

CURRICULUM VITAE

Austin Oder Rosner, BA, ABD

Doctoral Candidate

Department of Special Education and Communication Disorders, University of Nebraska-Lincoln

Personal Information

Address: 220 Barkley Memorial Center, University of Nebraska
Lincoln, NE 68583-0738
Phone: (620) 433-2247
Email: aoder@huskers.unl.edu
Citizenship: United States

Educational History

- 2009 **BA, Speech-Language-Hearing: Sciences & Disorders**
B.A. minor, Linguistics
University of Kansas
Advisors: Dr. Sarah Hargus Ferguson, Dr. Diane Loeb
- 2013 **ABD, Speech-Language-Hearing: Sciences & Disorders**
University of Kansas
Mentor: Dr. Steven M. Barlow
- 2015 **PhD, Human Sciences with emphasis in Communication Disorders and Neuroscience** (anticipated Fall 2015 graduation)
University of Nebraska-Lincoln
Mentor: Dr. Steven M. Barlow

Honors and Awards

- 2015 **Travel Award to Society for Neuroscience Conference, Chicago, IL**
University of Nebraska-Lincoln Department of Special Education &
Communication Disorders
\$500
- 2014 **New Century Scholars Doctoral Scholarship**
American Speech-Language-Hearing Foundation
\$10,000
- 2014 **Travel Award to Society for Functional Near-Infrared Spectroscopy (fNIRS) Conference, Montreal, Quebec, Canada**

University of Nebraska-Lincoln Department of Special Education &
Communication Disorders
\$500

- 2013 **Margaret C. Byrne Saricks Graduate Research Award**
University of Kansas Department of Speech-Language-Hearing
\$100
- 2013 **Sigma Xi Research Competition Award** – *1st place for early graduate students*
University of Kansas Graduate Studies
- 2013 **University of Kansas Graduate Student Research Competition Award**
University of Kansas Graduate Studies
\$250
- 2009 **Margaret C. Byrne Saricks Undergraduate Research Award**
University of Kansas Department of Speech-Language-Hearing
- 2009 **Departmental Honors in Speech-Language-Hearing**
University of Kansas Department of Speech-Language-Hearing
- 2008 **University of Kansas Undergraduate Research Award**
University of Kansas Honors Program
\$750 *research grant*

Research Experience

- 2014-present **Communication Neuroscience Laboratories**
University of Nebraska-Lincoln
Graduate Research Assistant for Dr. Steven Barlow
- Conducting dissertation research on neural adaptation and hemodynamic responses to motor and somatosensory stimulation of the face and hand in children and adults, using fNIRS and structural MRI
 - Co-authored 2 book chapters on oral-motor development and preterm infant feeding/brain development
 - Assisted with Barlow lab move from University of Kansas to University of Nebraska-Lincoln, including lab setup and organization
- 2009-2013 **Communication Neuroscience Laboratories**
University of Kansas
Graduate Research Assistant for Dr. Steven Barlow
- Designed study, collected and analyzed data on the effects of multisensory stimulation on suck parameters in healthy infants
 - Published as first author on peer-reviewed article on the effects of pacifier texturing on healthy infants' non-nutritive suck patterns

- Co-authored 4 peer-reviewed articles on the effects of patterned oral stimulation on feeding and brain development
- Assisted in data collection and analysis of non-nutritive suck patterns of premature infants and oromotor skills of individuals with Parkinson's Disease
- Completed organization of lab records and materials, and performed EO sterilizations
- Assigned lab duties, managed and trained lab members

2008-2010 **Language and Reading Disorders Laboratory**

University of Kansas

Undergraduate/Graduate Research Assistant for Dr. Hugh Catts

- Administered standardized pre- and post-tests to children (K-2nd grade) in the Lawrence Public School District
- Assisted in the organization and preparation of reading intervention materials
- Assisted in the scoring and transcribing of assessments

2008-2009 **Speech Acoustics and Perception Laboratory**

University of Kansas

Undergraduate Research Assistant for Dr. Sarah Hargus Ferguson

- Designed study, collected and analyzed data for an undergraduate honors thesis on dialect acoustics and intelligibility
- Published as first author on peer-reviewed article on dialect acoustics and intelligibility
- Performed in-depth investigation of previous research on American English dialects, vowel space and acoustic characteristics, formant contours, speech perception and categorization, and sociolinguistic variables

