Département de psychiatrie
Centre de neurosciences psychiatriques
Site de Cery
CH-1008 Prilly - Lausanne

Centre de Neurosciences Psychiatriques

CNP SEMINAR

ANNOUNCEMENT

Thursday, June 27, 2013, 11:15

"How can connectomics inform us about the brain basis of psychiatric disorders? Evidence from ADHD"

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Connectomics defines a new field in neuroscience, which uses imaging techniques to map the anatomical and functional networks through which brain regions are interconnected. Studying the brain as a network is motivated by the hypothesis that the pattern of connectivity between regions that are specialised for specific functions poses limits on brain processing abilities. In this talk I will present results from a recent study on attention-deficit hyperactivity disorder (ADHD) that highlight the relevance of connectomics to advancing our knowledge of psychiatric disorders. I will also present new data illustrating how large-scale brain network dynamics may be manipulated via exogenous interventions (i.e., trans-cranial magnetic stimulation), opening new avenues for the treatment of psychiatric disorders.

References (can be downloaded here: https://sites.google.com/site/lucacocchiphd/) :

1. Cocchi L., Zalesky A., Fontenelle L. F., How can connectomics advance our knowledge of psychiatric disorders? 2012. Revista Brasileira de Psiquiatria. 34 (2): 131-134.

2. Cocchi L., Bramati I. E., Zalesky A., Furukawa E., Fontenelle L., Moll J., Tripp, G., Mattos P. 2012. Altered functional brain connectivity in a non-clinical sample of young adults with Attention-Deficit/Hyperactivity Disorder. Journal of Neuroscience. 32(49):17753-61.

3. Zalesky A., Cocchi L., Fornito A., Murray M.M., Bullmore, E.T. Connectivity differences in brain networks. 2012. NeuroImage. 60 (2):1055-62.

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