

Rebecca Custead, RN, MA

(913) 314-9282

rcustead@huskers.unl.edu

Education

- 2014 ABD, PhD candidacy in Communication Disorders, Human Sciences, University of Nebraska
2011 Master of Arts Degree in Speech-Language Pathology, University of Kansas
1992 Bachelor of Science Degree in Nursing, University of Illinois at Chicago

Employment

- 2014-Present Graduate Research Assistant, Barkley Doctoral Fellow, SECD, Communication Neuroscience Laboratories, University of Nebraska
2010-2013 Graduate Research Assistant, Communication Neuroscience Laboratories, Life Span Institute, University of Kansas
2003-2004 RN: Adult CCU (Charge/Staff); St. Luke's Hospital and Heart Institute, Kansas City, MO
1996-2003 RN: Adult ICU/CCU (Charge/Staff); Overland Park Regional Medical Center, OP, KS
1993-1996 RN: Adult and Pediatric ER, SICU, MICU, BURN (Staff): Doctor's Hospital of Hyde Park, Mount Sinai Trauma Center, Rush-Presbyterian Medical Center, Chicago, IL
1992-1993 RN: Adult OR Step-Down (Staff), Truman Medical Center, Kansas City, MO

Clinical Experience: Speech-Language Pathology

Intercampus Program in Communication Disorders, University of Kansas (2010-2013)

- Kansas University Medical Center Adult Swallow Outpatient Evaluation; Modified Barium Swallows (MBS/Radiography)
- Individual Clients: Adult Voice, Adult Dysphasia (Evaluation and Treatment)
- Individual Clients: Child Fluency, Child Articulation, Autism (Evaluation and Treatment)
- Kansas University Medical Center Adult Diagnostic Clinic: Aphasia, Traumatic Brain Injury, CVA, Dysarthria (Evaluation)
- Graduate Externship (Field Study): Keystone Preschool Evaluation (LEAP), Jefferson County, KS

Clinical Experience: Nursing

- 10 years adult cardiothoracic, cardiovascular and trauma specialization (CCU)
- Charge nurse and supervisory experience: Includes staffing, triage and skill mix considerations
- Worked in the intensive care setting (ICU): Training includes resuscitative protocol/advanced cardiac life support (ACLS), acute respiratory distress syndrome (ARDS), acute trauma, neural injury (CHI), post open-chest (POC) and solid organ transplant recovery
- Experience with many chemotherapeutics, central line placement, HIV drug trials, and stroke anticoagulation protocols
- Extensive experience with many types of IV infusion and hemodynamic monitoring systems including; intraventricular shunts, ICP monitors, dialysis, ECMO and continuous cardiac output (CCO, Swan Ganz)

Research Experience: Communication Disorders & Sciences

Communication Neuroscience Laboratory, Mentor: Dr. Steven Barlow, University of Kansas (2010-2013), University of Nebraska (2014-Present):

- Encoding of Saltatory Tactile Velocity in the Human Orofacial Somatosensory System using fMRI (University of Nebraska, Center for Brain, Biology & Behavior; Barkley Trust)
- Plasticity of Sensorimotor Cortex in Adult Cerebrovascular Stroke (University of Nebraska, Madonna Rehabilitation Hospital, Center for Brain, Biology & Behavior; Barkley Trust)
- Somatosensory and Motor Function in Individuals with Cerebral Stroke Following Patterned Pneumocutaneous Stimulation (FDA Trial, University of Nebraska, Madonna Rehabilitation Hospital, University of Nebraska Medical Center, Omaha; Epic Medical Concepts & Innovations)
- Somatosensory and Motor Function in Neurotypical Adults Following Patterned Pneumocutaneous Stimulation (University of Nebraska Graduate Project; Barkley Fund)
- Adaptation of the cSEP Following Pneumatic Stimulation of the Face in Adults (University of Nebraska, University of Kansas Graduate Project)
- Vibrotactile Cutaneous Detection Thresholds in the Lower Face and Hand (Graduate Assistant, Venkatesan Dissertation)
- Biodynamics of Speech and Orofacial Movement in Health and Disease; Motion Lab (Graduate Assistant, Chu Dissertation)
- Orofacial Kinematics of Canonical Babbling; Motion Lab (Graduate Assistant, Poore Dissertation)
- Oromotor Entrainment Therapy (NTrainer device); NICU, Overland Park Regional Medical Center, Stormont-Vail Healthcare (Graduate Assistant, Barlow NIH R01 DC00311-11 Grant)
- Newborn/Infant Vestibular Stimulation; NICU, Stormont-Vail Healthcare (Graduate Assistant, Zimmerman Dissertation)

Teaching Experience

- SPLA 853: Communication Neuroscience (Graduate), University of Nebraska (Lecture: Stroke, Cerebral Vascular Accident, 2014, 2015)
- SPLH 320: The Computing Brain (Undergraduate), University of Kansas (Teaching Assistant, Exam Review and Proctor, Lecture, 2013)
- Adult/Child/Infant Cardiopulmonary Resuscitation (BLS/CPR) Instructor, American Red Cross

Independent Study: Communication Disorders and Sciences

Department of Speech-Language-Hearing; Sciences and Disorders, University of Kansas (2009-2013):

- Rigid and Flexible Endoscopy
- Cleft Lip and Palate; Fetal/Infant Development
- Sensorimotor Neural Pathways/Mechanoreception/Plasticity
- Autism, Somatosensory Integration and Mirror Neuron Systems
- Orofacial Biomechanical Properties in Health and Disease

Supplemental Study: Graduate Neuroscience

Department of Neuroscience, University of Kansas Medical Center (2011-2013)

- Advanced Neuroscience
- Neurophysiology
- Chemistry of the Nervous System
- Molecular Mechanisms of Neurological Disorders

Publications

Custead R, Oh H, Oder A, Barlow SM. Adaptation of the cortical somatosensory evoked potential following pneumatic stimulation of the face in adults. *Brain Research* 2015, 1622: 81-90.

Poster Presentations (published abstract)

Custead, R, Oh, H, Oder, A, Barlow, SM. (2013). Adaptation of the cortical somatosensory evoked potential following pneumatic stimulation of the face in adults. *Society for Neuroscience*

Custead, R, Oh, H, Oder, A, Barlow, SM. (2014). Adaptation of the cortical somatosensory evoked potential following pneumatic stimulation of the face in adults. *Int. Motor Speech Conference*

Custead, R, Oh, H, Barlow, SM (2015). Encoding saltatory tactile velocity in the human orofacial somatosensory system using fMRI, *Society for Neuroscience, Nanosymposium*

Honors and Awards

2009-2011 Golden Key International Honors (Undergraduate-Graduate)

2009-2010 Sigma Alpha Lambda (Graduate Honors Speech-Language, University of Kansas)

2009 Kansas Vocational Rehabilitation Graduate Study and Teaching Scholarship

1992 Phi Beta Kappa (Undergraduate Honors)

Service/Professional Affiliations

- American Speech-Language-Hearing Association (active member)
- The Neurovascular Research Foundation (active member, former coordinator)
- Society for Neuroscience (active student member)
- American Heart Association Professionals Network (active member)
- American Association of Critical Care Nurses (active member)
- Emergency Medical Services and Disaster Volunteer Responder, American Red Cross