

FACULTY RESEARCH ACTIVITY AND INTERESTS

Department of Communication Sciences and Disorders

East Carolina University

January 2012

The following is a brief description of the research activity in the Department of Communication Sciences and Disorders at East Carolina University. This is an example of the faculty's research interests but by no means an exhaustive description.

Rose Allen, PhD

Associate Professor

Research Interests:

Ethical issues; Supervision of graduate level students in Speech-Language Pathology and Audiology; Audiological diagnostics; Binaural Interference.

Selected Publications:

- Allen, R. & Rastatter, M. (2005). *Student Judgments of Ethical/Unethical Scenarios*, ASHA Special Interest Division 11; Perspectives on Administration and Supervision, 15 (2), 12-14.
- Cray, J., Allen, R., Stuart, A., Hudson, S., Layman, E., and Givens, G. (2004). *Telephone Usage Among Cochlear Implant Recipients*. American Journal of Audiology, 13(2), 200-212.
- Allen, R., Stuart, A., Everett, D., and Elangovan, S. (2004). *Preschool hearing screening: Pass/Refer rates for preschool children*. American Journal of Audiology, 13 (1), 29 - 38.
- Smith, L., and Allen, R. (2004). *State of the States: What do they regulate?* ASHA Special Interest Division 11: Perspectives on Administration and Supervision, 13 (2), 3 - 4.
- Allen, R., Smith, L., and Rastatter, M. (2003). *Teamwork Revisited: Are You Ready for Virtual Teams?* ASHA Special Interest Division 11 Newsletter (13) 1.
- Allen, R. and Eubanks, C. (2003). *Hearing aids: Reasonable expectations for parents*. Audiology Online [On-line], Available: www.audiologyonline.com.
- Allen, R. (2002). *Hearing aids: Reasonable expectations for the consumer*. Audiology Online [On-line], Available: www.audiologyonline.com.
- Allen, R. and Culbertson, D. (2002). *Students with hearing loss in audiology training programs: Academic and clinical considerations*. ASHA Special Interest Division 11 Newsletter (12) 3.
- O'Rourke, C., Valente, M., Britten, F., Allen, R., Staab, M., and Schober-Peterson, D. (2002). *Career paths for clinical faculty: Four university approaches*. ASHA Special Interest Division 11 Newsletter (12) 1.
- Allen, R. (2000). *CROS words of wisdom*. Advance for Audiologists, pp. 42-43.
- Allen, R., Schwab, B., Cranford, J., and Carpenter, M. (2000). *Investigation of binaural interference in normal hearing and hearing impaired adults*. Journal of the American Academy of Audiology, (11), 494-500.
- Wynne, M., Kahn, J., Abel, D., and Allen, R. (2000). *External and middle ear trauma resulting from ear impressions*. Journal of the American Academy of Audiology, (11), 351-360.

- Stuart, A., Allen, R., Downs, C., and Carpenter, M. (1999). The effects of venting on in-the-ear, in-the-canal, and completely-in-the-canal hearing aid shell frequency responses: real-ear measures. *Journal of Speech, Language, and Hearing Research*, *42*, 804-813.
- Allen, R., Cranford, J., Pay, N. (1996) Case study of central auditory processing in an adult with congenital absence of left temporal lobe, *Journal of the American Academy of Audiology*, August.

Laura J. Ball, PhD

Associate Professor

Research Interests:

Augmentative communication and apraxia.

Selected Publications:

- Beukelman DR, Fager S, Ball L, Dietz A. (2007). AAC for adults with acquired neurological conditions: a review. *AAC: Augmentative & Alternative Communication*. *23*, 230-242.
- Ball LJ, Sullivan MD, Delany S, Stading K, Schaefer GB. (2005). Speech-language characteristics of children with Sotos syndrome. *Am J Med Genet A*, *136A*, 363-7.
- Ball LJ, Beukelman DR, Pattee GL. (2004). Communication effectiveness of individuals with amyotrophic lateral sclerosis. *J Commun Disord*, *37*, 197-215.
- Beukelman DR, Ball LJ. (2002). Improving AAC use for persons with acquired neurogenic disorders: understanding human and engineering factors. *Assist Technol*, *14*, 33-44.

