



PHYSICAL THERAPY PROGRAM  
DEPARTMENT OF EXERCISE SCIENCE  
THE NORMAN J. ARNOLD SCHOOL OF PUBLIC HEALTH

## TBI RESEARCH STUDY

### Intensive Mobility Training (IMT) for Traumatic Brain Injury

The following contains information regarding a research study being offered by the **University of South Carolina**. Before you decide whether or not to participate, read the following information carefully.

**The purpose of this study is to see whether 20 days of a new treatment, called Intensive Mobility Training, can produce improvements in walking, balance, and mobility for individuals who have had a traumatic brain injury.**

#### **In order to participate, you must:**

- greater than 3 months post-traumatic brain injury and not currently receiving physical therapy
- the ability to walk 30 feet with maximum 1 person assisting but able to advance legs independently
- the ability to follow simple three-step commands
- the ability to communicate presence and location of pain
- the ability to sit independently without back or arm support for two minutes
- the ability to stand with support any type of cane, crutches, or walker for 2 minutes
- participate in two Magnetic Resonance Imaging (MRI) tests, one before and one after the intervention sessions
- be able to participate in 3 hours of therapy for 20 weekdays
- be at least 18 years of age

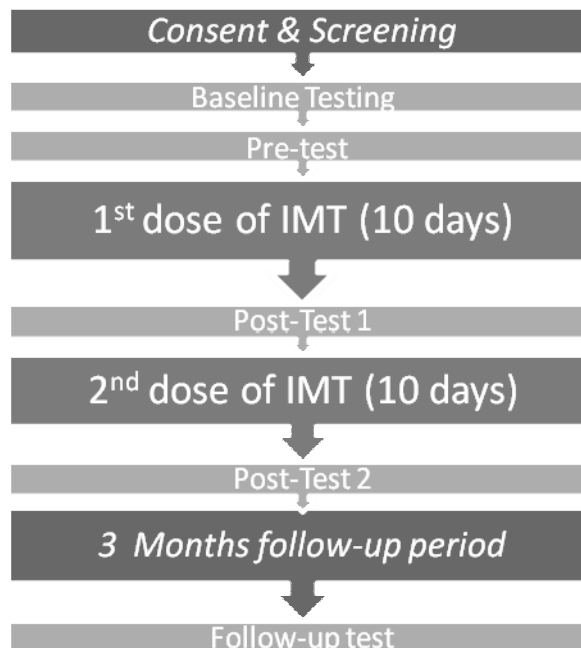
#### **IMT for TBI:**

- Intensive Mobility Training is a treatment approach that encourages you to use your lower extremities to perform various leg activities that challenge your balance and coordination.
- **Screening Evaluations:** If you are interested in participating in the study, you will be screened by phone. If the phone screen is approved, you will be asked to attend a physical screen for further evaluation in our lab at the University of South Carolina.

- **Baseline and Pre-Test Evaluations:** If you are accepted into the study, prior to therapy, you will be asked to attend two **evaluation sessions** that will last approximately 3 hours each. Evaluation sessions will include completing various survey tests. You will also perform tests that evaluate your ability to use your lower extremities. Tasks will include activities such as standing, walking, stepping over or around obstacles, and going up and down stairs.
- **MRI:** You will receive two MRI scans during your participation in the study. The first will be before intervention begins and the second will be after the intervention. In order to participate in the study, you must be eligible for an MRI.
- **IMT and Interim Test:** Following the evaluation, you will undergo **10 days of IMT**. After the first 10 days of IMT, you will be evaluated again (Interim) before the next **10 days for IMT** for a total of **20 days of IMT**. Both the evaluation and therapy sessions will last approximately **3 hours** and will be held on **Monday thru Friday** at the University of South Carolina.
  - You will be asked to perform activities that challenge you, but you are able to do with some help. The primary activity will be treadmill training with body-weight support. Other possible activities include: gait training, sit-to-stand, stair climbing, various balance activities, range of motion, stretching activities, strengthening activities, or coordination tasks. Below are some examples of activities that may occur during the 3 hour session. Therapy is geared to your individual level of function.



- **Post-Test and Follow up-evaluation session:** Immediately following the 20 days of IMT you will have a post-test, and 3 months after the post test you will return for another testing session. These testing sessions will again last approximately 3 hours.
- **The overall commitment** to this study is 24 days which includes the 3 month follow-up evaluation.



- **Benefits to you** may include: improved knowledge about your abilities, and possible improvement in movement control. In addition, the information obtained from this study may help improve the treatment of individuals with traumatic brain injury. Participants will receive \$500 following the intervention phase and \$500 at completion of 3 month follow-up.
- **Participation in this study is entirely voluntary.** There is **no direct cost for participation or the MRI scans** in this research study; however, you may incur costs for travel or lodging depending on how far away you live. There is no charge for the therapy.

**For more information concerning this research study,  
please contact the Rehabilitation Lab at 803-777-2627 or email  
RehabLab@mailbox.sc.edu**