Collaboration Group: Neural Modulation

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Deep Brain Stimulation

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DBS Stimulation
Parameter Optimization
DBP: Chris Butson
DBS Patient Registry

Patient Workflow & System Architecture

1. Patient Timeline
   - Enrollment
   - Pre-Operative MRI
   - DBS Surgery
   - Post-Operative CT
   - Post-Operative Programming Sessions

2. Experimental Group Only
   - Generate Patient-Specific DBS Models

3. Delivery to Clinician iPad
   - Clinician Performance
     - Clinical Rating Scales
     - DBS Settings
     - Patient Ratings

4. All Patients
   - Compare Clinician Performance & Patient Outcomes: Standard Care versus Mobile Computing Platform

5. RedCap Database
   - Integrate Targets Into Patient Model
   - Generate Outcome-Specific Stimulation Targets

6. Phase I & Phase II

7. Phase II Only
tDCS With Multiple Electrodes

Electrode Currents

Current Intensity
TMS Simulation
Computational and imaging tools for targeting non-invasive brain stimulation

Organizers:

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