Kathleen Treole Cox, PhD

Associate Professor

Research Interests:

Kathleen T. Cox's research interests include primarily voice and voice disorders; however, she has also mentored doctoral students and conducted research in studies of swallowing function and dysphagia. Her research is clinical in focus with specific interests in paradoxical vocal fold dysfunction and the impact of stroboscopy in the diagnosis and treatment of voice disorders. Her data is often gathered during clinical practice at the otolaryngological offices of Eastern Carolina Ear-Nose-Throat where she provides voice diagnostic and treatment services along with dysphagia services and laryngectomy care. She has close affiliations with the Vocal Music program in the ECU School of Music as well as the otolaryngologists in Greenville, North Carolina.

Selected Publications:

- Hiss, S.G., Hough, M., Treole, K., Stuart A. (2004). Effects of Age, Gender, Bolus Volume, Bolus Viscosity, and Gustation on Swallowing Apnea Onset Relative to Lingual Bolus Propulsion Onset in Normal Adults. *Journal of Speech, Language and Hearing Research*, *47*(3):572-83.
- Hiss, S.G., Hough, M., Treole, K., Stuart, A. (2003). Swallowing Apnea as a Function of Airway Closure. *Dysphagia*, *18*(4):293-300.

- Workman, J. R., Treole, K. (2002). Evaluation and Management of Adult Dysphagia and Aspiration. Current Opinion in Otolaryngology & Head and Neck Surgery 10(6), 478-484.
- Hiss, S., Treole, K., Stuart, A. (2001). Effects of Age, Gender, Bolus Volume, and Repeated Measures on Swallowing Apnea Duration and Swallow/Respiratory Phase Relationships in Normal Adults. Dysphagia, 16, 128-135.
- Hiss, S., Treole, K., Stuart, A. (2001) Effect of Age, Gender, and Repeated Measures on Intraoral Air Pressure in Normal Adults. The Journal of Voice, 15(2), 159-164.
- Powell, DM, Karanfilov, BI, Beechler, KB, Treole, K, Trudeau, MD, Forrest, LA. (2000). Paradoxical vocal cord dysfunction in juveniles. Archives of Otolaryngology Head and Neck Surgery, 126(1): 29-34.
- Lawrence, P., Treole, K., McCabe, R., Allen, R., Toppin, L. (2000). The Effects of Preventive Vocal Hygiene Education on the Vocal Hygiene Habits and Perceptual Vocal Characteristics of Training Singers. The Journal of Voice (14), 1: 1-13.
- Treole, K, Trudeau, M., Forrest, L.A. (1999) Endoscopic and Stroboscopic Description of Adults with Paradoxical Vocal Cord Dysfunction. The Journal of Voice (13), 1: 143-152.
- Treole, K, Trudeau, M. (1997) Changes in Sustained Production Tasks Among Women with Bilateral Vocal Nodules Before and After Voice Therapy. The Journal Of Voice, 11 (4): 362-369

Deborah Culbertson, PhD

Clinical Associate Professor

Research Interests:

Clinical audiology procedures: reliability, validity, and modifications of clinical procedures.
 Auditory processing: patterns of test results; relation of behavioral and objective test results.
 Hearing aids, assistive devices and aural rehabilitation: verification measures (e.g., relation of programming to desired real ear gain), and benefit measures (i.e., self reports of real world function); relation of client care to on-going status of hearings aids (e.g., need for visits related to repair), conversational behaviors of seniors with hearing loss, effects of counseling.

