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PROFESSIONAL EXPERIENCE

2014 – Present	**Director of Human Imaging, Social, Life, & Engineering Sciences Imaging Center (SLEIC), Pennsylvania State University**
2014 – Present	**Associate Professor of Psychology & Linguistics, Penn State University**
2010 – 2014	Assistant Professor of Psychiatry, Duke University
2010 – 2014	Associate Director of the Brain Imaging & Analysis Center (BIAC), Duke University
2007 - 2010	Instructor of Radiology, Duke University
2005 - 2010	Assistant Director of the Brain Imaging & Analysis Center, Duke University

EDUCATION

Ph.D. Duke University, May 2005
Department of Psychology
Certificate in Cognitive Neuroscience
Advisor: Gregory McCarthy

M.A. Duke University, May 2002
Department of Psychology
Advisor: Tamara Swaab

B.A Pennsylvania State University, May 1999
Psychology (GPA: 3.94)
Advisor: Judith Kroll

CURRENT RESEARCH SUPPORT

R01 AG034138-01A1 (Diaz) 05/01/10 - 4/30/16

NIH/NIA

“Neuroimaging of Age-Related Changes in Language”

Adult development is often associated with physical and cognitive decline. However, semantic processing is an area of cognition in which many abilities are largely preserved. In contrast, specific deficits in phonological retrieval have been observed. This pattern of age-related changes in semantic and phonological processes suggests a fundamental difference in the cognitive organization of these two abilities. The goal of this project is to use behavioral measures, diffusion tensor imaging (DTI), and functional magnetic resonance imaging (fMRI) to investigate phonological and semantic processes in older and younger adults to elucidate patterns of sparing and decline that are associated with healthy aging.

Role: Principal Investigator

SSRI Level 2 Project (Dennis) 08/15/14 – 08/15/16

"Behavioral, neural and genetic factors influencing motor and cognitive function in healthy older adults"

The goal of this research is to determine the relations between cognition, grip force control, brain structure, and brain function in healthy older adults. The central hypothesis is that measures of grip force control will relate to measures of cognition, specifically working memory and planning, and that both grip force and cognition will rely on similar neural mechanisms in the frontal cortices associated with executive functioning. Moreover, task performance is predicted to vary as a function of measures of brain structure and function as well as age.

Role: Co-Investigator

NSF PIRE (PIs: Kroll, Dusias, Li, Van Hell) 08/10/10 – 07/31/16

"Bilingualism, mind, and brain: An interdisciplinary program in cognitive psychology, linguistics, and cognitive neuroscience"

This PIRE project, a collaboration between three U.S. and seven foreign institutions in Europe and Asia, will investigate the cognitive and neural consequences of bilingualism to understand the ways in which multiple languages are learned and used. Recent behavioral and neuroscience evidence suggests that there are more extensive interactions between the two languages of a bilingual than previously thought, and this is true even when bilinguals are using only one language. Bilingual science therefore provides a tool for revealing fundamental principles about the mind and the brain. The next stage of research on bilingualism calls for national and international collaborations to unify our understanding of the nature of the bilingual mind and brain, the process of bilingual language development, and the consequences of bilingualism for cognition. International collaboration is essential for accessibility to widely differing bilingual populations of several spoken, written, and signed languages. This award enables an international network of collaborators with common research goals and methods to exploit unique and complementary opportunities to investigate properties of human languages. Leveraging the diverse perspectives inherent in interdisciplinary and cross-cultural research will facilitate the establishment of a world-class research context for investigating bilingualism science, enable generalization of research findings, and exploit bilingualism as a tool for investigating the representation and processing of language in the mind and brain.

Role: Investigator

R01-MH098301-01A1 (Wang) 09/15/12-06/30/17

NIH/NIMH

"Dorsal Cingulate Activity and Cognitive Decline in Late-Life Depression"

The long-term goals of the proposed project are to better understand the neural mechanisms linking depression and cognitive impairment, to establish biomarkers for early identification of depressed individuals at risk for cognitive impairment, and to understand the neural plasticity of LLD with and without cognitive impairment following prevention programs and clinical interventions.

