

Course Objectives

MedBridge

Using Brain Imaging and Stimulation to Inform Rehabilitation, Pt. 2

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Course Description:

This course will focus on how advanced brain imaging can inform our understanding of the behavioral manifestations of changes in brain structure and function in neurologic conditions. Using two examples: stroke and concussion, common changes in brain structure and function thought to be associated with cognitive and motor impairments will be described. Finally, how the clinician can exploit the information provided by human brain imaging to improve patient outcomes will be discussed.

Course objectives:

At the conclusion of this course, the learner will

1. Using stroke and concussion as two examples, explain how structural and functional changes in the brain are linked with the capacity for re-learning and recovery of function.
2. Summarize evidence from neuroimaging showing neuroplastic change in both structure and function is associated with response to rehabilitation.
2. Identify rehabilitation implications of major findings from state-of-the-art neuroimaging research that can lead to improved patient outcomes.