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Kids STEP Study

at UF and Brooks Rehabilitation



STepping Excites Plasticity

UF UNIVERSITY of
FLORIDA

BROOKS
Rehabilitation

The **Kids STEP Study at UF and Brooks Rehabilitation** is investigating recovery of walking in children with incomplete spinal cord injury (SCI). The study is directed by Dr. Andrea Behrman, PhD, PT, a physical therapist and researcher at the University of Florida. This investigation is funded by the Craig H. Neilsen Foundation (www.chnfoundation.org), an organization dedicated to spinal cord injury research and recovery. The Kids STEP Study aims to 1) determine if walking can be restored in children with incomplete SCI and little to no leg movement 2) identify the neural pathways that permit recovery of walking

WHAT is involved? Children enrolled in the study will undergo extensive testing and complete 12 weeks of locomotor training.

TESTING:

Tests to examine functional status include:

- ◆ Comprehensive muscle and strength tests
- ◆ Sensory & motor tests
- ◆ Analysis of walking, cycling, kicking, crawling

Tests to examine the child's injury include:

- ◆ Brain & Spinal MRI
- ◆ Transcranial Magnetic Stimulation (TMS)
- ◆ Reflex testing

TRAINING:

Locomotor training is an activity-based therapy to promote plasticity and recovery. Children will participate in 60 sessions of locomotor training, conducted daily (5 days/week) for 12 weeks. Locomotor training is an intensive walking program that uses a treadmill with a harness and partial body weight support, as well as over-ground environments, to practice the task of walking. Children will work closely with therapists, researchers, and trainers to practice walking skills.



WHO can participate?

Children who may participate will be:

- ◆ Pre-adolescent children, age 3-13 years old
- ◆ Diagnosed with an incomplete SCI of the cervical or thoracic spinal cord
- ◆ Unable to walk or have impaired walking for more than one year

Is there a COST to participate?

There is no cost to participate in this study. Tests and training are completed at the University of FL in Gainesville, FL and Brooks Rehabilitation Hospital (www.brooksrehab.org) in Jacksonville, FL (75 miles from UF). Reimbursement for travel and housing expenses is available. If provided, housing will be at the Ronald McDonald House in Gainesville (www.rmhgainesville.com).

FOR MORE INFORMATION

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