

CURRICULUM VITAE

Mark Andrew Eckert

DEPARTMENT OF OTOLARYNGOLOGY - HEAD & NECK SURGERY
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Biographical Data

Born: May 10, 1970, Akasambo, Ghana
Married: November 25, 2000 to Anita Ramsetty, M.D.
Citizenship: U.S.A.

Education

Villanova University
College of Liberal Arts & Sciences
1988-1992 Major in Psychology
Bachelor of Arts awarded May 1992

George Mason University
College of Liberal Arts & Sciences
1992-1994 Program in Experimental Neuropsychology
Master of Arts awarded August 1994

University of Florida
College of Liberal Arts & Sciences
1994-1998 Doctoral Program in Psychobiology
Thesis Advisor: Christiana M. Leonard, Ph.D.
Thesis Title: *Neuroanatomical and environmental factors affecting reading skill development*
Doctor of Philosophy awarded December 1998

Academic Appointments

1999 Adjunct Assistant Professor: Department of Psychology,
University of Florida, Gainesville, FL.

1999-2001 Post-doctoral Fellow: Department of Pathology, Immunology and Laboratory Medicine,
University of Florida, Gainesville, FL.

2001-2003 Instructor: Department of Neuroscience,
University of Florida, Gainesville, FL.

- 2003-2005 Senior Research Scientist: Department of Psychiatry,
Stanford University, Stanford, CA.
- 2005- 2009 Assistant Professor: Department of Otolaryngology Head & Neck Surgery,
Medical University of Charleston, Charleston, SC.
- 2009- present Associate Professor: Department of Otolaryngology Head & Neck Surgery,
Medical University of Charleston, Charleston, SC.

Honors & Awards

- 1993 Fellowship: Consortium of Universities/Army Research Institute
- 1996 Division of Sponsored Research Award, University of Florida
- 1996-1998 National Institute of Mental Health, University of Florida Center for the Neurobiological
Sciences Pre-Doctoral Fellowship
- 1999-2001 F-32 NSRA Post-Doctoral Fellowship, National Institute on Deafness and Other
Communication Disorders
- 2003 Exemplary Teacher Award, University of Florida College of Medicine
- 2008 Developing Scholar Award, Medical University of South Carolina
- 2009 Deafness Research Foundation, Centurion Clinical Research Award

Grants & Research Support Funding

Ongoing Research Support

NIH/NIDCD P50 Dubno (Prg Dir) 08/01/08-06/30/13
 Title: Experimental and Clinical Studies of Presbycusis (Project 2, Neuroimaging of Age-related
Changes in Speech Recognition)
 Aim: This subproject addresses questions concerning age-related declines in neural systems that
support speech recognition in normal hearing and hearing impaired adults.
 Role: *Principal Investigator*

Centurion Clinical Research Award
 Deafness Research Foundation Eckert (PI) 01/01/10-12/31/11
 Title: Neural Changes Underlying Speech-Perception Training in the Aging Brain
 Aim: This pre- and post-intervention imaging project examines the impact of speech perception
training on brain activity in older adults with hearing loss.
 Role: *Principal Investigator*

Research Grant

Barmore Fund for Parkinson's Research Eckert (PI) 10/01/10/-09/30/11

Title: Imaging the Human Locus Coeruleus: A Biomarker for Parkinson's Disease

Aim: This ex vivo imaging project relates MRI metrics of locus coeruleus structure to histological measures in order to establish the cellular foundation for an MRI biomarker of locus coeruleus decline in Parkinson's disease.

Role: *Principal Investigator*

Completed Research Support

Health Sciences of South Carolina / Duke Endowment Award 05/01/07-12/31/08

Title: Computer Aided Diagnosis of Subtle Brain Injury

Aim: This project involves the development of an image-based bioinformatics database and automated image processing algorithms to identify subtle brain injury in the MRI scans of people with temporal lobe epilepsy, mild cognitive impairment, and traumatic brain injury.