Role: Investigator

R01-AG043438-01A1 (Whitson) 08/01/13-07/31/18

NIH/NIA

"Cognitive Changes and Brain Connectivity in Age-Related Macular Degeneration"

Age-related macular degeneration (AMD) is the leading cause of blindness in older Americans. It is also associated with a two-fold increase in the risk of dementia, and even non-demented AMD patients exhibit strikingly poor performance on tests of verbal fluency. This suggests that AMD involves brain changes as well as eye changes. However, the extent and locus of brain changes associated with cognitive deficits in AMD is unknown. The overall objective of this project is to determine how AMD-related cognitive deficits (e.g. verbal fluency) relate to functional and structural connectivity in the brain.

Role: Investigator

PENDING RESEARCH SUPPORT

NSF PIRE (PIs: Kroll, Dusias, Lipski, Van Hell)

"Translating cognitive and brain science in the laboratory and field to language learning environments"

Research on the language and learning sciences has grown at a remarkable pace in the past decade, in part due to the contributions of cross-disciplinary approaches that merge the power of behavioral, neuroscience, and computational methods. The award of a PIRE grant in 2010 facilitated the development of a broad and sustainable international research network. That network enabled new discoveries about the consequences of bilingual and multilingual experience for learning and for the brain. The current proposal harnesses the excitement about these discoveries to ask how the basic science might be translated, to transform educational practice and policy, and to serve a changing population whose language experience is linguistically broad, culturally more diverse, and international. We will bring brain science to the classroom for children and older learners, investigate diverse language learning environments, and examine the consequences of bilingualism across the lifespan for education and health.

Role: Investigator

NIH T32 Training Grant: Psychosocial Determinants and Biological Pathways to Healthy Aging (PATHWAYS, PI: Almeida).

We propose to build on our established track record of successful pre-doctoral and post-doctoral training that focuses on "Psychosocial Determinants and Biological Pathways to Healthy Aging" (PATHWAYS). The PATHWAYS training program will fill a unique niche in the NIA portfolio by providing cutting-edge training to graduate students and post-doctoral scholars who are focused on understanding the linkages among behavioral, psychosocial and biological mechanisms that underlie healthy aging. Examples of these types of research topics include understanding the role daily stress plays in shaping long-term health trajectories; tracking the enduring effects of early childhood adversity and chronic stress on momentary self-regulation; elucidating the endocrine and inflammatory processes underlying cognitive aging; and linking chronic sleep deficiency to cardiometabolic outcomes. These examples illustrate that aging science is multidisciplinary and complex, requiring analytic skills that link variables measured at multiple levels of analysis (e.g., biology, behavior, social context) and across multiple timescales (e.g., moments, days, years). For these reasons, it is essential that the next generation of aging scientists be able to integrate research that spans from basic biology to complex social phenomena as well as be skilled in the application of advanced data acquisition and analytic methods.

Role: Investigator/Mentor

NSF NRT: NRT DESE: Integrating Big Data Analytics into Graduate Training in Brain Sciences (PI: Vasant; Co-PIs: Albert, Diaz, Li, P., Li, R.)

The emergence of big data offers unprecedented opportunities for data enabled discovery and innovation across virtually all areas of human endeavor. Cognitive and Brain sciences are no exception. Realizing the promise and the potential of big data in Cognitive and Brain Sciences requires advances in Data Sciences; and the integration of the resulting approaches, methods, and tools into Cognitive and Brain Sciences research. As Cognitive and Brain Sciences become increasingly dependent on advanced data analytics and modeling for understanding brain data, Data Sciences are an essential component of training in the Brain Sciences. Similarly, realizing the transformative potential of big data across STEM disciplines calls for strategies for integrating Data Sciences into graduate training in STEM that can be scaled and customized to meet the needs of a broad range of disciplines.

