizophrenia are mediated primarily by the medial-temporal lobes rather than other cortical structures. Functional magnetic resonance imaging (fMRI) has been used to investigate the neurobiological basis of long-term memory deficits. Data from these studies have confirmed the role of the frontal, medial and inferior temporal regions in the memory dysfunctions observed in patients. Further, research suggests that memory strategies used by individuals with schizophrenia might be impaired as a result of the disturbance of the functional connectivity of prefrontal and temporal-limbic structures. In order to identify the unique contribution of the temporal lobes to the long-term memory deficit of schizophrenia, fMRI studies must focus on memory tasks which specifically elicit activation in this brain region.

#### S51.05

The clinical implications of the long-term memory impairment of schizophrenia

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Abstract not available at the time of printing

# W16. Workshop: IMPULSE CONTROL DISORDERS: ASSOCIATION WITH OBSESSIVE COMPULSIVE DISORDER AND IMPULSIVITY

## W16

Impulse control disorders: association with obsessive compulsive disorder, addiction and impulsivity

I. Iancu<sup>1</sup>, K. Lowengrub<sup>2</sup>, P.N. Dannon<sup>3</sup>, G. Anholt<sup>4</sup>, C. Alter<sup>5</sup>. <sup>1</sup> Department of Psychiatry B, Beer Yaakov Hospital, Beer Yaakov, Israel<sup>2</sup> Rehovot Community Clinic, Rehovot, Israel<sup>3</sup> Tel Aviv University, Tel Aviv, Israel<sup>4</sup> Department of Clinical Psychology, University of Amsterdam, Amsterdam, The Netherlands<sup>5</sup> Hôpital Paul Brousse, APHP Villejuif, Villejuif, France This workshop will discuss several impulse-control disorders, such as pathological gambling (PG) and kleptomania, and present an expanded conceptualization of their phenomenology.

PG might be considered as an obsessive-compulsive spectrum disorder, a form of non-pharmacological addiction or an impulse control disorder. Accordingly, we will present three subypes of pathological gamblers: the 'impulsive' subtype, the 'obsessive-compulsive' subtype, and the 'addictive' subtype.

Kleptomania is an impulse control disorder, but may be a form of obsessive compulsive spectrum disorder. On the other hand some authors described the kleptomanic behaviour as an addiction.

Based on these considerations we will bring together knowledge from clinical experience, neuroimaging examination and neuropsychological assessment, that might lead to better and wider understanding of these conditions. We will present a study that examined whether pathological gambling, a disorder belonging to the OC Spectrum, is characterized by dysfunctional cognitions as in OCD. OCD patients exhibited higher OCD cognitions than both panic patients and normal controls, but equal to PG patients. Pathological gamblers exhibited, however, no increase in OCD symptoms. These mixed results do not seem to support the OC Spectrum theory for PG.

We will also present recent publications on reward sensitivity and decision making in addictive behaviours and discuss the importance of identification and clarification of the neural substrates involved in decision-making.

Finally, we will summarize the rapidly accumulating body of knowledge related to the neurobiology of impulsiveness from multi-disciplinary neuropsychological and neuroimaging studies.

# W17. Workshop: YOUNG PSYCHIATRISTS NETWORK IN EUROPE

## W17.01

Networking in psychiatry, towards a new adventure!

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In the last two decades networking in psychiatry has became more and more important. The globalisation makes the world smaller and it has been easier for young psychiatrists around the planet to meet and share their ideas about research, education and training, avocation and patient care. Two of the main young psychiatrist's initiatives that reflect the importance of such international networks, are: the European Federation for Psychiatric Trainees (EFPT) founded in 1992 in the UK and the World Association of Young Psychiatrists and Trainees (WAYPT) founded in San Francisco (2003). In this presentation we will discuss benefits and difficulties these organizations meet.

### W17.02

The situation of training in psychiatry in south eastern europe and the relevance of young psychiatrists' networks: Experiences from Croatia

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**Background and Aims:** Croatian Young Psychiatrists and Psychiatric Trainees Section was founded on December 15, 2005. as part of Croatian Psychiatric Association, established to promote different activities using network of young psychiatrists accros the world. In order to indicate activities that could fulfill possible gaps in our educational system, we performed a study among psychiatry residents and young specialists from different Croatian psychiatric centers.

**Methods:** 91 participants answered the questionnaire constructed to obtain information about profile of young psychiatrist in Croatia, objective parameters of educational quality to produce competent psychiatrist, evaluation of residency training and suggestions of how to improve the current educational system.

**Results:** Study results indicate that Croatian psychiatry residents are derived from a pool of average to above average medical students and majority is engaged in postgraduate studies and research acitivities and shows high interest in specific psychiatric fields such as psychotherapy and clinical psychiatry, but low interest in community psychiatry and mental health. Most of participants are only partially satisfied with the current residency training and feel that most problems reside from the lack of practical psychotherapy, the inefficiency of the mentorship system and the lack of opportunities for student's exchanges with other countries.

**Conclusion:** The results of this study revealed the major problems of psychiatry residents in Croatia. Following those results, we will perform the study that would include mentors and supervizors from different Croatian psychiatric centers. That could enable the developement of specific interventions with aim to improve current residency training in Croatia.