Role: *Principal Investigator*

American Federation for Aging Research

07/01/07-06/30/08

Title: Brain Imaging of Age-related Changes in Speech Recognition

Aim: This project examines age-related changes in temporal lobe and frontal lobe cortex that may contribute to speech recognition difficulty in older adults.

Role: *Principal Investigator*

NIH/NIDCD R03

09/01/02-08/31/05

Title: The Epigenesis of Cerebral Asymmetry in Twins

Aim: This is a twin study designed to model the relative genetic and environmental variance in the development of language-related cerebral asymmetries.

Role: *Principal Investigator*

NSF/BCS Cognitive Neuroscience Initiative

04/01/03-03/31/05

Title: The Structural and Functional Neuroanatomy of Language Laterality

Aim: This study examines the relation between language-related cerebral asymmetries and measures of language laterality.

Role: *Principal Investigator*

NIH/NIMH Program Project

Bellugi (Prg Dir)

09/01/03-02/28/06

Title: Williams Syndrome: Bridging Cognition and Gene; Project III: Functional Neuroanatomy of Williams Syndrome

Aim: The goal of this project is to investigate the neuroanatomical and neurofunctional characteristics associated with Williams syndrome, and their relation to both genotype and neurocognitive phenotype.

Role: *Collaborator*

NIH/NIDCD Postdoctoral NRSA

05/01/99-04/30/01

Title: Heritability of an Anatomical Risk Factor for Dyslexia

Aim: This training grant provided the PI with training in genetics and examined the mode of inheritance for a neuroanatomical variable related to dyslexia.

Role: *Principal Investigator*

Consultation Services

2002- 2005 Virginia Berninger, University of Washington, Learning Disabilities: Links to Biology & Schools

Teaching Experience

1995 Course Instructor: Physiological Psychology, Department of Psychology, University of Florida

1996 Course Instructor: General Psychology, Department of Psychology, University of Florida

1997 Assistant Instructor: Medical Neuroscience, Department of Neuroscience, University of Florida

1999 Course Instructor: Physiological Psychology, Department of Psychology, University of Florida

1999 Course Instructor: General Psychology, Department of Psychology, University of Florida

2000 Lecturer: Medical Neuroscience, Department of Neuroscience, University of Florida

2001 Lecturer: Fundamentals of Neuroscience, Department of Neuroscience, University of Florida

2001 Lecturer: Developmental Neuroscience: Department of Neuroscience, University of Florida

2001 Course Director: Functional Human Neuroanatomy, Department of Neuroscience, University of Florida

2002 Assistant Course Director: Medical Neuroscience, Department of Neuroscience, University of Florida

2002* Course Director: Functional Human Neuroanatomy, Department of Neuroscience, University of Florida

2003* Co-Course Director: Medical Neuroscience, Department of Neuroscience, University of Florida

* Student evaluations, statement of teaching purpose, and faculty evaluations led to College of Medicine Exemplary Teacher Award

Mentorship

2006-2007 Emily Cloesner, B.A., College of Charleston, Department of Psychology – Undergraduate Honors Thesis: Neuroanatomical Predictors of Language Laterality

- 2006-2007 Stewart Denslow, Ph.D., Post-doctoral fellow, Independent Project:
Breath holding calibration of the fMRI BOLD signal
- 2007- 2009 Carl Lozar, B.S., Research Associate, Independent Project:
Random Forests classification of Mild Cognitive Impairment
- 2007- 2009 Eric Ortigoza, B.S., Southeastern Predoctoral Training in Clinical Research program –
Master’s Thesis Project: Fiber-tracking of the ventral speech-related pathway in the
human brain
- 2009- 2010 MA Mercer, College of Charleston Undergraduate, Thesis Project: Age-related changes
in the human locus coeruleus on MRI.
- 2009- 2010 Alicia Bonanno, College of Charleston Undergraduate, Thesis Project: Age-related
changes in auditory cortex responsiveness to speech.
- 2007- Present Kelly Harris, Ph.D., Assistant Research Professor, K23 NIDCD 008787-02: Auditory
Temporal Processing in the Aging Ear and Brain
- 2007- Present Noam Keren, M.A., Graduate Student, Independent Project:
In vivo and ex vivo mapping of the human locus coeruleus
- 2009- Present Stefanie Kuchinsky, Ph.D., Post-doctoral Fellow, Independent Project: Cortical
Adaptation to Challenging Listening Conditions.
- 2009- Present Kenneth Vaden, Ph.D., Post-doctoral Fellow, Independent Project: Age-related Changes
in Cortical Representations for Phonotactic Probability.

