# The Effectiveness of Hand-over-Hand Interactive Metronome for Infants, Toddlers, and Clients with Severe Physical Disabilities



## **Course Description:**

This presentation will review the basic principles of Interactive Metronome as they relate to motor control and functional movement. Hand-over-hand use of Interactive Metronome will be discussed for use with a diverse group of clients including infants, toddlers and clients with severe physical and/or cognitive impairments. Treatment options for working with movement disorders such as cerebral palsy and developmental delays will be reviewed. The use of IM for the reduction of spasticity and startle reactions will also be discussed.

## **Target Audience:**

- Occupational Therapist
- Certified Occupational Therapy Asst
- Physical Therapist
- Physical Therapy Asst
- Athletic Trainer
- Licensed Medical, Rehabilitation or Mental Health Professional
- Music Therapist

## Learning Outcomes:

Upon completion of this course, participants will be able to:

- Identify clients who will benefit from hand-over-hand use of Interactive Metronome;
- Adapt basic IM techniques to infants, toddlers and severely disabled individuals;
- Recognize when to progress from hand-over-hand to independent use of Interactive Metronome.

\*Note: This course covers information that pertains to licensed therapists and therapy assistants. COTA and PTA professionals must practice IM under the supervision of a licensed OT or PT.

#### Instructor:

**Nancy Cavaliere PT, MS, DPT, C/NDT** has been a practicing pediatric physical therapist for over 30 years. She has recently completed her Doctorate of Physical Therapy from the University of Montana. Nancy earned her BS in Physical Therapy from the University of Connecticut in 1980, followed by an MS in Developmental Disabilities from Long Island University in 1981. She is NDT Certified, having completed her basic training in Neurodevelopmental Treatment in 1983 and the Advanced Baby course in 1992. In addition, she also has expertise and advanced training in the areas of gait training and orthotics, as well as positioning, seating and wheelchair design. Nancy is the co-owner of Pediatric Therapy Services in Trumbull, CT. The practice is a collaborative therapy group which includes an occupational therapist and a speech/language pathologist who provide a team approach to the treatment of children with a wide variety of diagnoses. The group uses a variety of treatment interventions including NDT, Sensory Integration, PROMPT and Therapeutic Listening as well as Interactive Metronome. Nancy completed a case study on the use of Interactive Metronome as an intervention for an 11 month old diagnosed with congenital hemiplegia for her final doctoral project.

#### Disclosures:

**Instructor Financial Disclosure(s):** Nancy received an honorarium from Interactive Metronome, Inc. for the development and presentation of this course. She does not receive royalties or any other form of compensation for the continued publication and use of educational materials she has authored. Nancy does not sell or receive compensation for the sale of Interactive Metronome products.

**Instructor Nonfinancial Disclosure(s):** Nancy is the co-owner of Pediatric Therapy Services in Trumbull, CT where Interactive Metronome is used by therapists in clinical practice for a variety of conditions.

**Course Disclosure:** The Interactive Metronome, Inc. has developed and patented a licensed technology trademarked as the Interactive Metronome®. (U.S. Patents #4,919,030; #5,529,498; #5,743,744; #6,719,690; other U.S. and foreign patents pending) Interactive Metronome, Inc. is the sole source of the following products: Interactive Metronome®, Gait Mate® and IM Home®. Because there are no other like-kind products available, course offerings will only cover information that pertains to the effective and safe use of the above-named products.

# Agenda (60 minutes):

- Speaker introduction & disclosure
- Basic principles of Interactive Metronome as they relate to motor control and functional movement.
- Choosing clients who might be appropriate for hand over hand use of IM.
- Use of IM for clients with developmental delays.
- Use of IM with infants and toddlers.
- Use of IM in clients with cerebral palsy.
- Case presentation of an 11 month old with congenital hemiplegia.
- Use of IM with the cognitively challenged individual.
- Case presentation of a young man with cerebral palsy.
- Use of IM to reduce spasticity.
- Case presentation of a young woman with spastic diplegia.
- Use of IM to reduce the startle reaction.
- Case presentation of a boy with spastic quadriplegia

# **Instructional Methods:**

LECTURE, PPT, VIDEOS

# CEUs:

This course is not offered for CEUs.