

Elizabeth Hardin, PhD

Department of Defense

Clinical Translational Research Award Subcontract



The Cleveland FES Center congratulates Elizabeth Hardin, PhD for her subcontract with WillowWood, an industry leader in design, manufacturing, and distribution of prosthetic products. WillowWood was awarded a \$2 million Department of Defense Clinical Translational Research Award, "Development and Validation of a Self-Adapting Myoelectrically Controlled Prosthetic Ankle with Continuously Variable Stiffness."

The project is led by WillowWood who is collaborating with the Shirley Ryan AbilityLab, the University of Michigan and the Louis Stokes Cleveland VA Medical Center. This work will enhance the design of a prototype prosthetic ankle in several ways: determining ankle stiffness in real-time, proving manufacturability and durability, improving control algorithms, and validating the transtibial prosthesis on users. The device being tested was invented by Elliot Rouse, PhD, and Maxwell Shepherd.

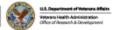
This multidisciplinary team has expertise in development, testing, and marketing of prosthetic devices. Dr. Hardin's group will provide human performance biomechanical testing data captured during activities of daily living. The Cleveland FES Center labs provide state of the art motion capture and virtual reality technology.











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.







