Brain Mapping Center

SEMINAR SERIES

Sponsored by the UCLA Brain Mapping Center faculty

The focus of these talks is on advancing the use of brain mapping methods in neuroscience with an emphasis on contemporary issues of neuroplasticity, neurodevelopment, and biomarker development in neuropsychiatric disease.

Hosted By: Danny Wang, Ph.D., Neurology, UCLA

Neurostimulation Combined with Neuroimaging for Cognitive and Clinical Research

Vincent P. Clark, Ph.D.

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Through a series of technical advances, neuroimaging has made many significant contributions to our understanding of normal human brain function, and the differences associated with brain and mental illness. However, these mainly correlational methods can only be used to infer causal relationships. Other interventional methods must be used to prove or disprove causal relationships. Also, these advances in imaging methods have not turned into direct benefits for patients in many cases, due to a variety of factors. Recent studies have reported that neurostimulation can reduce some symptoms of brain and mental illness and may offer new methods of treatment if safe, effective protocols can be developed. The combination of neuroimaging and neurostimulation together may provide a variety of benefits: improving the efficacy of neurostimulation, gaining a greater understanding of the mechanisms of neurostimulation, offering new methods to test causal hypotheses generated by imaging studies and ultimately providing new neurostimulation-based methods of treatment for brain and mental illness. Dr. Clark will discuss some proof-of-principle examples for the combined application of neuroimaging and neurostimulation and his vision for the future of this area of research.

April 2, 2015 11:00 am - 12:00 pm

Neuroscience Research Building (NRB 132)
635 Charles E. Young Dr. South

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