Committee Membership/University Service

- 2002- 2003 Course Development: Department of Neuroscience, University of Florida
- 2006- 2008 Neuroscience Institute Steering Committee, Medical University of South Carolina
- 2005- Present Center for Advanced Imaging Research, Medical University of South Carolina,

Professional Memberships

*Society for Neuroscience, Cognitive Neuroscience Society, Association for Research in
Otolaryngology, Organization for Human Brain Mapping*

Editorial, Journal, and Grant Review

Guest Editor for a *Special Issue of the Journal Cortex: The Neurobiology of Developmental
Disorders*

Ad Hoc reviewer for *Biological Psychiatry, Brain & Language, Cerebral Cortex, Cortex, Human Brain Mapping, Developmental Psychology, Journal of Cognitive Neuroscience, Journal of Neurology, Journal of Neuroscience, Neurosurgery & Psychiatry, Neuropsychology, Neuropsychologia*

United States - Israel Binational Science Foundation; Tinnitus Research Consortium

Publications

- Ward, O.B., Wexler A.M., Carlucci, J.R., Eckert, M.A., Ward, I.L. (1996). Critical periods of sensitivity of sexually dimorphic spinal nuclei to prenatal testosterone exposure in female rats. *Hormones & Behavior*, 30(4):407-15.
- Hoffman, J.A., Eckert, M.A., Koman, J.J., & Mayo, D.W. (1996). Profiles of clients in government funded drug user treatment settings. *Substance Abuse & Misuse*, 31(4), 453-477.
- Delisle, C., Bowers, D., Eckert, M., Lucas, M., Leonard, C., Barta, P. (1999). MRI volumetric analysis of the amygdala and hippocampus in Parkinson's disease. *The Psi Chi Journal of Undergraduate Research*.
- Eckert, M.A. and Leonard, C.M. (2000) Structural imaging in dyslexia: the planum temporale. *Mental Retardation and Developmental Disabilities Research Reviews*, 6, 198-206.
- Leonard, C.M., Eckert, M.A., Oakland, T., Lombardino, L.J., Crandall, C., Kranzler, J. (2001). Anatomical risk factors for phonological dyslexia. *Cerebral Cortex*, 11, 148-157.
- Eckert, M.A., Lombardino, L.J., Leonard, C.M. (2001). Planar asymmetry tips the environmental playground. *Child Development*, 72(4), 988-1002.
- Leonard, C.M, Lombardino, L.J., Walsh, K., Eckert, M.A., Mockler, J.L., Rowe, L.A., Williams, S., DeBose, C.B. (2002). Anatomical risk factors that distinguish dyslexia from SLI predict reading skill in normal children. *Journal of Communication Disorders*, 35(6), 501-531.
- Eckert, M.A., Leonard, C.M., Molloy, E., Giedd, J. (2002). The epigenesis of planum temporale asymmetry in twins. *Cerebral Cortex*, 12(7), 749-755.
- He, A.G., Tan, L.H., Tang, Y., James, G.A., Wright, P., Eckert, M.A., Fox, P.T., Liu, Y. (2003). Modulation of neuronal connectivity during tongue movement and reading. *Human Brain Mapping*, 18(3), 222-232.
- Eckert, M.A., Leonard, C.M., Richards, T.L., Aylward, E.H., Thomson, J., Berninger, V.W. (2003). Anatomical correlates of dyslexia: frontal and cerebellar findings. *Brain*, 126(2), 482-494.
- Reiss, A.L., Eckert, M.A., Rose, F.E., Karchemskiy, M.S., Kesler, S., Chang, S., Reynolds, M.F., Kwon, H., Galaburda, A. (2004). An experiment of nature: brain anatomy parallels cognition and behavior in Williams syndrome. *Journal of Neuroscience*, 24(21), 5009-5115.

