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EDUCATION

- 2004 **Ph.D., University of Connecticut**, Storrs, CT, Behavioral Neuroscience
- 2002 **M.S., University of Connecticut**, Storrs, CT, BioBehavioral Sciences
- 1999 **B.A., Cornell College**, Mt. Vernon, IA, Biology and Secondary Education

HONORS AND RECOGNITION

- 2009 National Postdoctoral Association Travel Award Recipient
- 2008 National Postdoctoral Association Most Innovative Postdoctoral Program Award
- 2008 National Postdoctoral Association Travel Award Recipient
- 2007 Aging and Speech Communication: An International and Interdisciplinary Research Conference Scholarship Recipient
- 2006-present National Institutes of Health Loan Repayment Program Scholar
- 2006 Human Brain Mapping Annual Meeting Travel Award
- 2005 National Institutes of Health NIA Summer Institute on Aging Research Scholar
- 2004 University of Connecticut Doctoral Dissertation Fellowship Award
- 2001-2003 University of Connecticut Neuroscience Fellow
- 1999 Brian Bernard Award for Excellence in Teaching

TEACHING EXPERIENCE

- 2009 Adjunct Assistant Professor: Wake Forest University, Readings in Research and Psychology: Functional Imaging of Neurocognitive Processes (PSY-782B)
- 2007-2008 Organizing Instructor: Problem based learning and small group facilitation skills seminar and responsible conduct of research awareness seminar for Scientific Integrity & Professionalism small group facilitators
- 2006-2008 Adjunct Assistant Professor: Wake Forest University, Introductory Psychology (PSY-151)
- 2006-present Assistant Course Director: Wake Forest University Graduate School, Scientific Integrity and Professionalism (Grad 713, 714, 715 and 716)
- 2006 MCAT General Chemistry Instructor: The Princeton Review
- 2003-2004 Instructor of Record: University of Connecticut, Learning & Memory (PSY-220)
- 1998-1999 Student teacher: Mt. Vernon High School, Biology, Chemistry, Animal Behavior, and Ecology

PROFESSIONAL COMMITTEES

- 2008-present Member: Wake Forest University Graduate School, Professional Development Advisory Council
- 2007-2008 Member: National Postdoctoral Association, Project Advisory Committee for "Bring RCR Home"
- 2006-present Member: Wake Forest University Graduate School, Advisory Committee for Ethics and Professionalism

RESEARCH EXPERIENCE

- 2004-present Post-Doctoral Research Fellow: Wake Forest University Health Sciences
Department of Radiology, Advanced Neuroscience Imaging Laboratory
- 2002-2004 Doctoral Research Fellow: University of Connecticut,
Department of Psychology, Behavioral Neuroscience Laboratory
- 1999-2002 Pre-doctoral Research Fellow: University of Connecticut,
BioBehavioral Sciences, Developmental Psychobiology Laboratory

INVITED LECTURES

- 2009 National Postdoctoral Association Annual Meeting: "Incorporating Professional
Development Opportunities into RCR Education"
- 2008 Prince of Wales Medical Research Institute Friday Sensorimotor Control
Seminars: "Chutes and Ladders: Top-down and Bottom-up Influences on
Multisensory Processing in Older Adults"
- 2007-present Wake Forest University Summer Research Opportunities Program / Excellence
in Cardiovascular Sciences: "How does ethics impact science and the process
of doing science?"
- 2007 Mount Holyoke College Spring Seminar Series Department of Biological
Sciences: "This is your Brain on Caffeine: Caffeine's Impact on Cerebral
Perfusion and the Functional MRI Signal"
- 2005 University of Connecticut Behavioral Neuroscience Seminar: "Aging, Imaging,
and Multisensory Processing"

COMMUNITY LECTURES

- 2008 Association for the Advancement of Retired Persons (AARP) of Winston Salem,
NC: "Brain-ercise"
- 2005-present Wake Forest University Baptist Medical Center BestHealth: "The Aging Brain"
- 2005-present Wake Forest University School of Biomedical Engineering and Sciences
Clinical Rotation Lectures: "Clinical and Research Applications of fMRI"

EDITORIAL EXPERIENCE

- 2007-2008 Grant Reviewer for "Bring RCR Home" NPA Project
- 2005-present Ad hoc reviewer for various scientific journals

