

Speaker:

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Title: Neural correlates of limb posture and movement control

Abstract:

The ability to move and to stabilize the hand is critical for many activities of daily living such as bringing a spoonful of soup to the mouth without spilling. In this talk I will describe functional brain imaging studies that explored the neural correlates of adaptive feedforward and feedback control of limb posture and movement in healthy human subjects. A recent study from our lab suggests that these two control functions may be differentially impaired after stroke. I will describe a study designed to examine coordination between these control mechanisms in healthy subjects as well as ongoing studies designed to examine how such coordination might be disrupted after stroke. I will close by describing planned brain imaging and motor control studies intended to advance this line of inquiry.

Talk topics

Stroke

Posture and movement

Redundancy

Credit assignment

Imaging studies – read Nicolas' papers / Michael Arbib

To do:

- 1) Postureography paper
- 2) Asnani paper
- 3) Xiaolin paper
- 4) Imaging paper