- Eckert, M.A. (2004). Neuroanatomical markers for dyslexia: a review dyslexia structural imaging studies. *The Neuroscientist*, 10(4), 362-371.
- Eckert, M.A., Hu, D., Eleiz, S., Bellugi, U., Galaburda, A., Korenberg, J., Mills, D., Reiss, A. (2005). Evidence for superior parietal impairment in Williams syndrome. *Neurology*, 64, 152-153.
- Eckert, M.A., Leonard, C.M., Wilke, M., Eckert, M., Richards, T., Richards, A., Berninger, V. (2005). Voxel based morphometry and manual based neuroanatomical findings in dyslexic children. *Cortex*, 41(3), 304-315.
- Barnea-Goraly, N., Menon, V., Eckert, M.A., Tamm, L., Bammer, R., Karmensky, A., Dant, C., Reiss, A.L. (2005). White matter development during childhood and adolescence: a cross-sectional diffusion tensor imaging study. *Cerebral Cortex*, 15(12):1848-1854.
- Rivera, S., Reiss, A.L., Eckert, M.A., Menon, V. (2005). Developmental changes in mental arithmetic: evidence for increased functional specialization in the left inferior parietal cortex. *Cerebral Cortex*, 15(11):1779-1790.
- Thompson, P.M., Lee, A., Dutton, R., Geaga, J., Hayashi, K., Eckert, M.A., Bellugi, U., Galaburda, A.M., Korenberg, J.R., Mills, D.L., Toga, A.W., Reiss, A.L. (2005). Cortical complexity and thickness are increased in Williams syndrome. *Journal of Neuroscience*. 25(16), 4146-4158.
- Leonard, C.M., Eckert, M.A., Kuldau, J. (2006). Exploiting human anatomical variability as a link between genome and cognome. *Genes, Brain, and Behavior*, 5, 64-77.
- Eckert, M.A., Leonard, C.M., Possing, E.T., Binder, J.R. (2006). Uncoupled leftward asymmetries for planum morphology and functional language processing. *Brain and Language*, 98(1), 102-111.
- Holzapfel, M., Barnea-Goraly, N., Eckert, M.A., Kesler, S.R., Reiss, A.L. (2006). Alterations in White Matter Anisotropy and Density in Females with Turner Syndrome. *Journal of Neuroscience*, 26(26), 7007-7013.
- Richards, T.L., Aylward, E.H., Raskind, W., Abbott, R.D., Field, K.M, Grimme, A.C., Richards, A., Nagy, W., Eckert, M.A., Leonard, C.M., Berninger, V.W. (2006). Converging evidence for triple word form theory in child dyslexics. *Developmental Neuropsychology*, 30(1), 548-589.
- Eckert, M.A., Galaburda, A, Mills, D.L., Bellugi, U., Korenberg, J.R. and Reiss, A.L. (2006). The neurobiology of Williams syndrome: cascading influences of visual system impairment? *Cellular and Molecular Life Sciences*, 63(16), 1867-1875.
- Eckert, M.A., Tenforde, A., Galaburda, A.M., Bellugi, U., Korenberg, J.R., Mills, D., Reiss, A.L. (2006). To modulate or not to modulate: differing results in uniquely shaped Williams syndrome brains. *Neuroimage*, 32(3), 1001-1007.