2007-2008 **Language Development Disorders and Intervention Studies Laboratory**

University of Kansas

Undergraduate Research Assistant for Dr. Diane Loeb

- Assisted in the pre- and post-testing of children involved in summer reading/language intervention program
- Prepared phonological activities and materials for summer intervention program
- Worked onsite in Topeka, KS and Powhattan, KS in absence of Site Coordinator
- Assisted in the scoring and transcribing of assessments

Research/Teaching Interests

- Infant neural development/plasticity
- Neuroprotection
- Sensory (uni- and multi-modal) and motor integration
- Speech anatomy and physiology
- Oromotor development for suck, mastication, and deglutition
- Uni- and multi-modal neuroimaging
- Communication neuroscience

- Research methods

Teaching Experiences

- 2014-2015 **SLPA 853: Neurological Foundations of Speech and Language**
University of Nebraska-Lincoln
- Invited guest lecturer on functional near-infrared spectroscopy (fNIRS)
- 2013 **SPLH 320: Neuroscience of Human Communication**
University of Kansas
- Teaching assistant for Dr. Steven Barlow
 - Taught lecture courses
 - Held office hours and exam review sessions
 - Wrote and graded quizzes and exams
- 2012-2013 **SPLH 662: Speech Science**
University of Kansas
- Teaching assistant for Dr. Steven Barlow & Dr. Jonathan Brumberg
 - Taught lecture courses
 - Held office hours and exam review sessions
 - Wrote and graded quizzes and exams

Professional Organizations

Acoustical Society of America (ASA)
 National Student Speech-Language-Hearing Association (NSSLHA)
 American Speech-Language-Hearing Association (ASHA) Special Interest Group 5: Speech Science and Orofacial Disorders
 Society for Neuroscience (SfN) Graduate Student member
 Sigma Xi, University of Kansas-Lawrence chapter
 Society for Functional Near-Infrared Spectroscopy (SfNIRS)

Professional and Discipline Related Services

- 2014 **Special Education & Communication Disorders Faculty Search**
University of Nebraska-Lincoln
 Graduate Student Participant
- 2010-2013 **Speech-Language-Hearing Faculty Meetings**
University of Kansas
 Graduate Student Representative
- 2010-2013 **Speech-Language-Hearing & Child Language Program Graduate Student Organization**
University of Kansas
 President (2011-2012; 2013)

Treasurer (2012-2013)
Member (2010-2013)

2007-2009 **KU Student Speech-Language-Hearing Association**
University of Kansas
Member

Invited Scientific Presentations

Barlow, S.M., Lee, J., Wang, J., **Oder, A.** (2012). Suck development in preterm infants is dependent on the spectral content of patterned somatosensory inputs. Invited Nanosymposium on *Oral Movements* at the annual meeting of the *Society for Neuroscience*, 14.05. New Orleans, LA.

Oder, A. & Barlow, S.M. (2013). The Communication Neuroscience Laboratories: Developing Translational Neurotherapeutics. Invited presentation at the Institute for Electrical and Electronics Engineers–Kansas City chapter April meeting.

Oral Presentations

Rosner, A.O., Barlow, S.M. (2015). Hemodynamic changes in sensorimotor cortex following hand and orofacial motor tasks and pulsed cutaneous stimulation. Technical clinical/technical research oral session at the annual meeting for the *American Speech-Language-Hearing Association*, Denver, CO.

Rosner, A.O., Barlow, S.M., (2015). Sensorimotor cortical hemodynamics following hand and orofacial motor tasks and pulsed cutaneous stimulation. Nanosymposium on *Oral Motor and Speech* at the annual meeting for the Society for Neuroscience, Chicago, IL.

Poster Presentations

Oder, A., Clopper, C.G., & Ferguson, S.H. (2009). Effects of dialect on vowel acoustics and intelligibility. *The Acoustical Society of America*, Portland, OR.

Oder, A., Wang, J., & Barlow, S.M. (2012). Effects of Chemotactile Experience on Ororhythmic Patterning in Neurotypical Infants. *American Speech-Language-Hearing Association*, Atlanta, GA. #7571.

