# Addressing Hemispheric Imbalances with Interactive Metronome



## **Course Description:**

In order for the human brain to function as a whole, both left and right cerebral hemispheres continuously communicate via electrical impulses. Recent research shows that when the two sides of the brain do not mature at the same rate, imbalance and impaired communication between the hemispheres occurs. Hemispheric imbalance contributes to a myriad of behavioral, social, and learning disorders. Advanced diagnostic images show a pattern of hemispheric imbalance among the brains of children and adults with diagnoses of ADHD, Dyslexia, and Autism Spectrum Disorder. This course introduces the certified IM provider to the concept of hemispheric imbalances in children and adults and how to address these imbalances using the Interactive Metronome.

### **Target Audience:**

- Speech and Language Pathologist
- Speech and Language Pathology Assistant
- Audiologist
- Occupational Therapist
- Certified Occupational Therapy Assistant
- Physical Therapist
- Physical Therapy Assistant
- Athletic Trainer
- Licensed Medical, Rehabilitation or Mental Health Professional
- Music Therapist

## Learning Outcomes:

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

- Use and interpret a check list developed by Dr. Robert Melillo to identify hemispheric imbalances
- Demonstrate understanding of the underlying principles of hemispheric imbalances
- Develop individualized treatment plans to stimulate the identified weaker hemisphere

\*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.

#### Specific Learning Outcomes for Speech-Language Pathologists & Audiologists:

- Use and interpret a check list developed by Dr. Robert Melillo to identify hemispheric imbalances that contribute to communication disorders;
- Demonstrate understanding of the underlying principles of hemispheric imbalances and their contribution to communication disorders;
- Develop individualized treatment plans to stimulate the identified weaker hemisphere within the context of speech & language therapy.

\*Note: This course covers information that pertains to licensed therapists and therapy assistants. SLPA professionals must practice IM under the supervision of a licensed SLP.

#### Instructor:

**Heather Cross, OTR/L**, has been an Occupational Therapist for 17 years. Her scope of practice has included hand therapy, orthopedic rehab, home health, school based therapy, acute care, and pediatrics. She is the co-owner of Performance Advantage, LLC in Colorado Springs, CO. Her current clientele includes a population that ranges from pediatrics to adult. She also works with high performance and pro athletes. She uses a holistic approach with all of her clients; utilizing various medical professions, treatment techniques, functional neurology, and metabolic/nutritional counseling.

Heather received her BS in Occupational Therapy from Colorado State University in 1993. Since that time she has been an advocate of continuing education and sponsoring students in their fieldwork assignments at all levels. She has furthered her education through various courses and self study over the last 17 years. Recent courses taken have been chosen to help with her belief that clients can recover neurological functioning at all ages. Some of these programs include: the Listening program, the Alert Program, Sensory integration techniques, and studies in neurology. Heather

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uses Interactive Metronome as part of an intensive neurological treatment option for qualified clients and as an introductory functional treatment option for pediatrics. She is a huge proponent of the Interactive Metronome following several years of great success using IM with her clientele.

#### **Disclosures:**

**Instructor Financial Disclosure(s):** Heather is the author of course materials that focus on the clinical application of Interactive Metronome technology, for which she has received honoraria from Interactive Metronome, Inc. She does not receive royalties or any other form of compensation for the continued publication and use of educational materials she has authored. Heather is also an instructor for Interactive Metronome, for which she receives a fee for teaching each course and reimbursement of travel expenses from Interactive Metronome, Inc. She provides clinical consultation to IM providers and receives a consulting fee from Interactive Metronome, Inc for these extended educational services. Heather does not sell or receive compensation for the sale of Interactive Metronome products.

Instructor Nonfinancial Disclosure(s): Heather uses Interactive Metronome in her clinical practice at Concentra Medical Center.

#### **Course Content 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
- What is hemispheric imbalance?
- Responsibilities of each hemisphere
- Symptoms/behaviors associated with hemispheric imbalance
  - Measuring hemispheric imbalance
    - Motor characteristics
    - Sensory characteristics
    - o Emotional characteristics
    - o Academic characteristics
    - o Immune characteristics
    - Autonomic characteristics
- Exercises to stimulate the right hemisphere
- Exercises to stimulate the left hemisphere
- Suggestions for incorporating interventions for hemispheric imbalance into Interactive Metronome training

## Instructional Methods:

LECTURE, PPT, PHOTOS

## CEUs:

This course is not offered for CEUs.