- Leonard, C.M., Eckert, M.A., Berninger, G., Given, B., Eden, G. (2006). Individual differences in anatomy predict reading and oral language impairment in children. *Brain*, 129, 3329-3342.
- Eckert, M.A., Galaburda, A., Karchemskiy, A., Liang, A., Rose, F., Thompson, P., Dutton, R.A., Lee, A.D., Bellugi, U., Korenberg, J., Mills, D. (2006). Anomalous Sylvian fissure morphology in Williams syndrome. *Neuroimage*, 33(1), 39-45.
- Bonilha, L., Rorden, C., Halford, J.J., Eckert, M., Appenzeller, S., Cendes, F., Li, L.M. (2007). Asymmetrical extra-hippocampal gray matter loss related to hippocampal atrophy in patients with medial temporal lobe epilepsy. *Journal of Neurology, Neurosurgery, and Psychiatry*, 78(3), 286-294.
- Mobbs, D., Eckert, M.A., Menon, V., Korenberg, J., Galaburda, A., Mills, D., Rose, F., Bellugi, U., Reiss, A.L. (2007). Reduced parietal and visual cortical activation during global processing in Williams syndrome. *Developmental Medicine & Child Neurology*, 49: 433-438.
- Mobbs, D., Eckert, M.A., Mills, D., Korenberg, J., Bellugi, U., Galaburda, A. Reiss, A.L. (2007). Frontostriatal dysfunction during response inhibition in Williams syndrome. *Biological Psychiatry*, 62(3): 256-261.
- Gothelf D., Furfaro J.A., Hoeft F., Eckert M.A., Hall S.S., O'Hara R., Erba H.W., Ringel J., Hayashi K.M., Patnaik S., Golianu B., Kraemer H.C., Thompson P.M., Piven J., Reiss A.L. (2008). Neuroanatomy of fragile X syndrome is associated with aberrant behavior and the fragile X mental retardation protein (FMRP). *Annals of Neurology*, 63(1):40-51.
- Bonilha, L., Cendes, F., Rorden, C., Eckert, M., Dalgarrondo, P., Li, M., Steiner, C.E. (2008). Gray and white matter imbalance – Typical structural abnormality underlying autism? *Brain and Development*, 30(6): 396-401.
- Eckert, M.A., Kamdar, N.V., Chang, C., Grecius, M.D., Menon, V. (2008). A cross-modal system linking primary auditory and visual cortices: evidence from intrinsic fMRI connectivity analysis. *Human Brain Mapping*, 29(7):848-857.
- Eckert, M.A., Walczak, A., Ahlstrom, J., Denslow, S., Horwitz, A., Dubno, J. (2008). Age-related reliance on frontal lobe cognitive control during word recognition. *Journal of the Association of Research in Otolaryngology*, 9(2):252-259.
- Eckert, M.A., Walczak, A., Bonilha, L., Binder, J., Leonard, C.M., Lombardino, L. (2008). Manual and automated measures of superior temporal gyrus asymmetry: concordant structural predictors of verbal ability in children. *Neuroimage*, 41(3):813-822.
- Leonard, C.M. and Eckert, M.A. (2008). Asymmetry and dyslexia. *Developmental Neuropsychology*, 33(6):663-681.
- Leonard, C.M., Towler, S., Welcome, S., Halderman, L.K., Otto, R., Eckert, M.A., Chiarello, C.L. (2008). Size matters: cerebral volume influences sex differences in neuroanatomy. *Cerebral Cortex*, 18(12): 2920-31.