PROFESSIONAL ASSOCIATIONS

- 2006-present Gerontological Society of America
- 2005-present Organization for Human Brain Mapping
- 2004-present National Postdoctoral Association
- 2004-present American Society of Functional Neuroradiology
- 2002-present Society for Neuroscience

GRANT FUNDING

- 2007-2010 Principal Investigator: F32 NS054472, NINDS: Aging and Unisensory
Influence of Multisensory Processing
- 2006-2007 Co-Investigator: 0530028 NSF: Problem-Based Learning for Ethics:
Graduate Curriculum for Science and Engineering

PUBLICATIONS

- Peiffer AM**, Dunleavy CK, Frenkel M, Gabel LA, LoTurco JJ, Rosen GD, & Fitch RH. (2001) Impaired discrimination of variable duration embedded tones in adult male ectopic NZB mice. *NeuroReport*, 12, 2875 - 2879.
- Peiffer AM**, Rosen GD, & Fitch RH. (2002) Rapid auditory processing and MGN morphology in rats reared in varied acoustic environments. *Dev Brain Res*, 138 (2), 175-181.
- Peiffer AM**, Rosen GD, & Fitch RH. (2002) Sex differences in rapid auditory processing deficits in ectopic BXSb/MpJ mice. *NeuroReport*, 13, 2277-2280.
- Peiffer AM**, Fitch RH, Friedman JT, Yurchovic AN, & Rosen GD. (2003) Brain weight differences associated with induced focal microgyria. *BMC Neuroscience*, 4:12. <http://www.biomedcentral.com/content/pdf/1471-2202-4-12.pdf>
- Peiffer AM**, Rosen GD, & Fitch RH. (2004) Sex differences in rapid auditory processing deficits in microgyric rats. *Dev Brain Res*, 148, 53-57.
- Peiffer AM**, McClure MM, Threlkeld SW, Rosen GD, & Fitch RH. (2004) Severity of focal microgyria and associated rapid auditory processing deficits. *NeuroReport*, 15, 1923-1926.
- Friedman JT, **Peiffer AM**, Clark MG, Benasich AA, & Fitch RH. (2004) Age and experience related improvements in gap detection in the rat. *Dev Brain Res*, 152, 83-91.
- Peiffer AM**, Friedman JT, Rosen GD, & Fitch RH. (2004) Impaired gap detection in juvenile microgyric rats. *Dev Brain Res*, 152, 93-98.
- McClure MM, **Peiffer AM**, Rosen GD, & Fitch RH. (2005) Auditory processing deficits in rats with hypoxic-ischemic injury. *Int J Dev Neuroscience*, 23, 351-362.
- Casanova R, Shrikanth R, Laurienti PJ, **Peiffer AM**, & Maldjian JA. (2006) Estimation of false discovery rates for wavelet-denoised statistical parametric maps. *Neuroimage*, 33, 72-84.
- Peiffer AM**, Mozolic JL, Hugenschmidt CE, & Laurienti PL. (2007) Age-related multisensory enhancement occurs with simple audiovisual detection task. *NeuroReport*, 18, 1077-1081.
- Hayasaka S, **Peiffer AM**, Hugenschmidt CE, & Laurienti PJ. (2007) Power and sample size calculation for neuroimaging studies by non-central random field theory. *NeuroImage*. 37(3), 721-730.
- Hugenschmidt CE, **Peiffer AM**, Kraft RA, Casanova R, Deibler AR, Burdette JH, Maldjian JA, & Laurienti PJ. (2008) Relating imaging indices of white matter integrity and volume in healthy older adults. *Cerebral Cortex*. 18(2), 433-42

