



Shaar Menashe MHC

Update summary talk by Professor Hendler and invitation for the next 6 December talk by Professor Idan Segev

Professor Talma Hendler demonstrated how a psychological concept and the phenomenological "field" of "Empathy" experience, can be traced to neuronal network representations in the brain. This by using brain imaging signal-processing analysis. It can be assumed that in her study she unravels the brain mechanisms of empathy. Her work (published, see PUBMED) is directly relevant to clinicians dealing with emotions of fear and mood related to empathy generating events.

Professor Hendler, started her talk by offering a detailed explanation about the definitions of neuronal network organization in the brain, she then moved on to show how brain signals can be analyzed to detect network organization as synchronized "togetherness" activity and then showed that by using experience (in this case emotional eliciting scenarios from movies) activation and detection of emotional-related and specific networks is possible.

The audience was composed of both clinicians and neuroscientists and it is needless to say that clinicians dealing with emotional disturbances found it directly relevant to understanding the brain of their patients. For the neuroscientists in the audience, the connections with the clinical manifestations of emotional disturbance was intriguing.

Author note (Abraham Peled) : with the progression of this seminar it is expected that networking between the clinicians and neuroscientists will result in a research scientific working group.

Save the date for the next meeting 6 December talk by Professor Idan Segev about The Human Brain Project

See invitation program at: <http://neuroanalysis.org.il/wp-content/uploads/2011/09/seminar-Shaar-Menashe-20141.pdf>

Idan Segev is the David & Inez Myers Professor in Computational Neuroscience and former director of the Interdisciplinary Center for Neural Computation (ICNC) at the Hebrew University of Jerusalem, where he received his B.Sc (1973) in Math and Ph.D (1982) in experimental and theoretical neurobiology. He initiated the prestigious international EU course in Computational Neuroscience His work is published in the top journal such as Science, Nature, PNAS and he received several awards including "best teacher" in international brain-courses. His research team utilizes computational and theoretical tools to study how neurons, the elementary microchips of the brain, compute and dynamically adapt to our ever-changing environment. In recent years, his group worked jointly with several experimental groups worldwide in an endeavor to model a whole piece of the mammalian cortex with the ultimate goal to unravel how local fine variations within the cortical network underlie specific behavioral function and may give rise to certain brain diseases or to healthy and "individual" brains.