NexusBMI at home protocol:

**Day 1:**

**Introduction (10-15 min)**

* Consent forms
* Explain goal of trial
* Ask if good place to store equipment

**Setup**

* Setup camcorder
* Mood/motivation assessment
* Food / exercise / medication information

**Optimizing bandwidth (30 min)**

* Setup camcorder
* Using contact suggestions from Nicki, record Movement Data with Time Domain streaming on (422 Hz, M1 channel)
* Plot spectrogram of M1 data
* Narrow in on relevant Beta band (desynch correlated with move onset)
  + Try higher beta if feasible
* Decide power channel CF and BW settings of M1 and STN channels
  + Make sure stim BW is narrow enough not to be saturated by stim
* Repeat movement task (2 min) and ensure power channels shows sufficient modulation
* If not, adjust gains (of STN channel especially)

**Pre-BMI (5-10 min)**

* Once set, take baseline recording with time domain on (2 min)
* Take movement recoding (if anything has changed from the last move recording, 2 min)
* Fit decoder

**BMI (~1 hour)**

* Do BMI with finger tapping
  + Adjust BMI assist / LPF as needed

**Conclude**

* Mood / motivation assessment
* Remove camcorder
* Upload data to box.net
* Setup logistics for next few days

**Days 2 – 10:**

**Setup**

* Setup camcorder
* Mood/motivation assessment
* Food / exercise / medication information

**Pre-BMI (5-10 min)**

* Once set, take baseline recording with time domain on (2 min)
* Take movement recording with time domain on
* Fit new decoder

**BMI (~1 hour)**

* Do BMI with finger tapping
  + Adjust BMI assist / LPF as needed

**Conclude**

* Mood / motivation assessment
* Remove camcorder
* Upload data to box.net
* Setup logistics for next few days