Selected Publications:

- Culbertson, D., Griggs, M. & Hudson, S. (2004). Ear and Hearing Status in a Multilevel Retirement Facility, *Geriatric Nursing*, 25 (2), 93-98.
- Carpenter, M.D., Allen, R.L., Culbertson, D., Everhart, D.E., Holbert, D., & Rastatter, M.P. (In press). Effects of rate, frequency, and ear of stimulation on the amplitude of Late Auditory Evoked Potentials. *Journal of the American Academy of Audiology* .
- Allen, R., & Culbertson, D. (2002). Students with Hearing Loss in Audiology Training Programs: Academic and Clinical Considerations. *Perspectives on Administration and Supervision (ASHA Division 11)*, 12 (3), 4-6.
- Scudder, S.G., Culbertson, D.S., Waldron, C.M., & Stewart, J. (2003). Predictive Validity and Reliability of Adult Hearing Screening Techniques, *Journal of the American Academy of Audiology*. Volume 4 (1), 9-19.
- Culbertson, D, & Kricos, P. (2001). Language and Speech of the Deaf and Hard of Hearing. In R.L. Schow and M.A. Nerbonne, (Eds.), *Introduction to Audiologic Rehabilitation*. Austin, Texas: Pro-Ed.

Gregg D. Givens, PhD

Professor

Research Interests:

Auditory processing and learning disabilities; Aging effects on auditory abilities; Infant and early developmental audition in humans; telemedicine applications to audiology.

Patent:

Givens, G., Balch, D., Murphy, T., Blanarovich, A., & Keller, P. Systems, methods and products for interactive diagnostic hearing assessments distributed via the use of a computer network, 2005.

Selected Refereed Publications:

- Crowell, E., Givens, G., Jones, G., Brechtelsbauer, P., and Yao, J. (2011) Audiology Telepractice in a Clinical Environment: A Communication Perspective, *Journal of Otology, Rhinology and Laryngology*, 120 (7), 441-447.
- Yao, J. and Givens, G. (2010) Using Web Services to Realize Remote Hearing Assessment, *Journal of Clinical Monitoring and Computing*, 24,41-50.
- Yao, J., Wan, Y. and Givens, G. (2009) Design of a Web Services Based System for Remote Hearing Diagnosis, Proceedings of the 31st Annual International Conference of the IEEE Engineering in Medicine and Biology Society.
- Yao, J., Givens, G. and Wan, Y., (2009) Web Services-based Distributed System with Browser-Client Architecture to Promote Tele-audiology Assessment, *Journal of Telemedicine and E-Health*, 15,8 758-763.
- Hough, M., Givens, G., Cranford, J., and Downs, R. (2007) Behavioral and Electrophysiological Measures of Auditory attention in Right Hemisphere Brain Damage, *Journal of Aphasiology*, 21, 831-843.
- Walker, M., Givens, G., and Cranford, J. Holbert, D., Walker, L. (2007) Auditory Temporal Processing by Children with Reading Disorders, *Journal of Communication Disorders*.
- Stuart, A, Givens, G, Walker, L and Elangovan, S. (2006) Auditory Temporal Resolution in Normal Hearing Preschool Children Revealed by Word Recognition in Continuous and Interrupted Noise, *The Journal of the Acoustical Society of America*, 119, 1946-1949.

Joseph Kalinowski, PhD

Professor

Research Interests:

Fluency and speech science.

Dr. Kalinowski is working to develop a state-of-the-art acoustics and speech physiology laboratories to investigate normal and pathological speech production. Research interests include stuttering, normal speech physiology, the role of the auditory system in normal and disordered speech, and speech-related computer applications. Dr. Kalinowski and colleagues have established research relationships with Dr. Kathleen Jones of the State University of New York at Geneseo and Ms. Catherine Otto Montgomery of the Total Immersion Fluency Program in

New York City both of which allows access to hundreds of participants who stutter, as well as other populations.

