

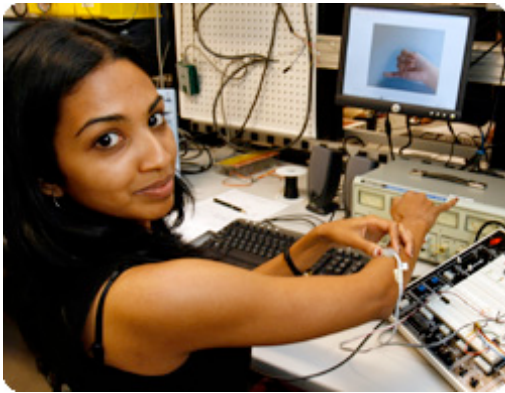
Participate in Research

Measuring Muscle Patterns in Accelerometer-based Mechanomyography during Pediatric Gait



Principal Investigator:
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**TO ASK QUESTIONS
OR TO SIGN UP,
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Participate in a walking study to measure muscle activity using a new method with MMG sensors

What is this study about:

When muscles contract to move or hold an object, they create small movements that can be recorded by a system called mechanomyogram (MMG). The purpose of this study is to assess muscle patterns in MMG signals when the participant is walking and their muscles are contracting.

Who can participate?

We are looking for:

- Youth (8-18 years) with diplegic CP
- GMFCS Levels I-II – able to walk and climb stairs
- Able to walk continuously for 15 minutes with no assistive devices (such as a walker or ankle foot orthoses)
- Able to understand English
- No lower limb amputees

What's involved?

- Only one hour session
- Non-invasive sensors will be taped to 4 different parts along both legs
- The task is to walk for 15-mins around a gym at a comfortable speed
- Small muscle movements will be measured during walking

Potential Benefits?

- Information from this study may help develop biofeedback sensors used for rehabilitation programs for children.

Potential Risks?

- No known potential harms from this study
- Some discomfort associated with medical tape and sensor removal (feels like removing a small