

1116-VM-1094 **Taylor M. Posey*** (taylor_p94@hotmail.com), Seattle, WA 98105, and **Kelsey Kalmbach** (kelsey.kalmbach@gmail.com), Golden, CO 80401. *Exploring Transcranial Stimulation in a Cognitive Learning Model*. Preliminary report.

We develop and test a biologically-based model of cognition that allows for determining the effects of transcranial stimulation on learning tasks. Learning is tested through pattern recognition of images. Using a modified Hodgkin–Huxley model, this model contains multiple interconnected brain regions with the ability to model stimulation from different sources of electrical current. New measures of discriminability between neural responses are also explored and detailed. (Received September 16, 2015)