Selected Refereed Publications:

- Saltuklaroglu, T., Kalinowski, J., Robbins, M., Crawcour, S., & Bowers, A. (2009). Comparisons of stuttering frequency during and after speech initiation in unaltered feedback, altered auditory feedback and choral speech conditions. *International Journal of Language & Communication Disorders, 44*, 1000-1017.
- Zhang, J., Saltuklaroglu, T., Hough, M., and Kalinowski, J. (2009). Jobs, Sex, Love, and Lifestyle: When Nonstutterers Assume the Roles of Stutterers. *Folia Phoniatria et Logopaedica, 61*, 18-23.
- Stuart, A., Frazier, C.L., Kalinowski, J., Vos, P.W. (2008). The Effect of Frequency Altered Feedback on Stuttering Duration and Type. *Journal Speech, Language, and Hearing Research, 51*, 889-97.
- Guntupalli, V.K., Everhart, D.E., Kalinowski, J., and Saltuklaroglu, T. (2007). Emotional and Physiological Responses of Fluent Listeners While Watching the Speech of Adults Who Stutter. *International Journal of Language and Communication Disorders, 42*, 113-129.
- Kalinowski, J., Saltuklaroglu, T., Stuart, A., and Guntupalli, V.K. (2007). On The Importance of Scientific Rhetoric in Stuttering: A Reply to Finn, Bothe, and Bramlett (2005). *American Journal of Speech Language Pathology, 16*, 69- 76; author reply, 77-83.
- Guntupalli, V, Kalinowski, J., & Saltuklaroglu, T., (2006) The Need for Self-Report Data in the Assessment of Stuttering Therapy Efficacy: Repetitions and Prolongations of Speech ≠ The Stuttering Syndrome. *International Journal of Language and Communication Disorders, 41*, 1-18.
- Kalinowski, J., Saltuklaroglu, T., Dayalu, V.N, & Guntupalli, V. (2005). Is it possible for speech therapy to improve upon natural recovery rates in children who stutter? *International Journal of Language and Communication Disorders, 40*, 349-358.
- Saltuklaroglu T, Kalinowski J. (2005). How effective is therapy for childhood stuttering? Dissecting and reinterpreting the evidence in light of spontaneous recovery rates. *International Journal of Language and Communication Disorders 40 (3)*, 359-374
- Guntupalli VK, Kalinowski J, Saltuklaroglu T, Nanjundeswaran C. (2005) The effects of temporal modification of second speech signals on stuttering inhibition at two speech rates in adults. *Neurosciences Letters, 385*, 7-12.

Jamie Perry, PhD, CCC-SLP

Assistant Professor

Research Interests:

Dr. Perry's research uses magnetic resonance imaging and 3D computer technology to study the anatomy, speech, and surgical approaches used to treat cleft palate. Her research is funded through the National Institute of Health. Her current work is aimed to examine the effect of gender and race on craniometric morphology and how it relates to cleft palate surgery. She serves on cleft palate craniofacial teams in NC and IL and provides service through surgical mission trips to third world countries.

Selected Publications:

- Perry J, Kuehn D, Wachtel J, Bailey J (*in press*). Using Magnetic Resonance Imaging for Early Assessment of Submucous Cleft Palate: A Case Report. *Cleft Palate-Craniofacial Journal*.
- Bae Y, Kuehn D, Sutton B, Conway C, Perry J. (*in press*). Three-dimensional magnetic resonance imaging of velopharyngeal structures. *Journal of Speech-Language and Hearing Research*.
- Perry J, Bae Y, Kuehn D (*in press*). Effect of posture on deglutitive biomechanics in healthy individuals. *Dysphagia*.
- Perry J (2011). Anatomy and physiology of the velopharyngeal mechanism. *Seminars in Speech and Language, 32*(2), 83-92.
- Perry J, Kuehn D, Sutton B, & Goldwasser M (2011). Craniometric and velopharyngeal assessment of infants with and without cleft palate. *Journal of Craniofacial Surgery, 22*(2), 499-503.
- Perry J (2011). Variations in velopharyngeal structures between supine and upright postures using open-type magnetic resonance imaging. *Cleft Palate-Craniofacial Journal, 48*(2), 123-133.
- Perry J, Cunningham L, & Gamage J (2010). Computer technology in the classroom; Do students really like it? *International Journal of Instructional Media, 39*(1).
- Perry J, Cunningham D, Kuehn D, & Gamage J. (2010). Do 3D stereoscopic computer animations improve student learning of surgical procedures? *International Journal of Instructional Media, 38*(4).
- Perry J & Kuehn D (2009). Magnetic resonance imaging and computer reconstruction of the velopharyngeal mechanism. *Journal of Craniofacial Surgery, 20*(8), 1739-1746.
- Perry J, Kuehn D, & Langlois R (2007). Teaching anatomy of the speech mechanisms through computer based stereoscopic images. *Journal of College Science Teaching, 36*(4), 18-23.
- Perry J & Kuehn D (2007). Three-dimensional computer reconstruction of the levator veli palatini muscle in situ using magnetic resonance imaging. *Cleft Palate-Craniofacial Journal, 69*(2), 214-216.

Twyla Perryman, PhD, CCC-SLP

Assistant Professor

Research Interests:

Dr. Perryman's research interests are in autism spectrum disorders, specifically the influence of child/family characteristics on early identification, treatment fidelity, language development, and intervention outcomes.

Selected publications and presentations:

- Perryman, T. Y. & Watson, L.R. (in prep). Association Between Caregiver Perceptions and the Age of Autism Spectrum Disorders Diagnosis.
- Perryman, T. Y. & Yoder, P. J. (2011). What is the Picture Exchange Communication System (PECS). In S. Bolte & J. Hallmayer (Eds.), *Autism Spectrum Conditions: International experts answer your questions on autism, Asperger syndrome and PDD-NOS* (pp. 194-197). Cambridge, MA: Hogrefe

- Watson, L. R., Baranek, G. T., Roberts, J. E., David, F., & Perryman, T. Y. (2010). Measures of Attention to Child-Directed Speech as Predictors of Social-Communicative Outcomes in Children with Autism Spectrum Disorders. *Journal of Speech, Language, and Hearing Research, 53*, 1052-1064.
- Watson, L. R., Baranek, G. T., Crais, E. R., Reznick, J. S., Dykstra, J., & Perryman, T. (2007). The first year inventory: Retrospective parent responses to a questionnaire designed to identify one-year-olds at risk for autism. *Journal of Autism and Developmental Disorders, 37*, 49-61.
- Perryman, T.Y. and Watson, L.R. (2010). Caregiver perceptions and Early Diagnosis of Autism Spectrum Disorders. Poster Presentation, International Meeting for Autism Research, Philadelphia, PA.
- Perryman, T.Y. (2008). The role of caregiver's beliefs in the early diagnosis of autism. Oral Presentation, American Speech Language and Hearing Association, Chicago, IL.

Heather L. Ramsdell, PhD CCC-SLP

Assistant Professor

Research Interests:

Dr. Heather L. Ramsdell, together with a team of Graduate Research Assistants and Undergraduate Students, pursues research studies focused on phonetics, phonology, and psycholinguistics in the Infant Vocal Development Laboratory. To fully explore the breadth and depth of early vocal, speech, and language patterns, we must investigate the caregiver and infant in both naturalistic and interactive contexts. The Infant Vocal Development Laboratory at East Carolina University provides a state of the art infant and child vocalization recording suite, consisting of a nursery/play room (recording room) and a control room. The recording suite enables us to capture multiple video angles and audio streams simultaneously using advanced technologies. The video and audio recordings facilitate analysis of early (prelinguistic) phonological development and caregiver/infant interaction. Some activities pursued in the Infant Vocal Development Laboratory include coding and analysis of vocal categories (e.g., squeal, growl, vowel, etc.), phonetic transcription, gaze direction, facial affect, and illocutionary force. AACT (Action, Analysis Coding and Training Software), with TF32 and LIPP (Logical International Phonetics Program) interfaces, enables sophisticated and detailed coding of all vocal/interaction data of interest. Such research may provide us with diagnostic and treatment information for within the clinical setting, help us to identify abnormalities in development earlier, and illuminate better predictors of later language outcomes. Infant vocal development, phonetics, phonology, and psycholinguistics.

