# The Effects of Poverty, Stress and Prolonged Hospitalization on Brain Maturation and Function:

Intervention Approaches for Children with Adverse Experiences



Friday, September 8 and Saturday, September 9, 2017

Instructor: Martha Burns, PhD

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



choa.org/therapisteducation

# Registration

The Effects of Poverty, Stress and Prolonged Hospitalization on Brain Maturation and Function: Intervention Approaches for Children with Adverse Experiences

Registration Fee \$335

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.

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.



# Register Online

Visit www.eply.com/Burns2017 to register. Call 404-785-7853 if you are not able to register online..

#### Location

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

Visit choa.org/locations and click on "The Children's Healthcare of Atlanta Office Park" for door-to-door directions.

#### Accommodations

Doubletree Hotel Atlanta North Druid Hills 2061 North Druid Hills Road Atlanta, GA 30329-1808 404-321-4174 www.doubletree1.hilton.com (Mention Children's Healthcare of Atlanta for discounted rates.)

#### Courtyard Atlanta Executive Park/Emory

1236 Executive Park Drive NE Atlanta, GA 30329-2243 404-728-0708 http://cwp.marriott.com/atlep/choa

#### Course Description

This course will cover a review of the effects of poverty, stress and prolonged hospitalization on brain maturation and function with an emphasis on evidence-based intervention approaches. After a review of the new research on brain maturation and environmental versus genetic factors that influence maturation the course will address methods for differential diagnosis keeping negative environmental effects on maturation in mind. The course will conclude with best practices for overcoming the effects of negative environmental factors on learning and evidence-based interventions for speech, language, cognitive and reading.

#### Who Should Attend

The target audience is pediatric SLP's, OT's, Special Education Teachers, Social Workers, Psychologists, and General Education Teachers in high poverty districts. Adult therapists are encouraged to attend as well as they will be treating this population as adults. Other disciplines are invited to attend as they see the need.

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.

## **Agenda**

Friday, September 8

7:30 a.m. Registration and continental breakfast

8:00 a.m. Brain organization for language, reading, math, and executive

functions

• Brain maturation mechanisms

Nodes and hubs

Edges and modules

Connectomes

9:30 a.m. Break

9:45 a.m. Etiological factors in complex learning problems

NeurogeneticsExperienceOther factors

Noon Lunch (on your own)

1:00 p.m. Effects of language exposure on brain maturation

Historical research - Hart and Risley

Galant labs research

 The role of auditory processing and effects of noise exposure on language development

2:00 p.m. Break

2:15 p.m. Effects of Stress on brain maturation

• Stress mechanisms in the brain

Effects of manageable and toxic stress

3:30 p.m. Adjourn

#### Saturday, September 9

7:30 a.m. Continental breakfast

8:00 a.m. Adverse Childhood Experiences (ACES) and brain development

Effects of surgery, anesthesia, and chemo therapy on young brains

• Effects of adverse childhood experiences

- on school readiness

- on school achievement

9:30 a.m. Break

9:45 a.m. **Effects of nutrition** 

• Role of protein in brain maturation

Role of other nutrients on brain maturation

Noon Lunch (on your own)

1:00 p.m. Best practices for overcoming effects of poverty, stress and adverse

childhood experiences on brain development

2:00 p.m. Break

2:15 p.m. Evidence-based practice for training of language, executive functions

and cognitive skills in children with a history of poverty and ACES

3:30 p.m. Conclusion of course and evaluations

The agenda is subject to change

#### **General Information**

#### Continuing Education Units



The Georgia Speech-Language-Hearing Association 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. See course information for number of ASHA CEUs, instructional level and content area. ASHA CE Provider approval does not imply endorsement of course content, specific products or clinical procedures.

This program is offered for 1.3 **CEUs** (Intermediate level; Professional area)

Direct contact hours have been applied for through the **Georgia Occupational Therapy Association** (GOTA) and the **Commission For Case Manager Certification** (CCM) for 13 contact hours. These credits may apply toward licensure in other states.

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 and printed in the conference materials.

Visit choa.org/therapisteducation for more information about Continuing Education opportunities for therapists at Children's.

#### Learning Objectives

#### At the conclusion of the workshop, participants will be able to:

- Apply new research on brain maturation to assessment of children with developmental learning issues
- Differentiate between genetic and environmental etiological factors in assessment of complex learning problems
- Apply new research on the effects of toxic stress as well as Adverse Childhood Experiences (ACES) to differential diagnosis of speech, language and learning problems
- Apply new research on the effects of anesthesia, chemotherapy, and extended hospitalization to differential diagnosis and intervention for speech, language and learning problems
- Apply new research on the effects of toxic stress as well as Adverse Childhood Experiences (ACES) to evidence-based treatment of speech, language and learning problems
- Select among appropriate evidence-based approaches for treatment of children of poverty with language, executive function and cognitive skill difficulties

## **Faculty**

#### Martha Burns, PhD

Dr. Martha S. Burns has been a practicing speech language pathologist in the Chicago area for over 40 years working with both children and adults. She serves on the Faculty of Northwestern University, department of communication sciences and disorders, and has been a consultant to The Rehabilitation Institute of Chicago for 35 years. Dr. Burns is a Fellow of the American Speech-Language-Hearing Association and has received honors from Northwestern University, Evanston Hospital Corporation, the American Speech Language Hearing Foundation and St. Xavier University. She has authored 3 books and over 100 book chapters and articles. Doody's Rating Service selected her book on the Right Hemisphere published through Aspen Press as one of the best health sciences books of 1997. In addition to that book, Dr. Burns is the author of a book on aphasia and the test Burns Brief Inventory of Communication and Cognition published by The Psychological Corporation. Dr. Burns is a consultant at the Rehabilitation Institute of Chicago and many school districts around the world. She presents 75-100 invited in-services, keynotes, webinars and continuing education courses world-wide each year on neuroscience applications to education and clinical practice.

#### **Disclosures**

Martha Burns, PhD--Financial: none; Non-Financial: none

#### Conference Coordinator

Michelle Moore, M.S., O.T.R./L. Senior Physician Learning Coordinator 404-785-7853 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.



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