Advancing Social-Communication and Play (ASAP): An Intervention Program for Preschoolers with Autism. Institute of Education Sciences, Brian Boyd & Linda Watson, Co-PIs, Grace Baranek & Elizabeth Crais, Investigators, 2011-2016. This multisite study is examining the efficacy of a school-based intervention program developed by the UNC research team under an earlier award from the Institute of Education Sciences.

Outcomes of School Age Children who are Hard of Hearing. NIH-NIDCD, UNC Site Investigator: Melody Harrison in collaboration with Bruce Tomblin at the University of Iowa and Mary Pat Moeller at Boys’ Town National Research Hospital. This five-year study is a renewal of a longitudinal study to investigate child, family, and environmental factors that interact to predict the performance of children with mild-severe hearing loss.

Big Words II: A Phase II Steppingstones of Technology Innovations Award, U.S. Department of Education, Office of Special Education Programs, Karen Erickson, PI, 2011-2015. This Phase II study will complete the development of software designed to teach adolescents with language and learning disorders to decode science words with multiple syllables using a morphological approach, and conduct a large-scale experimental investigation of its effectiveness.

Temporal Masking and Speech Recognition in the Aging Auditory System. NIH-NIDCD, John Grose, PI (Department of Otolaryngology). The specific aims of this research are 1) to examine the relationship between speech recognition in modulated noise and temporal masking performance as a function of age, controlling for audibility, and 2) to relate psychophysical and electrophysiological measures of forward masking as a function of age. This is a collaborative project with hearing science colleagues in Brazil.

Complex Sound Analysis in Normal and Impaired Ears. NIH-NIDCD, John Grose, PI (Department of Otolaryngology). The purpose of this research is to better understand the role of temporal processing in perceptual organization, and how aging and impaired auditory systems can compromise this ability.

Development and Plasticity in Normal and Impaired Ears. NIH-NIDCD, Joseph W. Hall, PI (Department of Otolaryngology). The aim of this research is to gain a better understanding of the auditory processes that enable hearing in background noise, and the effect of early hearing loss on those processes.

Spectro-Temporal Analysis in Normal and Impaired Ears. NIH-NIDCD, Joseph W. Hall, PI (Department of Otolaryngology). The goal of this research is to gain a better understanding of the mechanisms that are responsible for poor hearing in noise by listeners with sensorineural hearing loss.

Acoustic Cues in Auditory Pattern Analysis. NIH-NIDCD, Emily Buss, PI (Department of Otolaryngology), PI, 2011-2016. The goal of this project is to identify and characterize the
auditory processes that limit detection and discrimination of spectral cues for stimuli that vary in level for both normal-hearing and hearing-impaired listeners.

**Auditory masking effects on speech fluency in aphasia and apraxia of speech.** NIH-NIDCD, Adam Jacks, PI, Katarina Haley, Co-investigator, 2012-2015. The goal of this project is to test the effects of listening to noise on speech fluency in stroke survivors with aphasia and apraxia of speech, and to identify individual factors that predict a change in fluency under these conditions.

**Project Core.** U.S. Department of Education, Office of Special Education Programs, Karen Erickson, PI. This five-year project is designed to develop products and services that support the implementation of a core vocabulary approach to augmentative and alternative communication for school-aged students with significant cognitive disabilities who also have complex communication needs.

**Investigating Visual Attention to Print in Children with Rett Syndrome,** International Rett Syndrome Foundation, subcontract with Appalachian State University, Karen Erickson, Co-investigator, 2014-2016. The goal of this project is to investigate the visual attention patterns of children with Rett syndrome during shared book reading with their parents before and after parents learn to employ a print referencing strategy while reading.

**Development of Stop Consonants in Children with Repaired Cleft Palate,** NIH-NIDCR, David J. Zajac, PI, 2013-2018. This five-year, longitudinal project will a) track the emergence and development of stop consonants in 12-month old children following cleft palate repair, and b) determine the factors – hearing, middle ear status, language, cleft type, and sex – that account for the development of stop consonants.

**Center on Secondary Education for Students with Autism Spectrum Disorders (CSESA).** Institute of Education Sciences, Jessica Dykstra Steinbrenner, Project Coordinator, (PIs: Sam Odom & Kara Hume at Frank Porter Graham Child Development Institute), 2012-2017. This multisite center grant is developing and examining the efficacy of a school-based intervention designed to support high school students on the autism spectrum across academics, social and peer relationships, independence and behavior, and transition.

**Pilot Study of the Pediatric Eating Assessment Tool (Pedi-EAT).** University of North Carolina, Junior Faculty Development Award, Cara McComish, PI, 2015-2016. The Pedi-EAT is being piloted with parents of children who are patients at the UNC Children’s Hospital Pediatric Feeding Team. The goals of this study are to determine feasibility of recruitment in a clinic setting and retention in preparation for a larger, multi-clinic study of the Pedi-EAT, and to evaluate changes in problematic feeding behaviors of children receiving feeding therapy over 6 months.

**Targeted transcranial electrotherapy to accelerate stroke rehabilitation: Exploratory trial on Aphasia.** NIH-NIND/Soterix Medical Inc, Adam Jacks, Site PI, 2015-2018. The goal of this project is to investigate the effect of targeted non-invasive brain stimulation (high-definition transcranial
direct current stimulation) paired with computerized naming treatment on naming ability in adults with aphasia and anomia following stroke.