Neuroimaging in Alzheimer’s Disease Research

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Abstract
Alzheimer’s disease (AD) is the leading cause of dementia and a major burden to the society. Despite of numerous efforts and considerable support, no disease modifying therapy is currently available to treat or prevent AD. In this talk, Dr. Su will give a brief review of AD and common imaging techniques used in AD research. He will then discuss his current research in three areas. As a technology that can perform in vivo measurements of the brain, neuroimaging provides important information that can facilitate research and drug development efforts. The first topic of this talk will focus on the development of accurate and robust quantitative image analysis techniques to support these efforts. Recently, there is an increasing appreciation of AD as a disorder with complex etiology and multiple pathogenesis pathways. The second topic of this talk will focus on the efforts to develop novel imaging biomarkers to increase our arsenal of techniques to investigate AD. Finally, the discussion will describe the efforts to understand the genetic factors that affect AD pathology and its progression.

Biography
Dr. Yi Su recently joined the Banner Alzheimer’s Institute (BAI) as a Senior Scientist and directs the Banner Imaging Research Analysis Lab. He oversees the computational image analysis operation at BAI. Previously, he was an Assistant Professor at Washington University School of Medicine in St. Louis. Dr. Su received his Ph.D. in biomedical engineering from the Mayo Graduate School in Rochester, MN, followed by a postdoctoral training in molecular imaging at Washington University. He then started his career there as a faculty member in the Neuroimaging Laboratories. Dr. Su’s research focuses on the development and application of novel imaging techniques to study brain function and pathology, especially in the context of the Alzheimer’s disease and related dementia. His research is currently supported by several awards from NIH and private foundations.

Hosted by: Yalin Wang