Oder, A., Stalling, D., Barlow, S.M. (2013). Effects of pacifier texture on non-nutritive sucking in neurotypical infants. *University of Kansas Graduate Research Competition*, Lawrence, KS.

- Barlow, S.M., Lee, J., Wang, J., **Oder, A.**, Hall, S., Knox, K., Weatherstone, K., & Thompson, D. (2013). NNS development in preterm infants is dependent on the spectral content of patterned somatosensory inputs. *Pediatric Academic Societies*, Washington, DC.
- Custead, R., Oh, H., **Oder, A.**, Barlow, S.M. (2013). Adaptation of the cortical somatosensory evoked potential following pneumatic stimulation of the face in adults. *Society for Neuroscience*, San Diego, CA.
- Custead, R., Oh, H., **Oder, A.**, Barlow, S.M. (2014). Adaptation of the cortical somatosensory evoked potential following pneumatic stimulation of the face in adults. *International Motor Speech Conference*, Sarasota, FL.
- Oder, A.**, Custead, R., Oh, H., Barlow, S.M. (2014). Hemodynamic changes in cortical sensorimotor systems following hand and orofacial motor tasks and pulsed cutaneous stimulation. *fNIRS 2014*, Montreal, Quebec, Canada.
- Rosner, A.O.**, Barlow, S.M. (2016). Sensorimotor cortical hemodynamics following hand and orofacial motor tasks and pulsed cutaneous stimulation. *International Motor Speech Conference*, Newport Beach, CA.

Publications

- Oder, A.**, Clopper, C.G., & Ferguson, S.H. (2013). Effects of dialect on vowel acoustics and intelligibility. *Journal of the International Phonetic Association*, 43, 23-35.
doi:10.1017/S0025100312000333
- Oder, A.**, Stalling, D., & Barlow, S.M. (2013). Short-term effects of pacifier texture on NNS in neurotypical infants. *International Journal of Pediatrics*. Article ID 168459, 8 pages.
<http://dx.doi.org/10.1155/2013/168459>
- Barlow, S.M., Jegatheesan, P., Weiss, S., Govindaswami, B., Wang, J., Lee, J., **Oder, A.**, & Song, D. (2014). Amplitude-integrated EEG and range-EEG modulation associated with pneumatic orocutaneous stimulation in preterm infants. *Journal of Perinatology*, 34(3), 213-219.
- Song, D., Jegatheesan, P., Weiss, S., Govindaswami, B., Wang, J., Lee, J., **Oder, A.**, & Barlow, S.M. (2014). Modulation of EEG spectral edge frequency during patterned pneumatic oral stimulation in preterm infants. *Pediatric Research*, 75(1), 85-92.
- Barlow, S.M., Lee, J., Wang, J., **Oder, A.**, Hall, S., Knox, K., Weatherstone, K. & Thompson, D. (2014). Frequency-modulated orocutaneous stimulation promotes non-nutritive suck development in preterm infants with respiratory distress syndrome or chronic lung disease. *Journal of Perinatology*, 34(2), 136-142.

Barlow, S.M., Lee, J., Wang, J., **Oder, A.**, Oh, H., Hall, S., Knox, K., Weatherstone, K., & Thompson, D. (2014). Effects of oral stimulus frequency spectra on the development of non-nutritive suck in preterm infants with respiratory distress syndrome or chronic lung disease, and preterm infants of diabetic mothers. *Journal of Neonatal Nursing*, 20(4), 178-188.

Barlow, S.M., & **Rosner, A.O.** (2015). Oral sensorimotor development: research and treatment. In R.H. Bahr & E.R. Silliman (Eds.), Handbook of Communication Disorders (pp 103-113). London: Routledge.

Custead, R., Oh, T., **Rosner, A.O.**, Barlow, S.M. (2015). Adaptation of the cortical somatosensory evoked potential following pulsed pneumatic stimulation of the lower face in adults. *Brain Research*, 1622, 81-90.

Barlow, S.M., & **Oder, A.** (in press). Feeding and Brain Development in Preterm Infants. In B. Govindaswami (Ed.), Newborn Medicine--Practical Approaches to Newborn Care: A Global Perspective in the Age of Information. New Delhi, India: Jaypee Brothers Medical Publishers.