



Università degli Studi di Padova
Dipartimento di Psicologia Generale

***Corso di Laurea Magistrale in Neuroscienze e Riabilitazione
Neuropsicologica***

Sleep and Cognition: from information processing in sleep to 'offline' memory consolidation

Prof. Manuel Schabus, PhD

Laboratory for "Sleep and Consciousness Research"
Department of Psychology
University of Salzburg, Austria

Venerdì 1 giugno 2018, ore 10.00-14.00
Aula Magna "Cesare Musatti", Via Venezia 8, Padova



Prof. Schabus will focus on three main topics. 1. He will review sleep and memory literature and highlight data from his laboratory which focused on the significance of (light and deep NREM) sleep spindles in the declarative (fact) and procedural (mainly motor learning) domains. 2. He will turn to a brand new and "hot" topic in the field, namely "targeted memory reactivation". The idea is that sleep mechanisms which are known to be beneficial for memory improvement (such as spindles or deep slow-wave sleep oscillations) are actively enhanced using for example odor-cuing, stimulation with auditory tones in deep sleep, neurofeedback or even electrical stimulation. 3. He will summarize exciting "sleep and cognition" findings where scientists focus on the processing of information in sleep. That is, is the brain really inactive and shielded from the environment during sleep or is it actually actively processing complex incoming information such as one's own name, the voice of a foreigner or one's own mother, etc.?

In summary, he will give a guided tour through the sleeping brain and focus on its relevance for memory consolidation and its capacity for active information processing while "offline".

Proponenti: Prof. Michela Sarlo e Dr. Nicola Cellini

Seminario aperto a tutti gli studenti e i docenti interessati