Role: Co-PI

PAST RESEARCH SUPPORT

Tongji Visiting Scholars (Diaz) 07/01/13-06/30/14
Tongji University
Provides training in MRI data collection and analysis for 2 visiting scholars from Tongji University.
Role: Principal Investigator

VA246-P-0644 (Diaz) 10/1/10-09/30/14
Veterans Administration Medical Center
"MRI and Data Analysis Services for MIRECC"
Provides brain research MRI and orbital X-ray scans for approximately 70 subjects per year for ongoing VISN 6 MIRECC research studies. The PI's role is primarily to provide technical and administrative oversight.
Role: Principal Investigator

M01 RR00030 (Voyvodic / Potkin) 12/01/06-11/30/12
NCRR
"The Function BIRN"
The overarching goal of this project is to develop fMRI into a tool suitable for large-scale clinical studies of treatment, longitudinal progression, and genetic and environmental risk factors. The aims are to: 1) develop an infrastructure for shared access and analysis of fMRI data, 2) standardize and cross-validate common activation tasks, acquisition methods, and analyses, and 3) compare the common activation tasks, methods, analyses to site-specific methods.
Role: Investigator

P01 NS41328-06 (Song) 7/01/01 – 8/31/12
NINDS
"Human Functional Brain Anatomy" – Core A
This Program Project will investigate the functional neuroanatomy of the human brain using high-field functional magnetic resonance imaging (fMRI), electrophysiology, and behavior. The four scientific projects are strongly linked by their focus on the relationship between brain and the behavior. Core A serves as an administrative unit to supervise grant expenditures and subject enrollment.
Role: Investigator

R03HD059220-01A1 (Diaz) 05/01/09 - 04/30/11
CHHD
Neuroimaging of Metaphor Processing
Clinical, behavioral, and neuroimaging research support right hemisphere involvement in metaphor processing. However, there is debate over whether it is metaphors per se that engage the right hemisphere or if other factors that co-vary along the figurative-literal dimension elicit right hemisphere engagement. The first goal of this proposal is to use functional magnetic resonance imaging (fMRI) to investigate the influence of semantic relatedness and the influence of context on hemispheric recruitment.
Role: Principal Investigator

NSF Graduate Research Fellowship 2002 – 2005
Role: Recipient

PUBLICATIONS

* indicates student collaborators

1. Whitson, H.E., Chou, Y., Potter, G., **Diaz, M.T.,** Chen, N., Lad, E., Johnson, M.A.*, Cousins, S., & Madden, D.J. (2015). Verbal fluency and resting state brain connectivity in age-related macular

degeneration: A pilot study. Brain Connectivity, 5(2), 126-135. doi:10.1089/brain.2014.0277 PMCID: PMC3674832

2. Liu, T.T., Glover, G.H., Mueller, B.A., Greve, D.N., Rasmussen, J., Voyvodic, J.T., Turner, J.A., van Erp, T.G.M., Lu, K., Brown, G.G., Keator, D.B., Calhoun, V.D., Lee, H.J., Ford, J.M., Mathalon, D.H., Jorgensen, K., **Diaz, M.T.**, O'Leary, D.S., Gadde, S, Preda, A, Lim, K.O., Wible, C.G., Stern, H.S., Belger, A., McCarthy, G., Ozyurt, B., Potkin, S.G., FBIRN. (In Press). Quality assurance in functional MRI. In K. Ugurbil, K. Uludag, & L.J. Berliner (Eds). *fMRI: Theory and Applications.* Springer Publishing.

3. Fryer, S., Roach, B., Ford, J., Turner, J., Van Erp, T., Voyvodic, J., Preda, A., Belger, A., Bustillo, J., O'Leary, D., Mueller, B., Lim, K., McEwen, S., Calhoun, V., **Diaz, M.T.,** Glover, G.H., Greve, D., Wible, C., Vaidya, J., Potkin, S.G., and Mathalon, D. (In Press). Relating intrinsic low frequency bold cortical oscillations to cognition in schizophrenia. *Neuropsychopharmacology.*

4. **Diaz, M.T.,** Johnson, M.A.*, Burke, D.M., & Madden, D. J. (2014). Age-related differences in the neural bases of phonological and semantic processes. *Journal of Cognitive Neuroscience, 26(12):1-14. DOI: 10.1162/jocn_a_00665* PMID: 24893737 NIHMSID: 605188 PMCID: PMC4216243

5. Johnson, M.A.*, **Diaz, M.T.**, & Madden, D.J. (2014). Global versus tract-specific components of cerebral white matter integrity: Relation to adult age and perceptual-motor speed. *Brain Structure & Function.* NIHMSID: 620459, PMCID: PMC4277942

