

## Neuroscience Seminar Series

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**Friday, June 9<sup>th</sup>, 2017 at 11:30**

Salle des Conférences (R229)

Centre Universitaire des Saints-Pères

45 rue des Saints-Pères, 75006 Paris

# Alan P Koretsky

PhD

Laboratory of Functional and Molecular Imaging, NINDS, Bethesda, USA

## *Localization of Synaptic Sites of Cortical Plasticity by MRI*

*Functional MRI techniques have found widespread use to measure brain neural circuits that are used for a large number of behaviors. When circuit activity changes due to plasticity, it remains a challenge to identify sites of synaptic changes responsible for the circuit level changes measured. Of particular interest are the cases of long range cortical rearrangements that have been detected in the human brain after injury. Rodent models that mimic some of these cortical rearrangements have been developed and are being used to determine the synaptic basis for the plasticity detected. We have developed a model of adult cortical plasticity due to peripheral somatosensory nerve damage that is being used to develop MRI tools that can pinpoint sites of synaptic changes. The presented results demonstrate that MRI is positioned to begin to give laminar specific information about mechanisms of cortical plasticity.*

Those interested in meeting with the speaker please contact

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