

Free Ultrasound Visual Feedback Lessons for Children with Speech Articulation Problems

A Research Study at Haskins Laboratories
Dr. Jonathan Preston, CCC-SLP, Principal Investigator

Who is Eligible?

Children ages 10-14 with articulation problems on the /r/ sound are now being recruited for a study. This includes children who have a history of Childhood Apraxia of Speech, as well as children with articulation problems on /r/ who do not have Childhood Apraxia of Speech. Children with speech disorders due to hearing loss, cleft palate, autism, or other developmental disability are not eligible at this time.

What Will Happen?

Children will be screened during a 2 hour visit at Haskins Laboratories in New Haven. During this session, several speech and language tests will be administered. If the child is eligible, he/she may be invited to participate in a follow-up visit involving EEG to assess the brain's response during speech tasks. Then, the child will participate in up to 14 sessions involving speech lessons in which **ultrasound** is used to provide a visual display of the tongue. Finally, three follow-up sessions will be conducted after the speech lessons.

Speech lessons involve using ultrasound to provide a video image of the tongue as the child talks. The child places the ultrasound beneath the chin. This generates a “real-time movie” of the tongue which can be used to help the child understand what is happening in the mouth when producing speech sounds. These images are used to cue the child to move the tongue to different positions and to make different tongue shapes to achieve a correct /r/.



What Does it Cost?

There is no cost to participants. Families will be compensated \$20/hr for each hour of testing plus \$5/hr for parking costs. No monetary compensation will be provided during the sessions in which speech lessons are provided.

What are the Risks?

Ultrasound imaging has been extensively studied. There are no known risks with this low-level imaging.

How Do I Find Out More?

For more information, email learn@haskins.yale.edu Or call 203-865-6163 x245



300 George St, Suite 900 New Haven, CT 06511 www.haskins.yale.edu