6. Madden, D.J., Parks, E.L., Davis, S.W., **Diaz, M.T.,** Potter, G.G., Chou, Y.H., Chen, N.K., & Cabeza, R. (2014). Age mediation of fronto-parietal activation during visual feature search. *Neuroimage,* 102(2), 262-274. *doi: 10.1016/j.neuroimage.2014.07.053.* NIHMSID: 619637, Publ.ID: YNIMG11555, PMCID: PMC4253678

7. **Diaz, M.T.,** Hogstrom, L.J.*, Zhuang, J.*, Voyvodic, J.T., Johnson, M.J.* & Camblin, C.C.*. (2014). The influence of written distractor words on brain activity during overt picture naming. *Frontiers in Human Neuroscience. 8:167. doi: 10.3389/fnhum.2014.00167,* PMID: 24715859 PMCID: PMC3970014

8. Greve, D.N., Duntley, S.P., Larson-Prior, L., Krystal, A.D., **Diaz, M.T.**, Drummond, S.P., Thein, S.G., Kushida, C.A., Yang, R., & Thomas, R.J. (2014). Effect of armodafinil on cortical activity and working memory in patients with residual excessive sleepiness associated with CPAP-Treated OSA: a multicenter fMRI study. *Journal of Clinical Sleep Medicine*, 10(2), 143-53. doi: 10.5664/jcsm.3440. PMCID: PMC3899316

9. Van Erp, T.G.M., Guella, I., Vawter, M.P. Turner, J., Brown, G.G., McCarthy, G., Greve, D.N., Glover, G.H., Calhoun, V.D., Lim, K.O., Bustillo, J.R., Belger , A., Ford, J.M., Mathalon, D.H., **Diaz, M.T.,** Preda, A., Nguyen, D., Macciardi, F., & Potkin, S.G.. (2014). Schizophrenia miR-137 Locus Risk Genotype is Associated with DLPFC Hyperactivation. *Biological Psychiatry. doi: 10.1016/j.biopsych.2013.06.016. PMID: 23910899 PMCID: In Process*

10. Glover, G.H., Mueller, B., Van Erp, T., Liu, T.T., Greve, D., Voyvodic, J., Rasmussen, J., Turner, J., Brown, G.G., Keator, D.B., Calhoun, V.D., Lee, H.J., Ford, J., **Diaz, M.T.**, O'Leary, D.S., Potkin, S.G., FBIRN. (2012). Function biomedical informatics research network recommendations for prospective multi-center functional neuroimaging studies. *Journal of Magnetic Resonance Imaging,* 36 (1), 39-54 PMID: 22314879 PMCID: PMC3349791

11. **Diaz, M.T. &** Hogstrom, L.J.* (2011). The influence of context on hemispheric recruitment during metaphor processing. *Journal of Cognitive Neuroscience,* 23(11), 3586-3597. PMID: 21568642 NIHMSID: 300129, PMCID: PMC3175018.

12. **Diaz, M.T.**, He, G., Gadde, S., Bellion, C., Belger, A., Voyvodic, J.T., & McCarthy, G. (2011). The influence of emotional distraction on verbal working memory: An fMRI investigation comparing individuals with schizophrenia and healthy adults. *Journal of Psychiatric Research,* 45 (9), 1184-1193. PMID: 21411108 NIHMS: NIHMS276896, PMCID: PMC3131474

13. **Diaz, M.T.**, Barrett, K.T.*, & Hogstrom, L.J.* (2011). The influence of sentence novelty and figurativeness on brain activity. *Neuropsychologia*, 49 (3), 320-330. PMCID: PMC3034783

14. Greve, D.N., Mueller, B.A., Liu, T., Turner, J.A., Potkin, S.G., Voyvodic, J.T., **Diaz, M.T.**, Wallace, S., Yetter, E., Roach, B.J., Ford, J.M., Mathalon, D.H., Wible, C.G., & Glover, G. (2011). A novel method for quantifying scanner instability in fMRI. *Magnetic Resonance in Medicine*, 65(4), 1053-61. PMID: 21121002 NIHMS: NIHMS240496 PMCID: PMC3117086

15. Brown, G.G., Mathalon, D., Stern, H., Ford, J., Mueller, B., Greve, D., McCarthy, G., Voyvodic J., Glover, G., **Diaz, M.T.,** Yetter, E., Ozyurt, B., Jorgensen, K.W., Wible, C., Turner, J., Thompson, W.K., Potkin, S., and the FBIRN. (2011). Multisite reliability of cognitive BOLD data. *Neuroimage*, 54(3), 2163-75. PMCID: PMC3009557 [Available on 2012/2/1].

