Dr. Thomas D. Carrell PhD

University of Nebraska-Lincoln Special Education & Communication Disorders (402) 472-0701 Email: tcarrell@unl.edu

Education

BA, University of California, Berkeley, 1976. Major: Psychology

Ph D, Indiana University - Bloomington.
 Major: Perceptual Psychology
 Dissertation Title: Contributions of Fundamental Frequency, Formant Spacing, and Glottal
 Waveform to Talker Identification

Postdoctoral Fellow, Massachusetts Institute of Technology. Major: Electrical Engineering / Speech Acoustics

Professional Memberships

Acoustical Society of America.

TEACHING

Teaching Experience

University of Nebraska-Lincoln

SLPA 250, Descriptive Phonetics and Normal Speech Development SLPA 456, Speech and Hearing Science SLPA 910, Auditory Signal Processing SLPA 964, Speech Perception and Processing SLPA 980B, Seminar in Speech Acoustics SLPA 981, Seminar in Speech Pathology

Directed Student Learning

Doctorate (committee member)

Doctorate (committee member, reader), "Executive capabilities in individuals with TBI" (in progress as of 2014). Advised: Jessie Brown.

Doctorate (committee member, reader) "Effects of reverberation and noise on speech comprehension and listener fatigue by native and non-native English speakers." Architectural Engineering. (Graduated December 2014). Advised: Zhao (Ellen) Peng

Doctorate (committee member, reader), "Neurophysiological Bases of Impaired Social Functioning in People with Severe Mental Illness," Psychology. (April 2013). Advised: Melissa Tarasenko

Doctorate (committee member), "Note-taking characteristics, performances, and classroom accommodation preferences of three undergraduate students with brain injuries,"

Speech-Language Pathology & Audiology. (July 2013). Advised: Carrie Childers

Doctorate (committee member), Special Education & Communication Disorders. Advised: Anusha Thomas (Graduated 2013)

Other

Pre-prospectus, "Imaging and Behavioral Measures of Auditory Objects, "Computer Science & Engineering: changed to Communication Disorders (in progress as of 2014) Advised: Bahar Shahsavarani

UCARE

UCARE, "Listener Fatigue as an Objective Measure of Speech Quality," Speech-Language Pathology & Audiology. (August 20, 2012 - 2014). Advised: Katherine Thrailkill

RESEARCH

Presentations Published in Proceedings

Carrell, T. (Presenter & Author), Nebraska Acoustics Group, Acoustical Society of America -Nebraska Chapter, Peter Kiewit Institute, Omaha, NE. (March 4, 2013).

Presentations Given

- Carrell, T. (Presenter & Author), Nebraska Acoustics Group, Acoustical Society of America -Nebraska Chapter, Peter Kiewit Institute, Omaha, NE. (March 4, 2013).
- Cabbage, K. & Carrell, T. (2014) The relationship between speech perception and production: Evidence from children with speech production errors. The Journal of the Acoustical Society of America, 135, 2420-2420 (2014).

Contracts, Grants and Sponsored Research

Grant

- Wang, L. (Principal Investigator), Carrell, T. (Investigator), "Comprehension of ESL Speech," Sponsored by Paul S Veneklasen Research Foundation, Associations/Foundations, \$40,277.00. (July 1, 2013 - November 30, 2014).
- Bahar Shahsavarani (CAPCSD scholarship). \$20,000 Carrell, T Advisor. fMRI and ERP imaging for measurement of sensory memory parameters. (Submitted)
- Samal, A. (Principal Investigator), Samal, A. (Investigator), Green, J. (Investigator), Marx, D. (Investigator), Molfese, D. (Investigator), Carrell, T. (Investigator), "Assessment of Speech Impairments," Sponsored by NSF, Federal, \$0.00.
- Wang, L. (Principal Investigator), Lau, S. K. (Investigator), Carrell, T. (Investigator),
 "Comprehension of ESL Speech," Sponsored by Paul S Veneklasen Research Foundation, Associations/Foundations.

Other

- Green, J. (Principal Investigator), Samal, A. (Investigator), Carrell, T. (Investigator), Samal, A. (Investigator), Wang, J. (Investigator), Wang, J. (Investigator), Wang, J. (Investigator), "Articulation-to-Speech Recognition," Sponsored by NSF, Federal.
- Beukelman, D. (Principal Investigator), Carrell, T. (Investigator), "Communication Sci & Disorders Rsch Group Protocol," Sponsored by Amer Speech,Lang & Hear Assn, Associations/Foundations, \$0.00.

Intellectual Contributions in Submission

Journal Articles

- Fager, T., Carrell, T., Beukelman, D. Duration and variability of single words in dysarthria due to traumatic brain injury.
- Shapley, K., Carrell, T. The interaction of acoustic and linguistic grouping cues in auditory object formation.
- Srinivasan, N., Carrell, T. Listening to natural versus cell phone speech on multiple simultaneous tasks.

Training

Currently training on MEG methodology at CB3 for research collaboration with Dennis Molfese.