- Bonilha L, Halford JJ, Rorden C, Roberts DR, Rumboldt Z, Eckert MA. (2009). Automated MRI analysis for identification of hippocampal atrophy in temporal lobe epilepsy. *Epilepsia*, 50(2): 228-33.
- Harris, K., Dubno, J.R., Keren, N., Ahlstrom, J., Eckert, M.A. (2009). Speech recognition in younger and older adults: a dependency on low-level auditory cortex. *Journal of Neuroscience*, 29: 6078-6087.
- Eckert, M.A., Menon, V., Walczak, A., Ahlstrom, J., Denslow, S., Horwitz, A., Dubno, J. (2009). At the heart of the ventral attention system: the right anterior insula. *Human Brain Mapping*, 30(8): 2530-2541.
- Keren, N., Lozar, C., Harris, K.C., Morgan, P., Eckert, M.A. (2009). In Vivo mapping of the human locus coeruleus. *Neuroimage*, 47(4): 1261-1267.
- Bonilha L., Eckert, M.A., Fridriksson, J., Hirth, V.A., Moser, D., Morgan, P.S., Rorden, C. (2009). Age-related relative volume preservation of the dominant hand cortical region. *Brain Research*, 1305: 14-19.
- Eckert, MA., Keren, NI, Roberts, DR, Calhoun, VD, Harris, KC. (2010). Age-related changes in processing speed: unique contributions of cerebellar and prefrontal cortex. *Frontiers of Human Neuroscience*, 4(10): 1-14. *Democratically voted by readers for 2nd tier publication.
- Harris KC, Eckert MA, Ahlstrom JB, Dubno JR. (2010). Age-related differences in gap detection: Effects of task difficulty and cognitive ability. *Hearing Research*, 264(1-2), 21-29.
- Bonilha L, Edwards JC, Kinsman SL, Morgan PS, Fridriksson J, Rorden C, Rumboldt Z, Roberts DR, Eckert MA, Halford JJ. (2010). Extrahippocampal gray matter loss and hippocampal deafferentation in patients with temporal lobe epilepsy. *Epilepsia*, 51(4), 519-528.
- Li, L, Lozar, C, Eckert, MA, Chahal, D, Wang, JZ. (2010). Detection of mild cognitive impairment using image differences and clinical features. *IEEE Transactions on Computational Biology and Bioinformatics*.
- Bonilha L, Elm JJ, Edwards JC, Morgan PS, Hicks C, Lozar C, Rumboldt Z, Roberts DR, Rorden C, Eckert MA. (2010). How common is brain atrophy in patients with medial temporal lobe epilepsy? *Epilepsia*, 51(9), 1774-1779.
- Li, L, Lozar, C, Eckert, MA, Chahal, D, Wang, JZ. (2010). Online brain image database system for diagnosis of subtle brain injury," the 4th International Conference on Bioinformatics and Biomedical Engineering.
- Eckert, M.A., Keren, N.I., Aston-Jones, G. (2010). Looking forward with the locus coeruleus. *Science*. E-letter, 309-a.

Eckert, M.A. (2011). Slowing Down: Age-related neurobiological predictors of processing speed. *Frontiers in Neuroscience*, 5, 25. *Invited Review*.

Conference Presentations

Eckert, M.A., et al. (1995). Hippocampal MR volumes as a function of onset and duration in patients with left temporal lobe epilepsy. American Electroencephalographic Society Annual Meeting, Washington D.C.

Eckert, M.A., et al. (1995). Superior temporal gyrus in schizophrenia and epilepsy. Society for Neuroscience Annual Meeting, San Diego.

Stearns, B., Bowers, D. Eckert, M., Lucas, T., Gilmore, R., Roper, S., Leonard, C., Barta, P. (1996). Volumetric amygdala asymmetries differ from hippocampal asymmetries in temporal lobe epilepsy. American Epilepsy Society, San Francisco, CA, December 1996.

Eckert, M.A. & C.M. Leonard. (1997). Central sulcus asymmetry and hand preference. Society for Neuroscience Annual Meeting, New Orleans.

Leonard, C.M., Kranzler, J., Eckert, M.A., Lombardino, L.J., Oakland, T. (1998). Auditory duplications predict phonological loop but not processing speed deficits in college students. Society for Neuroscience Annual Meeting, Los Angeles CA.

Eckert, M.A., Lombardino, L.J., Leonard, C.M. (1998). Who is at risk for reading failure? Neuroanatomical & socioeconomic (SES) contributions to reading skill. Society for Neuroscience Annual Meeting, Los Angeles, CA.

