Cognitive Restoration, Neuroethics and Disability Rights: Narratives from the Central Thalamic Stimulation for TBI Study *

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In my talk I will report on subject and family perspectives from the CENTURY-S (<u>CEN</u>tral <u>Thalamic Deep Brain Stimulation for the Treatment of Traumatic Brain InjURY</u> using the Medtronic $PC+\underline{S}$) first-in-human invasive neurological device trial to achieve cognitive restoration in moderate to severe TBI. I will report on interviews conducted preoperatively and following a therapeutic trial of stimulation. I will cover how decisions about participation were made, how subjects and family members grappled with reemergent agency, and questions of personhood and personal identity before and after stimulation. Beyond objective psychometric data indicating improved executive function and processing speed with stimulation, I will report on the subjective aspects of cognitive restoration and its broader implications for subjects and families. Finally, I will also address the pressing issue of our collective post-trial obligations to subjects with indwelling devices in investigational trials through the prismatic of disability rights and neurotech justice.

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