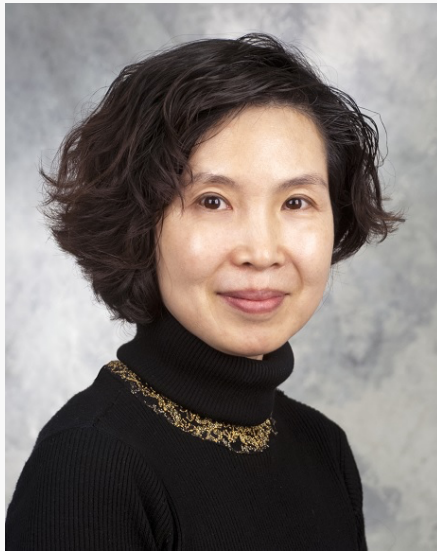




BIRC Speaker Series '18-'19

09/05/18 Wednesday, 1:30-2:30, Arjona-307

“Neuroimaging Markers of Cognitive Reserve and Brain Aging”



Lihong Wang PhD, UCONN Health, Dept of Psychiatry

Our brain can reorganize its function and neural resources to counteract neural damages. The ability of reorganization of brain function depends on cognitive reserve capacity. To examine dynamic changes of cognitive reserve over time, we developed a new measure for evaluating neural compensatory capacity, a core factor of cognitive reserve, using independent component analysis and a cognitively very challenging task in older adults. Interestingly, we find higher neural compensatory capacity to be related to working memory function. In another study, we show a one-month physical exercise training to improve working memory as well as neural compensatory capacity through activating additional neural networks, i.e., the cerebellar and motor cortex. We believe the new measure on neural compensatory capacity can be applied to broad lines of research on neuroplasticity. Other imaging markers related to brain aging and cognitive decline will also be discussed.

BIO: Dr. Wang obtained her Ph.D. degree in neurology from Japan and has six years of experience as a neurologist in China. She has performed neuroimaging-related research in depression at Duke University for over 12 years, primarily focused on geriatric depression and cognitive neuroscience. Her recent research centers on neural signatures of depression vulnerability and neural plasticity in patients with late-life depression and mild cognitive decline.

Please email us if you would like to meet with Prof. Lihong Wang.

Shuttle btwn UCHC & Storrs: transpo.uconn.edu/blank/uconn-health-center/

Remote access: ucsf.zoom.us/j/7384800369

Contact: BIRC@uconn.edu

Please email us if you would like to meet with a speaker

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