Bowers, D., Rogish, M., Eckert, M., Kortenkamp, S., Gilmore, R., Roper, S. (1999) Decoding nonverbal social signals of fear and threat by patients with unilateral temporal ablations involving the amygdala. International Neuropsychology Society, Boston MA, February 1999.

Eckert, M.A., Lombardino, L.J., Leonard, C.M. (1998). Neuroanatomical and environmental factors affects reading skill development. International Dyslexia Association Annual Meeting, San Francisco, CA.

Eckert, M.A. & Leonard, C.M. (1999). Heritability of Heschl's gyrus duplication: A neural risk factor for dyslexia. Cognitive Neuroscience Society Annual Meeting, Washington, DC.

Eckert, M.A., Leonard, C.M., Giedd, J. (1999). Shared expression of Heschl's gyrus morphology in monozygotic twins. Society for Neuroscience Annual Meeting, Miami, FL.

Eckert, M.A., Gauger, L.M., Leonard, C.M. (2000). The morphology of Heschl's gyrus in the congenitally deaf. Society for Neuroscience Annual Meeting, New Orleans, LA.

Bowers, D., Gilmore, R., Selke, G., Eckert, M.A. (2001). Emotional autobiographical memories, mood, and hippocampal/amygdalar asymmetries in patients with temporal lobe epilepsy. American Epilepsy Society Annual Meeting, Philadelphia, PA.

- Eckert, M.A., Leonard, C.M., Molloy, E., Giedd, J. (2001). The epigenesis of neuroanatomical predictors for reading ability. Society for Neuroscience Annual Meeting, San Diego, CA.
- Eckert, M.A., Lombardino, L.J., Leonard, C.M. (2001). Language-learning disability and developmental dyslexia: evidence for distinct disorders. American Speech and Hearing Association Annual Meeting, New Orleans, LA.
- Leonard, C.M., Kuldau, J.M., Eckert, M.A., Lombardino, L.J., Bussing, R. (2002). Anatomy predicts cognition not diagnosis. Society for Neuroscience Annual Meeting, Orlando, FL.
- Eckert, M.A., Leonard, C.M., Richards, T.L., Aylward, E.H., Thomson, J., Berninger, V.W. (2002). Neuroanatomical subtyping of dyslexia. Society for Neuroscience Annual Meeting, Orlando, FL.
- Leonard, C.M., Chiarello, C., Eckert, M.A., Mahoney, B., Kuldau, J.M, Berninger, V., Bussing, R. (2003). Regulation of cerebral asymmetry. Society for Neuroscience Annual Meeting, New Orleans, LA.
- Keren, N.I., Mahoney, B., Eckert, M.A., Kuldau, J.M., Leonard, C.M. (2003). Fusiform gyrus gray matter reduction and visual processing in schizophrenia. Society for Neuroscience Annual Meeting, New Orleans, LA.
- Thompson, P.M., Lee, A., Dutton, R., Geaga, J., Hayashi, K., Bachellar, J., Eckert, M.A., Toga, A.W., Reiss, A.L. (2004). Fractal complexity of the human cortex is increased in Williams syndrome. Human Brain Mapping, Budapest, Hungary.
- Mobbs, D., Eckert, M.A., Menon, V., Bellugi, U., Galaburda, A., Korenberg, J., Mills, D., Reiss, A. (2004). GTF2I and GTF2IRD1 linked to Williams syndrome parietal lobe activation and performance for visual-spatial working memory. Society for Neuroscience Annual Meeting, San Diego, CA.
- Eckert, M.A., Liang, A., Rosenthal, M., Leonard, C.M., Giedd., J. (2004). Pars triangularis morphology in monozygotic and dizygotic twins. Society for Neuroscience Annual Meeting, San Diego, CA.
- Eckert, M.A. (2003). Morphologic Studies of the Dyslexic Brain. TENNET Conference: An Annual Meeting of Theoretical & Experimental Neuropsychology. Montreal, Canada. Invited Presentation.
- Eckert, M.A., Kamdar, N., Greicius, M. Sheih, M, Chang, C., Menon, V. Auditory system networks in resting state fMRI data. (2006). 29th Mid-Winter Research Meeting of the Association for Research in Otolaryngology.
- Bonilha, L., Fridriksson, J., Eckert, M.A., Rorden, C. (2007). Progressive brain asymmetry: indirect evidence for structural plasticity? 13th Annual Meeting of Human Brian Mapping.

