Dates for Onsite Training

August 5-7, 2016
Frazier Rehab Institute
220 Abraham Flexner Way
Louisville, KY 40202

Registration Fees

Pediatric Locomotor Training Principles and Practice: An Activity-based Therapy Course

Online/Onsite Training - $995 per person

Team of 3 persons - $2,985 plus $675 each for additional up to 5

Required Materials: Locomotor Training Principles & Practice Book (available on Amazon.com)

If you completed the online course previously you will receive a discounted price. Contact Marilyn@neurorti.com for details.

Register online at
www.NeuroRTI.com

Contact hours will be provided through the State Board of Physical Therapy in the state where the respective host site is located. Contact us for a list of states that provide reciprocity for CE credit.

Pediatric Locomotor Training Principles and Practice
an Activity-based Therapy Course

Provided in cooperation with the Christopher & Dana Reeve Foundation NeuroRecovery Network
Program Overview

Participants in this Introductory Pediatric Locomotor Training course will learn:

- the scientific basis for this activity-based therapy promoting neuromuscular activation, recovery, and development of age-appropriate motor skills
- hands-on skills
- clinical decision-making for progression

This course focuses specifically on the application of Locomotor Training to the pediatric population with neurological dysfunction, e.g. children with spinal cord injury, brain injury, or cerebral palsy and pre-adolescent children, 1-12 years of age.

With Locomotor Training, an activity-based therapy, therapists and trainers provide task-specific practice of standing and walking and optimize the sensory cues to generate improved motor activity for mobility, standing, and walking after neurologic injury. Locomotor retraining is provided on a treadmill using partial body weight support and manual facilitation. Improved neuromuscular capacity is then transferred to over ground skills, e.g. sitting balance, respiratory function, upper extremity function, bed mobility - that are integrated into the home and community.

This intense course includes pre-conference preparation (3 hours of online lectures; 3-4 hours of reading, assignments and pre-tests) followed by 2.5 days at a clinical site with hands-on training with pediatric patients; video review of participant’s skills; guided review of video cases; and discussions addressing locomotor training principles, components, and application beyond the clinic.

Course Schedule

Preconference online lectures:
The pre-conference course is designed to provide the practicing pediatric physical therapist with current evidence-based information on Locomotor Training. Susan Harkema, PhD discusses the basic science evidence for locomotor training and translation to a therapeutic intervention for recovery after neurologic injury. Andrea Behrman, PT, PhD discusses the principles of locomotor training, compares and contrasts with usual care and application to clinical practice. An overview of the Pediatric Neuromuscular Recovery Scale will be provided, however a comprehensive online course will be available in the future.

Onsite Course Days 1-3

Course Program Day 1: 8:00 AM–5:00 PM
Course Program Day 2: 8:00 AM–5:00 PM
Course Program Day 3: 8:00 AM–Noon

Course Objectives

This intensive 3.5 day course (1 day on-line course, 2.5 days at clinical site) combines didactic teaching, practical skills development with hands-on treatment, and clinical decision-making for children with neurologic dysfunction to advance neuromuscular recovery and development of age-appropriate motor skills:

1. Demonstrate a working knowledge of the basic science related to activity-based therapy.
2. Demonstrate a working knowledge of the guiding principles of activity-based therapy, with an emphasis on locomotor training on the treadmill, over ground, and in the community.
3. Identify and incorporate the principles of locomotor training during evaluation and progression of children with neurological dysfunction.
4. Demonstrate knowledge of trainer positions and roles during locomotor training.
5. Demonstrate introductory level hands-on skills as a trainer of locomotor training (in preparation for continued practice and skill development upon return to own clinical site).
6. Demonstrate clinical decision-making for skill progression.
7. Select and use developmentally-appropriate play and activities supporting therapeutic goals on and off the treadmill.
8. Develop a successful, training environment based on scientific evidence that supports successful therapeutic interaction of child and trainers to meet therapeutic goals.
9. Discuss how to effectively integrate locomotor training into an existing comprehensive therapy program.

Target Audience

Pediatric physical therapists, physiatrists, physical therapist assistants, and rehab technicians working with children. Translation of learning to the therapists’ and technicians’ home clinical environment is most effective if teams of therapists/technicians all participate in the training. As delivery of locomotor training requires an integrated team working in synergy we highly recommend each clinic to send multiple staff members (e.g. 3-5 staff) for the most beneficial training outcome.

Instructors

- **Shelley Trimble, PT**, Pediatric Rehabilitation and Research Specialist, Pediatric NeuroRecovery Program, Frazier Rehabilitation Institute and Kosair Charities Center for Pediatric NeuroRecovery, Louisville, KY. Shelley is a career pediatric physical therapist who has worked in almost every pediatric clinical setting including home health, school system, hospital, children’s out-patient services, and private practice. She was the Research PT for the Kids STEP Study funded by the Neilson Foundation examining effects of locomotor training in children with severe spinal cord injuries and non-ambulatory and will be working on a study to adapt the adult Neuromuscular Recovery Scale for use with children (Neilson Foundation). She currently provides locomotor training on a daily basis to children with neurological disorders and assures the integrity of this therapy for the Pediatric NeuroRecovery Program at Frazier Rehabilitation Institute. She has presented at the Howard Steele Conference on Pediatric Spinal Cord Injuries and Dysfunction, the APTA Combined Sections Meeting and International Spine Care conference on pediatric spinal cord injuries (Australia).

- **Andrea L. Behrman, PhD, PT, FAPTA**, Co-Director Reeve Foundation NeuroRecovery Network; Director, Kosair Charities Center for Pediatric NeuroRecovery, Kosair Charities Helmsley Charitable Trust, Todd Crawford Foundation and WHAS Crusade for Children, Department of Neurological Surgery, University of Louisville, KY. Dr. Behrman is a physical therapist who specializes in neuro-rehabilitation research. She is committed to the development of best practice for recovery for adults and children after neurologic injury based on principles of activity-dependent plasticity and the intrinsic biology of the nervous system. Fast-tracking this evidence into clinical practice, she is co-author of Locomotor Training: Principles and Practice and has published key scientific literature on locomotor training for both adults and the pediatric population. Her research has been funded by NIH, the Craig H. Neilson Foundation, the VA Rehabilitation and Research Service, and the Department of Defense.