

# **Executive Function and Theory of Mind: Clinical Approaches**

**Friday, Feb. 22, and  
Saturday, Feb. 23, 2013**

**Martha S. Burns, Ph.D.**

**Children's Healthcare of Atlanta Office Park  
1680 Tullie Circle, NE, Classroom 5  
Atlanta, GA 30329-2321**

**[www.choa.org/therapistevents](http://www.choa.org/therapistevents)**



**Children's**  
Healthcare of Atlanta  
*Dedicated to All Better*

# Registration

## Executive Function and Theory of Mind: Clinical Approaches

Friday, Feb. 22, and Saturday, Feb. 23, 2013

**Registration Fee \$325**

**Available discounts (choose only one if applicable):**

- \$100 discount for Children's Healthcare of Atlanta employee/PRN
- \$50 discount for each participant with two or more employees from the same facility
- \$33 discount for Georgia Speech-Language-Hearing Association (GSHA)

**Refund Policy:** If you must cancel your registration, notify us at least seven days before the course and we will issue a refund (minus a \$25 administration fee). No-shows or cancellations received fewer than seven days prior to the course are ineligible for a refund.

Credit card, check and Children's Healthcare of Atlanta departmental accounts are accepted for payment.  
Enrollment is limited.



## Register Online

Visit [choa.org/therapistevents](http://choa.org/therapistevents) to register.

Call 1-800-785-6809 or 404-785-3803 if you are not able to register online.

# Agenda

## Friday, February 22

8 a.m. Registration and continental breakfast

8:30 a.m. – Noon (15 minute morning break)

- I. Overview of recent neuroscience research on:
  - A. attentional networks for cognitive (executive) control, response inhibition and working memory
  - B. motor planning, motor sequencing, and motor monitoring
    - 1. how the frontal lobe develops specialized regions during maturation
    - 2. how speech and tool use overlap in human development
  - C. Theory of Mind
    - 1. the right temporal parietal junction in TOM
    - 2. the medial pre-frontal lobe in self perception and understanding others
    - 3. how future planning and compassion for others are related
  - D. Motivational aspects of neuromodulation

Noon Lunch (on your own)

1 – 4:30 p.m. (15 minute afternoon break)

- II. Right Hemisphere organization of Theory of Mind and Social Skills as applicable to autism spectrum disorders
  - A. Development of facial recognition, voice recognition and social skills
  - B. Right vs. left hemisphere organization for object and face recognition (DeHaene, 2009)
  - C. The right temporo-parietal region and TOM
  - D. Developmental disorders of TOM and social skill development
  - E. Evidence-based interventions

4:30 p.m. Adjourn

# Agenda

## Saturday, February 23

8 a.m.              Continental breakfast

8:30 a.m. – Noon (15 minute morning break)

- III. Left hemisphere organization for motor planning, motor sequencing and motor monitoring
  - A. Inferior frontal gyrus development as a bridge to pre-frontal lobe function
  - B. Speech development vs. motor skills acquisition
  - C. The role of perception in motor skill acquisition
  - D. The role of the mirror mechanism in motor skill acquisition

Noon              Lunch (on your own)

1 – 4:30 p.m.    (15 minute afternoon break)

- IV. Pre-frontal lobe functions of Cognitive (Executive) Control and working memory
  - A. How "screen" time may be shaping a new, distractible brain
  - B. Assessment of attention
  - C. Clinical considerations for maximizing attention control during treatment
    - 1. Continuous performance activities
    - 2. Working memory and attention

4:30 p.m.              Q & A and conclusion of course

# General Information

## Course Description

This two-day course provides an overview and clinical application of our new understanding of higher cognitive functions gleaned from neuroscience functional imagery of the brain during sensory-motor and cognitive tasks. Discussion will focus on executive functions of cognitive control, motor planning, working memory and Theory of Mind (TOM) with specific attention to how these are affected in children with ADHD, autism spectrum disorders and traumatic brain injuries. Evidence-based clinical approaches will follow a discussion of motivational neuromodulators that drive neuroplastic changes. A very clinical perspective will be taken with actual neuroscience based interventions presented.

This course will focus on:

- Cognitive (executive) control necessary for focused and sustained attention
- Motor planning, motor monitoring and motor sequencing learning and impairment
- The right hemisphere to medial pre-frontal lobe organization for Theory of Mind neuromodulators: noradrenalin, acetylcholine and dopamine – how they are upregulated and their role in cognitive and motor learning

Videos of neurodevelopment, neuroplasticity and neurological disorders will be presented for discussion and clinical problem-solving.

