

Materials List for:

# A Multimodal Imaging- and Stimulation-based Method of Evaluating Connectivity-related Brain Excitability in Patients with Epilepsy

Mouhsin M. Shafi<sup>1,2,3</sup>, Susan Whitfield-Gabrieli<sup>4</sup>, Catherine J. Chu<sup>1,5</sup>, Alvaro Pascual-Leone<sup>1,2,3</sup>, Bernard S. Chang<sup>1,2</sup>

<sup>1</sup>Department of Neurology, Harvard Medical School

<sup>2</sup>Department of Neurology, Beth Israel Deaconess Medical Center

<sup>3</sup>Berenson-Allen Center for Noninvasive Brain Stimulation, Beth Israel Deaconess Medical Center

<sup>4</sup>Department of Brain and Cognitive Sciences, Massachusetts Institute of Technology

<sup>5</sup>Department of Neurology, Massachusetts General Hospital

Correspondence to: Mouhsin M. Shafi at [mshafi@bidmc.harvard.edu](mailto:mshafi@bidmc.harvard.edu)

URL: <https://www.jove.com/video/53727>

DOI: [doi:10.3791/53727](https://doi.org/10.3791/53727)

## Materials

Name	Company	Catalog Number	Comments
3T MRI scanner			
MRI functional connectivity software			
MRI image viewing software			MRICron
Transcranial Magnetic Stimulator	Nexstim	eXimia Stimulator	Can use stimulators from other suppliers, e.g., Magventure, Magstim
MRI neuronavigation system	Nexstim	NBS v3.2.1	Alternative MRI neuronavigation system, e.g., Brainsight, Localite
TMS-compatible EEG system	Nexstim	Eximia EEG	Alternatives: Brain Products, Synamps, ANT
Matlab	Mathworks	R2012b	Alternatives: Octave
EEGLab			
Minimum Norm Estimate (MNE) software			
FreeSurfer			