- Fitch RH, Threlkeld SW, McClure MM, & **Peiffer AM**. (2008) Use of a modified prepulse inhibition paradigm to assess complex auditory discrimination in rodents, *Brain Research Bulletin*. 76(1-2), 1-7.
- Mozolic JL, Hugenschmidt CE, **Peiffer AM**, & Laurienti PJ. (2008) Modality-specific selective attention attenuates multisensory integration. *Experimental Brain Research*. 184(1), 39-52.
- Peiffer AM**, Maldjian JA, & Laurienti PJ. (2008) Resurrecting brinley plots for a novel use: Meta-analyses of functional brain imaging data in older adults. *International Journal of Biomedical Imaging*, vol. 2008, Article ID 167078, doi:10.1155/2008/167078
- Mozolic JL, Joyner D, Hugenschmidt CE, **Peiffer AM**, Kraft RA, Maldjian JA, & Laurienti PJ. (2008) Cross-modal deactivations during modality-specific selective attention. *BMC Neurol*. 8(1), 35. Epub
- Peiffer AM**, Laurienti PJ & Hugenschmidt CE. (2008) Fostering a culture of responsible lab conduct. *Science*. 322(5905), 1186.
- Addicott MA, Yang LL, **Peiffer AM**, & Laurienti PJ. (2008) Methodological considerations for the quantification of self-reported caffeine use. *Psychopharmacology*. Epub
- Peiffer AM**, Hugenschmidt CE, Maldjian JA, Casanova R, Shrikanth R, Hayasaka S, Burdette JH, Kraft RA, & Laurienti PJ. (2009) Aging and the interaction of sensory cortical function and structure. *Human Brain Mapping*. 30, 228-240.
- Hugenschmidt CE, Hayasaka S, **Peiffer AM**, & Laurienti PJ. (*In press*) Applying capacity analyses to psychophysical evaluation of multisensory interactions. *Information Fusion*.
- Addicott MA, Yang LL, **Peiffer AM**, Burnett LR, Burdette JH, Chen MY, Hayasaka S, Kraft RA, Maldjian JA, & Laurienti PJ. (*In review*) The effect of daily caffeine use on cerebral blood flow: how much caffeine can we tolerate? *Human Brain Mapping*.
- Hugenschmidt CE, **Peiffer AM**, McCoy T, Hayasaka S, & Laurienti PJ. (*In review*) Preservation of crossmodal selective attention in healthy aging. *Experimental Brain Research*.
- Peiffer AM**, Hugenschmidt CE, & Laurienti PJ. (*In review*) Ethics in 15-minutes. *Journal of Science and Engineering Ethics*.

BOOK CHAPTERS

- Fitch RH & **Peiffer AM**. (2006) Behavioral consequences of focal neuromigrational anomalies. *In the Dyslexic Brain: New Pathways in Neuroscience Discovery*. G. D. Rosen (Ed). Lawrence Erlbaum Associates, Publishers. p. 259-288.

ABSTRACTS / SCIENTIFIC EXHIBITS

- Clark MG, Tallal P, Rosen GD, **Peiffer AM**, & Fitch RH. Impaired perception of speech stimuli in rats with induced microgyria. Program No. 30.12. *2000 Abstract Viewer/Itinerary Planner*. Washington, DC: Society for Neuroscience, 2000. Online.
- Chen J, Sava S, **Peiffer AM**, Fitch RH, & Markus EJ. Testing visual acuity in aged rats. Program No. 114.17. *2003 Abstract Viewer/Itinerary Planner*. Washington, DC: Society for Neuroscience, 2003. Online.
- Threlkeld SW, McClure MM, **Peiffer AM**, Rosen GD, & Fitch RH. Developmental timeframes for the induction of focal cortical anomalies and associated auditory processing deficits. Program No. 919.6. *2004 Abstract Viewer/Itinerary Planner*. Washington, DC: Society for Neuroscience, 2004. Online.
- Laurienti PJ, Hugenschmidt CE, & **Peiffer AM**. Revisiting the race model for evaluating multisensory integration. Program No. 617.20. *2005 Abstract Viewer/Itinerary Planner*. Washington, DC: Society for Neuroscience, 2005. Online.
- Hugenschmidt CE, **Peiffer AM**, Bennett EA, & Laurienti PJ. Modality specific selective attention: Costs and benefits in unisensory and multisensory tasks. Program No. 388.4. *2005 Abstract Viewer/Itinerary Planner*. Washington, DC: Society for Neuroscience, 2005. Online.
- Casanova R, Shrikanth R, Baer A, Laurienti PJ, **Peiffer AM**, Hayasaka S, Burdette J, & Maldjian J. Biological Parametric Mapping. Program No. 2797. *2006 Abstract ISMRM*. Seattle, WA: 2006.
- Addicott MA, **Peiffer AM**, Yang LL, Kraft RA, Maldjian JA, Burdette JH, Burnett LR, Chen MY, & Laurienti PJ. The effects of caffeine on cerebral Perfusion in Withdrawal and Native States. Program No. 369M. *2007 Abstract, Human Brain Mapping Conference*, Chicago, IL: 2007.
- Yang LL, **Peiffer AM**, Addicott MA, Kraft RA, Maldjian JA, Burdette JH, Burnett LR, Chen MY, & Laurienti PJ. BOLD Signal Decreases Following Caffeine Challenge in Individuals Who Intake High Daily Doses of Caffeine. Program No. 396M. *2007 Abstract, Human Brain Mapping Conference*, Chicago, IL: 2007
- Peiffer AM**, Burdette JH, Laurienti PJ, Flowers L, Maldjian JA, Milner L, & Wood F. Evaluating Dyslexia Across Multiple Speech Conditions Using a Novel fMRI Meta-Analysis Technique. Program No. 186T. *2007 Abstract, Human Brain Mapping Conference*, Chicago, IL: 2007.
- Hugenschmidt CE, **Peiffer AM**, Casanova R, Maldjian JA, Burdette JH, & Laurienti PJ. Preservation of Default Mode Functioning in Healthy Aging Adults. Program No. 49TH. *2007 Abstract, Human Brain Mapping Conference*, Chicago, IL: 2007.
- Peiffer AM**, Hugenschmidt CE, Mozolic JL & Laurienti PJ. Enhancement of multisensory integration in older adults across a variety of audiovisual tasks. Abstract, Aging

