

## CONGRATULATIONS

## Michael Fu, PhD

## National Science Foundation CAREER Award



The Cleveland FES Center congratulates Michael Fu, PhD on receiving a 5-year National Science Foundation CAREER Award to research FES as an assist-as-needed technology to improve muscle movement recovery after stroke.

It is unknown how much actual effort a person is maintaining during FES in stroke therapy. This may be a problem because the brain learns best after stroke when a person actively tries to move the paretic limb, rather than having it passively moved by electrical pulse. Fu's team is designing a wearable device that will only assist when needed, and a control algorithm that measures muscle exertion amid the noise of the electrical stimulation being artificially applied to those muscles.

## About the FES Center

The Cleveland FES Center is a consortium of the Louis Stokes Cleveland VA Medical Center, MetroHealth Medical Center, Case Western Reserve University, University Hospitals, and the Cleveland Clinic Neurological Institute. With their support, researchers, engineers and clinicians collaborate together to develop innovative solutions that improve the quality of life of individuals with neurological or other muscular skeletal impairments. Through the use of neurostimulation and neuromodulation research and applications, the Cleveland FES Center leads the translation of this technology into clinical deployment.