Selected Publications:

- Preston, J.L., Ramsdell, H.L., Oller, D.K., Edwards, M.L., & Tobin, S.J. (2011). Developing a weighted measure of speech sound accuracy. *Journal of Speech, Language, and Hearing Research, 54*, 1-18.
- Ramsdell, H.L., Oller, D.K., & Ethington, C.A. (2007). Predicting phonetic transcription agreement: Insights from research in infant vocalizations. *Journal of Clinical Linguistics and Phonetics, 21*, 793-831.
- Oller, D.K. & Ramsdell, H.L. (2006). A weighted reliability measure for phonetic transcription. *Journal of Speech, Language, and Hearing Research, 49*, 1391 – 1411.

Publications in progress:

- Ramsdell, H.L. & Oller, D.K. (In progress). Identification of phonological categories in infant vocal development. *Developmental Science*.
- Oller, D.K., Buder, E.H., Ramsdell, H.L., Warlaumont, A., & Chorna, L. (In progress). Functional flexibility of vocalization and the emergence of language. *Nature*.
- Ramsdell, H.L., Russell, K.K., Lancaster, M., Allen, R., Sammartino, K., Bogard, H.A., & Moreland, M.A. (In progress). Phonetic transcription and clinical practice: A survey of speech-language pathologists. *Journal of Speech, Language, and Hearing Research*.

Michael P. Rastatter, PhD

Professor

Research Interests:

Neurolinguistics, Fluency, and Speech Science.

Dr. Rastatter was the recipient of the “2004 East Carolina University Life Time Achievement Award for Research,” and has developed the Biosensory Research Laboratory in the department. Dr. Rastatter is involved in numerous research projects and welcomes student inquiry. The neurolinguistic line of research involves the study of hemispheric processing characteristics of clinical and normal populations. This line of research has led to the formulation of theoretical models of neurolinguistic organization underlying such disorders as stuttering and reading disabled children. The effects of delayed auditory feedback and frequency-altered feedback on the fluency characteristics of stuttering subjects are being investigated. In addition the effects of altered auditory feedback on reading comprehension in children with reading disorders are currently being investigated. The speech science line of research has focused on the developmental, acoustic parameters of the vocal tract in an attempt to propose inverse mapping models of articulatory aging processes, and to investigate various acoustic parameters of three-fitting .

Selected Refereed Publications:

- King, K., Hough, M., Walker, M., Rastatter, M., and Holbert, D. (2006). Mild Traumatic Brain Injury: Effects on Word Retrieval and Discourse. *Brain Injury*, 20, 725-732.
- Barrow I., Hough, M., Rastatter, M.P., Walker, M., Holbert, D. & Rotundo, M.F. (2006). The Effects of Mild TBI on Confrontation Naming in Adults. *Brain Injury*, 8, 845-855.
- Barrow, I.M., Givens, G., Stuart, A., Kalinowski, J., and Rastatter, M. (2005) Influence of duration and location of pauses on comprehension of a temporarily ambiguous utterance in adults. *Perceptual and Motor Skills*, 100, 142-152.
- Rami, M., Kalinowski, J., Rastatter, M.P., Holbert, D., & Allen, M. (2005). Choral reading with filtered speech: Effect on Stuttering. *Perceptual and Motor Skills*, 100, 421-431.
- Saltukaroglu, T., Kalinowski, J., Stuart, A. & Rastatter, M.P. (2005) Stuttering frequency on meaningful and non-meaningful words in adults who stutter. *Folia Phoniatica et Logopaedica*, 19, 216-227.
- Stuart, A., Kalinowski, J., Rastatter, M. P., Saltuklaroglu, T., & Dayalu, V. N. (2004). Investigations of the impact of altered auditory feedback in-the-ear devices on the speech of people who stutter: Initial and four-month follow-up. *International Journal of Language & Communication Disorders*, 39, 93-113.