16. Wible, C.G., Lee, K., Molina, I., Hashimoto, R., Preus, A.P., Roach, B.J., Ford, J.M., Mathalon, D.H., McCarthy, G., Turner, J.A., Potkin, S.G., O'Leary, D., Belger, A., **Diaz, M.**, Voyvodic, J., Brown, G.G., Notestine, R., Greve, D., Lauriello, J., FBIRN (2009). FMRI activity correlated with auditory hallucinations during performance of a working memory task: Data from the FBIRN consortium study. *Schizophrenia Bulletin*, 35, 1, 47-57. PMCID: PMC2643958.

17. Segall, J.M., Turner, J.A., van Erp, T.G.M., White, T., Bockholt, H.J., Gollub, R.L., Ho, B.C., Magnotta, V., Jung, R.E., McCarley, R.W., Schulz, S.C., Lauriello, J., Clark, V.P., Voyvodic, J.T., **Diaz, M.T.**, Calhoun, V.D. (2009). Voxel-based morphometric multi-site collaborative study on schizophrenia. *Schizophrenia Bulletin*, 35, 1, 82-95. PMCID: PMC2643956.

18. Potkin, S. G., Turner, J. A., Brown, G. G., McCarthy, G., Greve, D. N., Glover, G. H., Manoach, D. S, Belger, A, **Diaz, M.T.**, Wible, C. G, Ford, J. M, Mathalon, D. H, Gollub, R, Lauriello, J, O'Leary, D, van Erp, T. G. M, Toga, A. W, Preda, A, and Lim, K. O. (2009). Working memory and DLPFC inefficiency in schizophrenia: The FBIRN study. *Schizophrenia Bulletin*, 35(1), 19-31. PMCID: PMC2643959.

19. **Diaz, M.T.**, He, G., Gadde, S., Bellion, C., Belger, A., Voyvodic, J.T., and McCarthy, G. (2009). Brain activity elicited by emotional stimuli during a verbal working memory task: A comparison of healthy adults and patients with chronic schizophrenia. *NeuroImage*, 47, S166.

20. **Diaz, M.T**. & McCarthy, G. (2009). A comparison of brain activity evoked by single content and function words: An fMRI investigation of implicit word processing. *Brain Research*, 1282, 38-49. PMCID: PMC2755079.

21. **Diaz, M.T**. & Swaab, T.Y. (2007). Electrophysiological differentiation of phonological and semantic integration in word and sentence contexts. *Cognitive Brain Research,* 1146, 85-100. PMCID: PMC1853329.

22. Schwartz, A.I, Kroll, J.F., & **Diaz, M.T.** (2007). Reading words in Spanish and English: Mapping orthography to phonology in two languages. *Language and Cognitive Processes,* 22:1, 106 - 129.

23. **Diaz, M.T.** & McCarthy, G. (2007). Unconscious word processing engages a distributed network of brain regions. *Journal of Cognitive Neuroscience, 19(11)*, 1768-1775. PMID: 17958480.

24. Robertson, B., Wang, L., **Diaz, M.T**., Aiello, M., Gersing, K., Beyer, J., Mukundan, S., McCarthy, G., & Doraiswamy, P.M. (2007). Effect of Bupropion XL on negative emotion processing in major depression: A pilot functional MRI study. *The Journal of Clinical Psychiatry*, 68(2), 261-267. PMID: 17335325

PAPERS UNDER REVIEW

* indicates student collaborators

1. **Diaz, M.T.,** Zhuang, J.*, & Rizio, A.A.* (Under Review). The neural language systems that support healthy aging: Integrating function, structure, and behavior.

