ULTRASOUND BIOFEEDBACK FOR SPEECH SOUND DISORDERS: CLINICAL TRAINING FOR SLPs

Presented by
Dr. Jonathan Preston, CCC-SLP
Research Scientist, Haskins Laboratories &
Assistant Professor, Communication Disorders, Southern Connecticut State University

with Elaine R. Hitchcock, Ph.D., CCC-SLP,
Tara McAllister Byun, Ph.D., CCC-SLP, & Jessica Whittle, MA, CCC-SLP

Course Description
This course will introduce participants to ultrasound through hands-on experience with the technology, video examples, and an evidence-based review of the literature. Recent research has shown that biofeedback has the potential to facilitate accurate phoneme production in children who have not responded to traditional therapy. Ultrasound imaging provides real-time dynamic views of the tongue’s movement during speech. These images can be used to cue different movements with the tongue, which can be effective in establishing new articulatory patterns in children with persistent speech errors. This workshop will introduce clinicians to the strengths and limitations of an ultrasound treatment program. Hands-on practice with ultrasound technology will also be provided with the supervision of experienced clinicians. Workshop participants will be shown how to determine appropriate candidates for ultrasound imaging treatment, how to use ultrasound to evaluate tongue shapes and movements, as well as how to implement an ultrasound biofeedback program.

Course Objectives
As a result of this seminar, participants will be able to:
1. define ultrasound imaging as a biofeedback method for treatment of speech errors
2. explain the strengths and limitations of an ultrasound treatment program
3. determine appropriate candidates for ultrasound treatment
4. interpret coronal and sagittal ultrasound images associated with specific phonemes
5. describe how ultrasound could be used to treat specific speech sound errors

Biographical Information
Dr. Jonathan Preston is an Assistant Professor in Communication Sciences and Disorders at Southern Connecticut State University and a Research Scientist at Haskins Laboratories in New Haven, CT. He specializes in assessment and treatment of speech sound disorders. He has conducted clinical research on ultrasound biofeedback with children with persisting speech sound errors, including those with childhood apraxia of speech. He currently has an NIH grant supporting further research on the use of ultrasound in speech therapy.
Dr. Elaine R. Hitchcock is an assistant professor in Communication Sciences and Disorders at Montclair State University. She has an active research agenda in phonology, focusing on phonological development, treatment of phonological disorders using visual biofeedback and voicing acquisition. Dr. Hitchcock co-founded The Voice Center at St. Joseph’s Medical Center before joining the faculty at Montclair State University.

Dr. Tara McAllister Byun is an assistant professor of Communicative Sciences and Disorders at New York University. Her work focuses on the interaction between phonetic and phonological factors in child speech development. Dr. McAllister Byun’s research investigating acoustic biofeedback intervention for /r/ misarticulation is supported by an R03 grant from NIDCD.

Jessica Whittle is a certified speech-language pathologist who works with preschool and school-age children with speech and language disorders. She provides treatment using ultrasound biofeedback as part of an ongoing research study at Haskins Laboratories.

Disclosure:

Jonathan Preston, Ph.D., CCC-SLP
Disclosure:
Financial — Dr. Preston is an employed researcher at Haskins Laboratories and a practicing speech-language pathologist.
Nonfinancial — Dr. Preston has active research agenda, which includes treatment of phonological disorders using visual biofeedback.

Elaine R. Hitchcock, Ph.D., CCC-SLP
Disclosure:
Financial — Dr. Hitchcock is an employed faculty member at Montclair State University and a practicing speech-language pathologist.
Nonfinancial — Dr. Hitchcock has active research agenda, which includes treatment of phonological disorders using visual biofeedback.

Tara McAllister Byun, Ph.D., CCC-SLP
Disclosure:
Financial — Dr. Byun is an employed faculty member at New York University and a practicing speech-language pathologist.
Nonfinancial — Dr. Byun has active research agenda, which includes treatment of phonological disorders using visual biofeedback.

Jessica Whittle, M.A., CCC-SLP
Disclosure:
Financial — Ms. Whittle is an employed speech-language pathologist at Haskins Laboratories.
Nonfinancial — Ms Whittle provides treatment using ultrasound biofeedback as part of an ongoing research study.

Course Schedule
1:00-1:30 Introduction to ultrasound biofeedback: Strengths, & limitations, candidacy
1:30-1:45 Hands-on practice in groups
1:45-2:15 Video demonstrations and therapy examples for specific sounds: Alveolars and velars, sibilants
2:15-2:40 Hands-on practice in groups
2:40-3:00 Break
3:00-3:20 Examples of rhotics
3:20-3:50 Hands-on practice in groups
3:50-4:00 Review of research on ultrasound biofeedback
4:00-4:20 Discussion/Questions
**Location**
Main Conference Room
Haskins Laboratories
300 George Street,
Suite 900 (9th floor)
New Haven,
Connecticut 06511

**Date & Time**
Friday,
January 10, 2014
1:00-4:00pm

**Registration**
Register by January 8, 2014.
There is no fee for this program.
However, space is limited and will be offered on a first-come first-serve basis so please register early!

**Audience**
Certified Speech-Language Pathologists

**For further information and to register, contact**
Joann Kuebler
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This program is offered for .3 ASHA CEUs (advanced level, professional area).

Certificates documenting 3 contact hours of professional development will be distributed at the end of the workshop. Participants who arrive more than 15 minutes after the start of the activity or who leave more than 15 minutes before the end of the activity will not receive the certificate or be eligible for CE credit.