- Saltuklaroglu, T., Kalinowski, J., Dayalu, V.N., Stuart, A., & Rastatter, M.P (2004). Voluntary stuttering suppresses true stuttering: A window on the speech perception production link, *Perception & Psychophysics*, 66, 249-254.
- Saltuklaroglu, T., Dayalu, V.N., Kalinowski, J., Stuart, A., & Rastatter, M.P. (2004). Say it with me: Stuttering inhibited. *Journal of Clinical and Experimental Neuropsychology*. Apr; 26(2):161-8.
- Rami, M.K., Kalinowski, J., Stuart, A. & Rastatter, M.P. (2003). Self-perceptions of speech language pathologists-in-training before and after pseudostuttering experiences on the telephone. *Disability and Rehabilitation*, 25, 491-496.
- Barrow, I.M., Hough, M., Rastatter, M.P., Walker, M., Holbert, D., and Rotondo, M. (2003) Can within category naming identify subtle cognitive deficits in the mild traumatic brain injured patient? *Journal of Trauma, Injury, Infection, and Critical Care*, 54(5), 1-10.
- Stuart, A., Xia, S., Jiang, Y., Jiang, T., Kalinowski, J., & Rastatter, M.P. (2003). Self-contained in-the-ear device to deliver altered auditory feedback: Applications for stuttering. *Annals of Biomedical Engineering*, 31, 233-237.
- Dayalu, V. N., Kalinowski, J., Stuart, A., Holbert, D, & Rastatter, M. P. (2002). Stuttering frequency on content and function words in adults who stutter: A concept revisited. *Journal of Speech, Language, and Hearing Research*, 45, 858-870.
- Stuart, A., Kalinowski, J., Stuart, A., Rastatter, M., & Lynch, K. (2002). Effect of Delayed Auditory Feedback on Normal Speakers at Two Speech Rates. *Journal of the Acoustical Society of American*, 111, 2237-2241.
- Walker, M., Barrow, I., & Rastatter, M.P. (2001). The effects of dimension and vocabulary-age on picture naming functions. *Journal of Communication Disorders*, 35, 1-11.
- Dayalu, V. N., Saltuklaroglu, T., Kalinowski, J., Stuart, A., & Rastatter, M. P. (2001). Producing the Vowel /a/ Prior to Speaking Inhibits Stuttering in Adults. *Neuroscience Letters*, 306, 111-115.
- Walker, M., Spire, H. & Rastatter, M. (2001). Hemispheric processing characteristics for lexical decisions in adults with reading disorders. *Perceptual and Motor Skills*, 92, 273-287.
- Kalinowski, J., Dayalu, V.N., Stuart, A., Rastatter, M.P., & Rami, M.K. (2000) Stutter-free and Stutter-filled Speech Signals and Their Role In Stuttering Amelioration. *Neuroscience Letters*, 293, 115-118.
- Barrow, I, Holbert, D, & Rastatter, M.P. (2000). Effect of Color on Developmental Picture-Vocabulary Naming of 4, 6, and 8 year old Children. *American Journal of Speech-Language Pathology*, 9, 310-318.
- Kalinowski, J., Stuart, A., Rastatter, M. P, Dayalu, V. & Snyder, G. (2000). Inducement of Fluent Speech in Persons Who Stutter Via Visual Choral Speech. *Neuroscience Letters*, 281, 198-200.
- Rami, M. K., Shine, R. E., & Rastatter, M. P. (2000). Stutterer's Vocal reaction times to unilaterally presented high and low frequency verbs. *Perceptual and Motor Skills*, 91, 123-130.