2. Rizio, A.A.* & **Diaz, M.T.** (Under Revision). Language, aging, and cognition: Predicting cognitive performance using age and white matter integrity.

3. Rossi, E. & **Diaz, M.T.** (Under Review). How aging and bilingualism influence language production: theoretical and neural models.

4. Madden, D.J., Parks, E.L., Hoagey, D.A., Cocjin, S.B., Johnson, M.A., Chou, Y., Potter, G.G., Chen, N.K., Cabeza, R., & **Diaz, M.T.** (Under Review). Age Mediation of Cognition: Effects of Cerebral White Matter Integrity, Resting-State Functional Connectivity, and White Matter Hyperintensity Volume

5. Rossi, E., **Diaz, M.T.**, Kroll, J.F., & Dussias, P.E. (Under Revision). Using clitic pronouns to test the sensitivity of late bilinguals to L2 morphosyntax.

6. Rossi, E., **Diaz, M.T.**, Kroll, J.F., & Dussias, P.E. (Under Review). When sentence comprehension in the native language is not enough: What second language learners and bilinguals tell us about the processing of morphosyntax.

7. Chou, Y., Weingarten, C.P., Gaur, P., Chu, M., Madden, D.J., Song, A.W., **Diaz, M.T.,** and Chen, N. (Under Review). Support Vector Machine Classification of Mind Wandering Using Whole-Brain Resting-State Functional Connectivity.

PAPERS IN PREPARATION

* indicates student collaborators

1. **Diaz, M.T.,** Johnson, M.A.*, Truong, T.K., Burke, D.M., & Madden, D.J. (In Preparation). Age-related differences in the influence of task-irrelevant information on the neural bases of phonological and semantic processes.

2. Zhuang, J.*, Johnson, M.A.*, Madden, D.J., Burke, D.M., & **Diaz, M.T.** (Under Review). Hierarchical cognitive control systems in prefrontal cortex in language comprehension.

3. **Diaz, M.T.** (In Preparation). Non-verbal reasoning correlates with functional activation to metaphors.

4. **Diaz, M.T.**, Winkler, T., & Swaab, T.Y. (In Preparation). Electrophysiological investigation of sentential semantic ambiguity effects in older and younger adults.

5. **Diaz, M.T.** & Swaab, T.Y. (In Preparation). Age-related changes in phonological and semantic integration in word and sentence contexts.

