

Effects of Intervention-Induced Changes in Plantar Flexor Muscle-Tendon Morphology and Mechanical Properties on Lower Extremity Muscle Function in Children with Cerebral Palsy



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▪ **Big Picture Motivation:**

- To determine how the intervention-induced changes in the morphology and mechanical properties of the calf muscle and tendon in children with CP can translate into functional improvement (i.e., muscle force production and activation patterns) of the calf muscles and other lower extremity muscles

▪ **Workshop Goal:**

- Get feedback on existing results in terms of calf muscle force capacity generated from 3 different models (i.e., typically developing child, child with CP, and child with CP after robotic intervention)
- Explore other muscle-tendon parameters that can be adjusted based on reported ultrasound measurements
- Run CMC to evaluate muscle forces and activations during gait