Andrew Stuart, PhD

Professor

Research Interests:

Early Infant Hearing Screening, Electrophysiology, Pediatric Audiology, Psychoacoustics, Altered Auditory Feedback and Stuttering.

Primary research and clinical interests are in the area of infant/child auditory assessment (both behavioral and electrophysiological) and auditory temporal processing. Along with other colleagues at East Carolina University, research of issues in fluency has been ongoing.

Selected Refereed Publications:

- Stuart, A., & Butler, A.K. (in press). Contralateral suppression of transient otoacoustic emissions and sentence recognition in noise in young adults. *Journal of the American Academy of Audiology*.
- Stuart, A., & Preast, J.L. (in press). Contralateral suppression of transient evoked otoacoustic emissions in children with sickle cell disease. *Ear and Hearing*.
- Stuart, A., Zhang, J., & Swink, S. (2010). Reception thresholds for sentences in quiet and noise for monolingual English and bilingual Mandarin-English listeners. *Journal of the American Academy of Audiology*, 21, 239-248. DOI: 10.3766/jaaa.21.4.3
- Stuart, A., Passmore, A.L., Culbertson, D.S., & Jones, S.M. (2009). Test-retest reliability of low-level evoked distortion product otoacoustic emissions. *Journal Speech, Language, and Hearing Research*, 52, 671-681. DOI: 10.1044/1092-4388(2008/08-0118)
- Stuart, A., & Mills, K.N. (2009). Late onset unilateral auditory dys-synchrony/neuropathy: A case study. *Journal of the American Academy of Audiology*, 20, 172-179. DOI: 10.3766/jaaa.20.3.3
- Stuart, A., Frazier, C.L., Kalinowski, J., Vos, P.W. (2008). The effect of frequency altered feedback on stuttering duration and type. *Journal Speech, Language, and Hearing Research*, 51, 889-897.
- Stuart, A. (2008). Reception thresholds for sentences in quiet, continuous noise, and interrupted noise in school-age children. *Journal of the American Academy of Audiology*, 19, 135-146.
- Stuart, A., Kalinowski, J., Saltuklaroglu, T., & Guntupalli, V.K. (2006). Investigations of the impact of altered auditory feedback in-the-ear devices on the speech of people who stutter: one-year follow-up. *Disability and Rehabilitation*, 28, 757 - 765.
- Stuart, A., Givens, G.D., Walker, L.J., & Elangovan, S. (2006). Auditory temporal resolution in normal hearing preschool children revealed by word recognition in continuous and interrupted noise. *The Journal of the Acoustical Society of America*, 119, 1946-1949.

Marianna M. Walker, PhD

Associate Professor

Research Interests:

Child and Adolescent Language, Language System Modeling, Dyslexia and Reading Disorders, Temporal Processing, Language/Learning Disabilities

Lexical access, temporal processing, and retrieval have been investigated in numerous studies involving children and adults having reading disorders and normal reading and language abilities. Current studies are investigating the acceleration phenomenon for individuals with reading disorders. Another line of research relates to the presence of auditory and visual temporal processing deficits in individuals with reading disorders. Normative studies include the role of gender in emotional processing, the role of estrogen in lexical abilities, and hemispheric patterns of emotional semantic processing.

Selected Publications:

- Barrow I. M., Hough M. Rastatter, M. P. , Walker M., Holbert D. & Rotondo, M. F. (2006). The effects of mild traumatic brain injury on confrontation naming in adults. *Brain Injury*, 20(8): 845-55.
- Walker, M.M., Givens, G.D., Cranford, J.L., Holbert, D., & Walker, L. (2006). Auditory pattern recognition and brief tone discrimination of children with reading disorders. *Journal of Communication Disorders*, 39, 442-455 .
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