THE WINIFRED MASTERSON BURKE MEDICAL RESEARCH INSTITUTE

WEEKLY COLLOQUIUM

TUESDAY, 06/21/2011, 12:30 PM
ROSEDALE CONFERENCE ROOM
BILLINGS BUILDING

TRANSLATING SPATIAL NEGLECT TO STROKE PATIENT CARE

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RESEARCH ABSTRACT

What is spatial function? Is it “higher-order” vision? Or could spatial attention and perception be multi-modal? Could internal spatial representations compute relationships between the body, objects and space across multiple visual, auditory, vestibular and somesthetic reference frames, from multiple viewpoints? And, most critically, could there be dedicated spatial-motor information processing? These are the basic science questions we and our collaborators in cognitive neuropsychology, cognitive neuroscience and behavioral neurology have asked, in order to improve the rehabilitation of a devastating spatial disorder affecting 30-85% of stroke survivors. Spatial neglect, asymmetric spatial behavior associated with functional disability, has conventionally been regarded as a single disorder. Our laboratory has asked whether the information processing stage most affected (“where” perceptual-attention and internal representation, versus “aiming” motor-intentional action) may be critical to stratifying natural recovery and response to treatments. We use information from basic behavioral science to propose new predictors and new methods of analyzing emerging neglect treatments, so as to bridge the gap between discovery science, and therapeutic development for neurorehabilitation.

Publications


FOR MORE INFORMATION ON THE WEEKLY COLLOQUIA, CONTACT vaccumanno@burke.org
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