Treat Fundamental Timing Skills in Patients with Aphasia & Apraxia

Improve Synchronization of Critical Neural Networks to
Restore Communication Skills Following Stroke & Traumatic Brain Injury

Course Description:
Several peer reviewed studies have shown that individuals with aphasia have difficulty processing the microstructure of speech (auditory temporal processing), which contributes to impairments in receptive & expressive language. Humans process time over 12 orders of magnitude, ranging from microseconds to hours. Timing is most prominent in the auditory domain and the most sophisticated level of timing & neural network synchronization occurs at the microsecond level for processing the rapidly changing and variable acoustics of speech. According to Tierney & Kraus (2013), the ability to tap consistently to a beat can be directly correlated to the consistency of the auditory brainstem response to sound. Those that have trouble synchronizing motor movements with an auditory beat & display less rhythm tend to exhibit greater distortions in the perception of speech, and have more neural jitter. Individuals who are able to move more rhythmically & synchronously to an auditory beat, process speech sounds more accurately & have less neural jitter. The transformation of temporal auditory periodicity into rhythmic motor output likely takes place via the connection of the Inferior Colliculus [master time-keeper of the brain] to the cerebellum. Imaging studies have delineated the role of the cerebellum in sensorimotor synchronization. This course will focus on the scientific and clinical rationale for including feedback-driven timing & rhythm training [via Interactive Metronome®] in the treatment of individuals with aphasia and apraxia following stroke or traumatic brain injury. Treatment hierarchy and facilitative strategies will be discussed. *Contact hours are offered pending successful completion of a written exam at the end of the course.

Target Audience:
This course welcomes the following professionals who have completed the Interactive Metronome Certification Course.

- Speech and Language Pathologist
- Speech and Language Pathology Asst

Instructional Level:
Intermediate

Specific Learning Outcomes for Speech-Language Pathologists:

- Define and identify characteristics of aphasia and verbal apraxia following stroke or traumatic brain injury;
- Discuss evidence-based treatment options for individuals diagnosed with aphasia and/or verbal apraxia;
- Incorporate feedback-driven timing & rhythm training [Interactive Metronome®] into treatment for aphasia and/or verbal apraxia with appropriate selection of exercises, settings, & treatment hierarchy based upon individual needs to facilitate improved communication skills.

*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:
Dara Coburn, MS, CCC-SLP received her undergraduate and masters degree from the University of Central Arkansas and holds the Certificate of Clinical Competence issued by the American Speech-Language-Hearing Association. Dara served as the National Program Champion for Interactive Metronome within the HealthSouth Corporation. She currently serves as Interactive Metronome’s Clinical Support contact person for Life Care Centers of America. Dara has been teaching IM Certification Courses since 2007 and has contributed to the development of the Adult Best Practice Certification Course and Fall Prevention Protocol. With expertise and experience in the field of neurological disorders, Dara has been able to accept this new treatment tool and successfully integrate it into her practice by modifying it to individually meet her patient's needs.

Disclosures:
Instructor Financial Disclosure(s): Dara is an active member of Interactive Metronome’s Clinical Advisory Board, for which she receives an annual honorarium. She is the author/co-author of educational offerings on the clinical application of Interactive Metronome technology, for which she has received honoraria. She does not receive royalties or any other form of compensation for the continued publication and use of educational materials she has authored/coauthored. Dara is also an instructor for Interactive Metronome, for which she receives a fee for teaching each course and reimbursement of travel expenses. Dara provides clinical consultation to IM providers and receives a consulting fee from Interactive Metronome for these extended educational services. She currently serves as Interactive Metronome’s Education Department Contact Info: imcourses@interactivemetronome.com, 877-994-6776 opt 3 (US Only), 954-385-4660 opt 3, Fax: 954-385-4674
Clinical Support contact person for Life Care Centers of America and is compensated for this. Dara does not sell or receive compensation for the sale of Interactive Metronome products.

Instructor Nonfinancial Disclosure(s): Dara does not have any relevant nonfinancial relationships to disclose.

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
- Define aphasia & verbal apraxia
- Evidence-based treatment for aphasia & verbal apraxia
- Feedback-driven timing [Interactive Metronome®] for the treatment of aphasia & verbal apraxia
- Case Study
- Q & A
- Online post-test & course evaluation

CEUs offered for:
0.1 ASHA (SLP)

Effective July 1, 2011, individuals must meet at least one of the following conditions in order to be eligible to earn ASHA CEUs.

- ASHA Member (includes Life member and International affiliates)
- ASHA Certificate of Clinical Competence (CCC) Holder
- Licensed by a state or provincial regulatory agency to practice speech-language pathology (SLP) or audiology
- Credentialed by a state regulatory agency to practice SLP or audiology
- Credentialed by a national regulatory agency to practice SLP or audiology
- Currently enrolled in a masters or doctoral program in SLP or audiology

This course is offered for 0.1 ASHA CEU (Intermediate level, Professional area).