CONFERENCE PRESENTATIONS

* indicates student collaborators

1. Rossi, E., Newman, S., **Diaz, M.T.,** Dussias, P., Ting, C., & Van Hell, J. (2015). Inhibitory control during sentential codeswitching: evidence from fMRI. 10th Annual International Symposium on Bilingualism, New Brunswick, NJ.
2. Rossi, E. & Diaz, M.T. (2015). Bilingual language processing and aging: A proposal for an integrative model. Slide presentation at the Bilingualism and Cognitive Aging Conference, Groningen, the Netherlands.
3. Johnson, M.A.*, Burke, D.M., & **Diaz, M.T.** (2015). White matter integrity relates to word finding failures and resolutions. Poster presentation at the 2015 Dallas Aging and Cognition Conference, Dallas, TX.
4. Zhuang, J.*, Madden, D., Duong-Fernandez, X.*, Chou, Y., Johnson, M.*, **Diaz, M.T.**, Cousins, S., Potter, G., Chen, N., & Whitson, H. (2015). Reduced functional connectivity in neural language systems in persons with age-related macular degeneration. Poster presentation at the 22nd meeting of the Cognitive Neuroscience Society, San Francisco, CA.
5. Yalcinbas, E.A.*, Johnson, M.A.*, Groh, J.M., & **Diaz, M.T.** (2014) Does aging affect multisensory integration processes in the brain? Poster presentation at the 44th annual meeting of the Society for Neuroscience, Washington, D.C.
6. Zhuang, J.* Johnson, M.A.*, Burke, D.M., Madden, D.J., McLaughlin, M.E.*, Danehower, S.*, & **Diaz, M.T.** (2014). Differentiating competition and selection processes in prefrontal cortices. Poster presentation at the 21st meeting of the Cognitive Neuroscience Society, Boston, MA.
7. Carter, R.M., Johnson, M.A.*, Danehower, S.*, & **Diaz, M.T.** (2014). Perceived warmth affects social cognition during game play. Poster presentation at the 7th meeting of the Social & Affective Neuroscience Society (SANS), Denver, Co.
8. Madden, D.J., Parks, E.L., Chou. Y., Cocjin, S.B.*, Hoagey, D.A.*, **Diaz, M.T.,** Potter, G.G., Chen, N.K., Cabeza, R. (2014). Frontoparietal structural and functional connectivity mediates age-related differences in cognition. Poster presentation at the 21st meeting of the Cognitive Neuroscience Society, Boston, MA.
9. Rossi, E., Newman, S., **Diaz, M.T.,** Dussias, P.E., Ting, C., & Van Hell, J.G. (2013). Inhibitory control during sentential code-switching: Evidence from fMRI. Poster presentation at the 5th meeting of the Society for the Neurobiology of Language, San Diego, CA.
10. **Diaz, M.T.,** Johnson, M.A.*, Burke, D.M., & Madden, D.J. (2013). Age-related differences in resting state network connectivity and language. Poster presentation at the 19th meeting of the Organization for Human Brain Mapping, Seattle, WA.
11. **Diaz, M.T.,** Johnson, M.A.*, Pecoraro, A.*, Burke, D.M., & Madden, D.J. (2013). Functional and behavioral age-related changes in phonological and semantic processes under distracting conditions. Poster presentation at the 20th meeting of the Cognitive Neuroscience Society Meeting, San Francisco, CA.
12. Johnson, M.A.*, **Diaz, M.T.,** & Madden, D.J. (2013). Diffusion Tensor Imaging (DTI) of cerebral white matter integrity: Global versus tract-specific effects and mediation of age-related slowing. Poster presentation at the 20th meeting of the Cognitive Neuroscience Society Meeting, San Francisco, CA.
13. **Diaz, M.T.,** Johnson, M.A.*, Burke, D.M., & Madden, D.J. (2012). The role of white matter integrity in explaining age-related differences in phonological and semantic processes. Slide presentation at the 4th meeting of the Society for the Neurobiology of Language, San Sebastian, Spain.
14. Rossi, E., Newman, S., **Diaz, M.T.**, & Kroll, J. F. (2012). There are no mental firewalls: fMRI evidence for global inhibition of the native language in bilingual speech. Poster presentation at the International Workshop on Language Production, New York, NY.
15. **Diaz, M.T.,** Johnson, M.A.*, Camblin, C.C.*, Burke, D.M., & Madden, D.J. (2012). Age-related differences in the neural bases of phonological and semantic processes. Poster presentation at the 19th meeting of the Cognitive Neuroscience Society, Chicago, IL.