- Ortigoza, E., Eckert, M.A., Rorden, C., Horwitz, A., Ahlstrom, J., Dubno, J. (2007). Lexical demands assessed with functional MRI. 30th Mid-Winter Research Meeting of the Association for Research in Otolaryngology.
- Eckert, M.A., Walczak, A., Denslow, S., Ahlstrom, J., Horwitz, A., Dubno, J. (2007). Functional MRI connectivity of frontal – temporal interactions in demanding listening conditions. 30th Mid-Winter Research Meeting of the Association for Research in Otolaryngology.
- Eckert, M.A. (2007). fMRI Studies of Aging and Speech Communication. Aging and Speech Communication: An International and Interdisciplinary Research Conference. Bloomington, Indiana. Invited Presentation.
- Eckert, M.A., Walczak, A., Ahlstrom, J., Denslow, S., Horwitz, A., Dubno, J. (2008). Increasing reliance on cognitive control systems for word recognition with declining structural integrity of speech systems. Cognitive Neuroscience Society Annual Meeting.
- Eckert, M.A., Harris, K.C., Keren, N.I., Ahlstrom J., Dubno J.R. (2008). Declining structural integrity of speech-related temporal lobe cortex predicts age-related declines in word recognition. American Federation for Aging Research Grantee Conference. Santa Barbara, California. Invited Presentation.
- Harris, K.C., Keren, N.I., Ahlstrom J., Dubno J.R., Eckert, M.A. (2009). Structural integrity of speech-related temporal lobe cortex predicts age-related differences in word recognition. Association for Research in Otolaryngology MidWinter Meeting.
- Harris, K.C., Dubno, J.R., Keren, N.I., Eckert, M.A. (2009). Function and Structure of Low-Level Auditory Cortex for a Gap-Detection Task. Organization for Human Brain Mapping Annual Meeting.
- Keren, N.I, Harris, K.C., Lozar, C., Eckert, M.A. (2009). The Human Locus Coeruleus: In-Vivo Probabilistic Mapping Using High Resolution MRI. Organization for Human Brain Mapping Annual Meeting.
- Mercer, M.A., Keren, N.I., Morgan, P.S., Hurd, M.W., Eckert, M.A. (2010). Age-related changes in locus coeruleus T1-TSE signal. 6th Annual SYNAPSE meeting.
- Bonano, A., Keren, N.I., Harris, K.C., Dubno, J.R., Hurd, M.W., Eckert, M.A. (2010). Aging speech systems: task demands but not perception. 6th Annual SYNAPSE meeting.
- Eckert, MA., Kuchinsky, SE., Keren, NI., Conner, C., Ahlstrom, JB., Dubno, JR. (2010). Sustained inferior frontal activation predicts age-related changes in word recognition. 16th Annual Meeting of The Organization for Human Brain Mapping.
- Vaden, K., Keren, N.I., Harris, K.C., Ahlstrom, J.B., Dubno, J.R., Eckert, M.A. (2010). Sublexical processing in left inferior frontal gyrus depends on word intelligibility. Society for Neuroscience Annual Meeting; Neurobiology of Language Conference.

- Kuchinsky, S.E., Vaden, K., Keren, N.I., Harris, K.C., Ahlstrom, J.B., Dubno, J.R., Eckert, M.A. (2010). Word intelligibility and age predict visual cortex activity during word listening. Society for Neuroscience Annual Meeting.
- Harris, K.C., Eckert, M.A., Dubno, J.R. (2010). Human evoked cortical activity to silent gaps in noise: relation to gap detection and processing speed. 33rd Annual Mid-Winter Meeting of the Association for Research in Otolaryngology.
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