SMEI LLC P.O. Box 1651, Melrose, FL 32666

MNRI® Upper Limb Reflex Integration & Manual Skills Development

Introduction:

Upper limb reflexes begin development in the womb and are among the first reflexes to actively engage after birth, first to protect us from harm, and second (once security is ensured) to allow active exploration of the outside world. As upper limb motor reflexes engage and mature, they form the foundation for the development of learned manual skills. Once basic manual skills become automatic, advanced skills begin to emerge and a child's movement repertoire expands and advances to include gross motor skills, fine motor coordination, and the motor planning ability necessary to productively function in the world. Manual skills are not the only developmental abilities dependant upon upper limb reflex integration. The visual and auditory systems as well as verbal, written, and general communication related abilities all depend on adequate upper limb reflex integration. Fine motor coordination systems, including the hands-eyes, hands-auditory, and hands-articulation systems, link fine motor coordination to visual, auditory, and vocal decoding, allowing communication to develop from sounds, to words, to conversations, to reading, to writing, to comprehension and more. MNRI Upper Limb Reflex and Manual Skills techniques target reflexes and the underlying neuro-structural system to engage and improve manual, gross, or fine motor skill function and speech delays. Many professionals subject to fatigue or upper limb injury often use the upper limb and manual skill techniques as a stress release program.

The Upper Limb Reflex Integration course explores:

- The general MNRI Method and the role played by the Upper Limb Reflex Integration and Manual Skill Development Program
- The progression of upper limb reflex and manual skill development beginning in utero and continuing through life
- The role upper limb reflexes and manual skills play in establishing a foundation for motor, communication and cognitive development, and emotional and behavioral regulation
- MNRI techniques designed to assess, pattern, and integrate upper limb reflexes
- How to create MNRI upper limb reflex integration programs for individual clients
- How to incorporate use of MNRI Upper Limb Reflex Integration and Manual Skill Development course content into daily client and home practice

Course Objectives:

Upon successful completion of the two-day, 16-hour Upper Limbs Reflex Integration & Manual Skills Development course participants will:

1. Learn about the Masgutova Neurosensorimotor Reflex Integration SM (MNRI) Method
   a. The innate nature of the motor reflex system
   b. The role of a reflex and its sensory, motor, and central nervous system mechanisms
   c. When, why, and how the brain engages in protection versus learning and development
   d. Learn the role of upper limb reflexes and related manual skill development within the motor reflex system and the neurosensorimotor reflex integration basis for the successful development of manual skills

2. Learn about Robinson Hands Grasp, Hands Pulling, Hands Supporting (Parachute), Sequential Fingers Opening and Closing and Asymmetric Tonic Neck Reflexes and the role each reflex plays in upper limb and manual skill development
   a. Identify and explain the maturational progression of upper limb reflexes and the development of manual skills related to each reflex
   b. Explore how upper limb reflexes and related manual skills are involved in the formation of:
      - Conscious motor control within the brain-body system
      - Fine motor control hands-eyes, hands-articulation and hands-auditory systems
      - Fine motor coordination and self-regulation
      - Writing, reading and calculation skills
   c. Understand and explain how dysfunctional upper limb reflexes and related manual skill development can affect protection, learning and development

3. Learn and implement MNRI assessment techniques to determine the integration state (i.e. integrated, dysfunctional or pathological) of each upper limb reflex
   a. Demonstrate through supervised hands-on-application the ability to conduct an MNRI assessment and adequately determine the state of each upper limb reflex

4. Learn and implement the MNRI techniques to integrate each upper limb reflex
   a. Learn through demonstration and hands-on-practice the MNRI techniques to adequately activate and integrate each upper limb reflex and related manual skills
   b. Learn through course discussion and instructor demonstration how to deal with unique and challenging client situations using MNRI method techniques
   c. Learn motivating games and activities to use in conjunction with MNRI techniques to enhance the integration process
   d. Demonstrate for the course instructor the ability to appropriately apply integration procedures for each upper limb reflex and related manual skills

5. Learn how to create and apply an individual MNRI program for clients with various challenges
   a. Learn to use the MNRI pre-assessment to identify non-integrated or immature upper limb reflexes
   b. Develop individual MNRI programs to activate, pattern, and integrate upper limb reflexes
   c. Share course knowledge regarding the impact of reflex integration with client families; specifically, possibilities for
      - Positive change in body structure, posture, and motor reflex system
      - Improvements in motor, communication, and cognitive learning abilities and emotional and behavioral regulation

7. Explore, evaluate, and develop strategies to incorporate the use of the MNRI Upper Limb Reflex and Manual Skill course content into daily client and home practice.

Reflexes and Techniques Addressed in this Course:

Primary Motor Reflex Patterns

- Asymmetric Tonic Neck (ATNR)
- Babkin Palmomental
- Hands Pulling
- Hands Supporting (Parachute)
- Robinson Grasp

Additional Motor Reflexes

- Sequential Fingers Closing
- Sequential Fingers Opening

Upper Limb Neuro-Structural Integration Techniques

- Upper Limbs Segment Stroking
- Arm Embracing Squeeze
- Wrist-Elbow-Arm Rotations
- Forearm Activation
- Forearm Two Bone Stimulation
- Wrist Joint Circular Stimulation
- Wrist Flexion Extension Activation
- Babkin Palmomental Activation
- Pincer Gripping Activation
- Tripod Gripping Activation
- Pyramid Finger Activation/Squeezing
- Thumb Stress Release
- Fingers Compression/Traction
- Hand/Palm Proprioceptive Stimulation
- Finger Base Proprioceptive Stimulation
- Sequential Arm Opening
- Rainbow Arms
- Variant Hand Grasp Pattern

Prerequisites: No prerequisites are required; however, Masgutova recommends attending the Dynamic & Postural Reflex Integration course first, whenever possible, to help provide broader context prior to attending other foundation courses.

Course Length: The course covers a period of two days and requires a minimum of 16 hours of direct classroom instruction to complete.

Curriculum Design: The course curriculum consists of a combination of historical and theoretical lecture, case study slides and videos, technique demonstration and applied practice, and class discussion.

Course Materials: The Upper Limb Reflex Integration and Manual Skill Development course manual, written by Svetlana Masgutova, Ph.D., is the primary source for content presented in class. Supplementary course content draws from a variety of articles and MNRI case studies, and is referenced as needed upon presentation in class. The course manual is included as part of the course fee and is distributed to course participants at initial course check-in.

Approved Continuing Education Course for: AOTA