and Speech Communication: An International and Interdisciplinary Research Conference, Bloomington, IN: 2007.

- Yang LL, Casanova R, **Peiffer AM**, Addicott MA, Kraft RA, Maldjian JA, Burdette JH, Hayasaka S, Burnett LR, Chen MY & Laurienti PJ. Evaluating BOLD signal time course in pharmacological functional MRI. Program No. 119.6. 2007 Neuroscience Meeting Planner. San Diego, CA: Society for Neuroscience, 2007. Online.
- Jones NL, **Peiffer AM**, Lambros A, Guthold M, Johnson D, Tytell M, Eldridge JC and ACEP. Problem-Based Learning for Professionalism and Ethics: Graduate Curriculum for Science and Engineering. Conference on RCR-EIT. St. Louis MO. 2008
- Peiffer AM**, Jones NL, Eldridge JC, Lambros A, Ronca A & Johnson D. Training Post-doctoral Fellows to facilitate Problem-Based Learning groups for graduate training in RCR, scientific integrity and professionalism. Conference on RCR-EIT. St. Louis MO. 2008
- Peiffer AM**, Jones NL, Eldridge JC, Lambros A, Ronca A & Johnson D. Training Post-doctoral Fellows to facilitate Problem-Based Learning groups for graduate training in Responsible Conduct of Research (RCR), scientific integrity and professionalism. National Postdoctoral Association Annual Meeting. Boston, MA. 2008
- Yang LL, Addicott MA, **Peiffer AM**, Kraft RA, Maldjian JA, Burdette JH, Burnett LR, Chen MY, & Laurienti PJ. Caffeine is not a universal BOLD contrast booster. 2008 Abstract, Human Brain Mapping Conference, Melbourne, Australia. 2008
- Addicott MA, Yang LL, Casanova R, **Peiffer AM**, Maldjian JA, Burdette JH, Burnett LR, & Laurienti PJ. The effects of chronic caffeine use on the temporal dynamics of the BOLD signal. 2008 Abstract, Human Brain Mapping Conference, Melbourne, Australia. 2008
- Peiffer AM**, Tytell M, Jones NL, Eldridge JC, & ACEP. Scientific integrity and professionalism instruction using problem-based learning. Program No. 228.9. 2008 Neuroscience Meeting Planner. Washington, DC: Society for Neuroscience, 2008. Online.
- Peiffer AM**, Lambros A, Lyons DJ, & Goodwin D. A responsible conduct of research (RCR) program by postdocs for postdocs. National Postdoctoral Association Annual Meeting. Houston, TX. 2009
- Peiffer AM**, Eldridge JC, & Jones NL. Moral Reasoning Schemas and Views on Science, Technology and Society in Biomedical Graduate Students and Faculty. ORI Research on Research Integrity Conference. Niagara Falls, NY. 2009