Research Goals

- To examine the effects of cochlear implant experience on young deaf children's
  - Prelinguistic speech development
  - Phonological development
  - Spoken language ability
  - Speech intelligibility
- To develop clinically useful assessment tools for young children with hearing loss
  - Speech production
  - Speech perception
  - Oral language ability

Frequently Used Methodologies

Data Collection
- Video and audio-taping of parent-child interactions
- Parent questionnaires
- Articulation and language tests
- Criterion-referenced speech perception and production tasks

Data Analysis
- Auditory perceptual and spectrographic classification of child vocalizations
- Phonetic transcription
- Listener judgments of speech intelligibility

Main Findings of Previous Studies

- Prelingually deafened children who receive cochlear implants before 3.0 (years; months) often make relatively rapid gains in vocal development and early spoken language abilities.
- Early speech development can be used to assess benefit from cochlear implant experience
- The time-course of gains in prelinguistic speech development appears to be influenced by age at implantation.

Future Directions

- Further study of spoken language development in very young CI recipients regarding...
  - the time-course and sequence of early speech development
  - speech and language comparisons with typically developing infants and toddlers
  - the effects of age at implantation on speech development and oral language abilities
- Potential for interdisciplinary collaboration with researchers in child development, psychology, education, and healthcare