

October 12, 2010

Neuropharmacology of visual attention

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ABSTRACT OF THE TALK

Attention is a rich psychological and neurobiological construct which influences almost all aspects of cognitive behaviour. It enables enhanced processing of behaviourally relevant stimuli at the expense of irrelevant stimuli 1. At the cellular level this is mediated by alterations in cell activity and in alterations of rhythmic synchronization of cell ensembles. Firing rate changes occur at least in part when the brain chemical acetylcholine activates specific brain areas 2. Attention induced alterations of rhythmic synchronization of cell ensembles may be dependent on NMDA 3 or acetylcholine mechanisms 4. In this talk I will present some of these recent findings, and discuss them in light of everyday perception

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- 3 A. Buehlmann and G. Deco, *J Neurosci* 28, 7679 (2008).
- 4 R. Rodriguez, U. Kallenbach, W. Singer, et al., *J Neurosci* 24, 10369 (2004).