



Neural Prosthesis Seminar

Connectomic Deep Brain Stimulation

Friday, October 12 • 8:30 am

DeGrace Hall, Room 312 Case Western Reserve University



Cameron McIntyre, PhD

Investigator Cleveland FES Center

Tilles-Weidenthal Professor of Biomedical Engineering School of Medicine, Case Western Reserve University

Abstract

Deep brain stimulation (DBS) has been a successful clinical therapy, primarily used to treat movement disorders, for over 30 years. In attempts to expand the clinical indications for DBS, as well as improve outcomes from the therapy, a major focus of present day DBS research is in the development of patient-specific MRI-based surgical targeting strategies for electrode placement. This work is leveraging advances in both anatomical and diffusion-weighted imaging to provide patient-specific connectomic maps of the brain networks being modulated by DBS, which are helping to elucidate optimal stimulation strategies for different disorders. This talk will highlight how these new computational imaging tools are being created and used to improve the clinical application of DBS for a wide range of indications, including depression and Parkinson's disease.

For more information, please contact Cheryl Dudek (216) 231-3257 | cdudek@FEScenter.org

Live stream video link for each lecture at www.FEScenter.org/Seminar











