Spectral Ripple Discrimination in Normal Hearing and Cochlear Implanted Infants

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**Aims/Goals:** Our goal is to understand the trajectory of spectral resolution ability in normal hearing and cochlear implanted (CI) infants using dynamic spectral testing. This could provide a tool for testing CI device efficacy in young listeners who are unable to participate in more complex means of device testing.

**Methods:** Using an observer-based psychoacoustic procedure, infants are presented with stimuli that are dynamic, spectrally rippled sounds that increase in ripple density until they seem non-rippled. An observer assesses infant response, and correct responses to stimuli are reinforced with toys or DVD clip.

**Results:** Currently, this project is in the data collection and analysis phase and manuscript in preparation.

**Future Directions:** Utilizing dynamic spectral ripple discrimination tests in school-aged CI children to understand the trajectory of spectral resolution ability and comparing performance to speech identification tasks.