## Objectives

At the conclusion of this course, participants should be able to:

- Demonstrate understanding of human frontal lobe attention, motor planning and motor monitoring and TOM functions.
- Describe how developmental limitations to specific neural networks result in language, perceptual and cognitive dysfunction.
- Identify specific neuro-developmental processes by clinical presentation.
- Select and prioritize evidence based interventions for treatment of:
  - Cognitive (executive) control and working memory
  - Motor planning, sequencing and monitoring deficits
  - Disorders of Theory of Mind

## Who Should Attend

This course is designed for speech therapists, occupational therapists, physical therapists, psychologists and parents who are involved with children with these diagnoses.

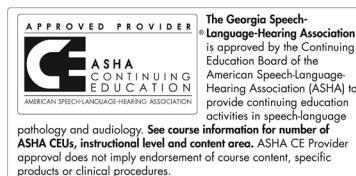
*This educational activity does not necessarily reflect the views, opinions, policies or procedures of Children's Healthcare of Atlanta, its staff or representatives. Children's cannot and does not assume any responsibility for the use, misuse or misapplication of any information provided.*

# General Information

## Continuing Education Units

Continuing Education Units have been applied for/approved through **Georgia Occupational Therapy Association** (GOTA) for **13 contact hours** (1.3 CEUs) for occupational therapists. These credits may apply toward licensure in other states as well as for PT licensure.

GSLHA is approved by the Continuing Education Board of the **American Speech-Language-Hearing Association** (ASHA) to provide continuing education activities in speech-language pathology and audiology. This program is offered for **1.3 CEUs** (Intermediate level; Professional area). ASHA CE Provider approval does not imply endorsement of course content, specific products or clinical procedures.



Children's Healthcare of Atlanta resolves to ensure that its educational mission, and, particularly, its continuing education activities are not influenced by the special interests of any corporation or individual associated with its program. While having a financial interest or professional affiliation with a corporation does not necessarily influence a speaker's presentation, the standards of the American Speech, Language and Hearing Association require that this relationship be disclosed to the audience. Any potential conflict of interest will be made known to participants at the beginning of the conference.

Visit [www.choa.org/therapistevents](http://www.choa.org/therapistevents) for more information about continuing education opportunities for therapists and a comprehensive listing of all of our course offerings at Children's.

## Accommodations

Mention Children's Healthcare of Atlanta for discounted rates.

Doubletree Hotel Atlanta North Druid Hills  
2061 North Druid Hills Road  
Atlanta, GA 30329-1808  
404-321-4174  
[www.doubletree.hilton.com](http://www.doubletree.hilton.com)

Courtyard by Marriott Executive Park/Emory  
1236 Executive Park Drive NE  
Atlanta, GA 30329-2243  
404-728-0708  
[www.marriott.com](http://www.marriott.com)

# General Information

---

## Location

Children's Healthcare of Atlanta Office Park  
1680 Tullie Circle, NE, Classroom 5  
Atlanta, GA 30329-2321  
[www.choa.org/locations](http://www.choa.org/locations)

## Instructor

**Dr. Martha S. Burns**, Ph.D., is an Adjunct Associate Professor at Northwestern University, Department of Communication Sciences and Disorders and has been a practicing clinician for 44 years. Dr. Burns is an ASHA Fellow and has received honors from Northwestern University, Evanston Hospital Corporation, the American Speech Language Hearing Foundation and St. Xavier University. She is the author of two books on aphasia and right hemisphere dysfunction as well as the test Burns Brief Inventory of Communication and Cognition published by Pearson. Dr. Burns has more than 125 publications including book chapters, non-refereed articles, blog posts, as well as more than 30 peer reviewed journal articles on the brain, speech, language and reading. Dr. Burns conducts courses and presents at more than 75 conferences world-wide each year on the application of neuroscience research to education and clinical practice.

## Conference Coordinator

Michelle Moore, MS, OTR/L  
404-785-7853  
[michelle.moore@choa.org](mailto:michelle.moore@choa.org)

All programs are intended to be accessible to all persons. If you have a disability and require assistance in order to fully participate in the conference activities, call the conference coordinator to discuss your specific needs.



---

1644 Tullie Circle NE  
Atlanta, GA 30329-2303

NONPROFIT  
U.S. Postage  
PAID  
Atlanta, GA  
Permit No. 2094