16. Camblin, C.C.*, Hogstrom, L.J.*, & **Diaz, M.T.** (2011). The influence of written word distractors on brain activity during overt picture naming. Poster presentation at the 3rd meeting of the Society for the Neurobiology of Language, Annapolis, MD.
17. **Diaz, M.T.** & Hogstrom, L.J.* (2011). The influence of contextual congruence and figurativeness on hemispheric recruitment. Slide presentation at the 18th meeting of the Cognitive Neuroscience Society, San Francisco, CA.
18. **Diaz, M.T.** & Hogstrom, L.J.* (2011). The influence of novelty and context on hemispheric recruitment in processing metaphors. Poster presentation at the 17th meeting of the Organization for Human Brain Mapping, Quebec City, Canada.
19. **Diaz, M.T.**, He, G., Gadde, S., Bellion, C., Belger, A., Voyvodic, J.T., and McCarthy, G. (2009). Brain activity elicited by emotional stimuli during a verbal working memory task: A comparison of healthy adults and patients with chronic schizophrenia, Poster presented at the 15th meeting of the Organization for Human Brain Mapping, San Francisco, CA.
20. **Diaz, M.T.** & McCarthy, G. (2005). Face and object processing in the fusiform gyrus: A comparison of intracranial ERP recordings and functional MRI. Paper presented at the 35th Meeting of the Society for Neuroscience, Washington, D.C.
21. **Diaz, M.T**. & McCarthy, G. (2005). Unconscious word processing: Differential activation based on word category and imageability. Poster presented at the 12th Meeting of the Cognitive Neuroscience Society, New York, NY.
22. **Diaz, M.T.** & McCarthy, G. (2004). Unconscious word processing engages a distributed network of brain regions. Paper presented at the 34th Meeting of the Society for Neuroscience, San Diego, CA.
23. **Diaz, M.T.** & McCarthy, G. (2004). Content and function words differentiated by gray and white matter activations. Poster presented at the 11th Meeting of the Cognitive Neuroscience Society, San Francisco, CA.
24. **Diaz, M.T.** & McCarthy, G. (2003). Different neural representations for content and function words. Poster presented at the 33rd Meeting of the Society for Neuroscience, New Orleans, LA.
25. **Diaz, M.T.** & Swaab, T.Y. (2002). An electrophysiological investigation of semantic and phonological aspects of spoken language. Poster presented at the 32nd Meeting of the Society for Neuroscience, Orlando, FL.
26. **Diaz, M.T.** & Swaab, T.Y. (2002). Electrophysiological differentiation of semantic and phonological processing during spoken language comprehension. Poster presented at the 9th Meeting of the Cognitive Neuroscience Society, San Francisco, CA.
27. Schwartz, A., Kroll, J.F. & **Diaz, M**. (2001). Reading cognates: Mapping orthography to phonology in two languages. Poster presented at the 42nd Annual Meeting of the Psychonomic Society, Orlando, FL.
28. Schwartz, A., Kroll, J.F., & **Diaz, M**. (2000). Reading Spanish words with English word bodies: Activation of spelling-to-sound correspondences across languages. Paper presented at the Second International Conference on the Mental Lexicon, Montreal, Canada.

HONORS AND AWARDS

2012	Duke Leadership Academy, participant
2002-05	National Science Foundation Graduate Research Fellowship, recipient
2000-04	James B. Duke Endowment Fellowship, recipient
1999	Student Marshall, PSU Psychology Department-student with the highest GPA in the major
1999	Evan Pugh Scholar, students in the top 0.05% of their class
1996-99	Dean's List, All Semesters

TEACHING EXPERIENCE

I enjoy interacting with students and they bring fresh perspectives to the content. Moreover, I find that teaching further develops one's own understanding of the material itself. Over the past 8 years, I had the opportunity to be the primary instructor in a variety of courses:

2009-2013	functional Magnetic Resonance Imaging (Primary Instructor, Duke University)
2008-2013	Neuroscience & Reading (Primary Instructor, Duke University Focus Program)
2005-2009	Statistical Methods (Primary Instructor, Duke University)
2007	Introductory Psychology (Primary Instructor, Duke University)
2004	Developmental Psychology (Teaching Assistant, Duke University)
2003	Cognitive Science (Teaching Assistant, Duke University)
2003	Introductory Psychology (Teaching Assistant, Duke University)

MENTORING EXPERIENCE

I have had multiple opportunities to mentor students at all levels: undergraduate, post-baccalaureate, graduate, and post-doctoral. Additionally, I supervised the BIAC post-baccalaureate fellowship program at Duke for 7 years, in which post-baccalaureate students met regularly to discuss career development and research topics.

Director, BIAC post-baccalaureate fellowship program (2007-2014)

Post-doctoral Researchers

Avery Rizio (2014 – present)
Jie Zhuang (2013 - Present)
C. Christine Camblin (2011 - 2012)

Ph.D. Thesis, Committee Member

Joseph Harris (2010 - 2012), Marissa Gamble (2010 - present), Kinsey Bice (2014 – present), Carla Fernandez (2014 – present), Christina Johnson (2014 – present), Haoyun Zhang (2014 – present)

Post-baccalaureate Research Assistants

Shaadee Samimy (2014 – present)
Micah Johnson (2010 - 2014)
Larson Hogstrom (2009 - 2011, awarded Fulbright Fellowship August 2011)

Undergraduate Honors Students

Ege Yalcinbas (2013 – present)
Kyle Barrett (2008 - 2009, 2012 University of Southern California law school graduate)
Anu Ganapathy (2003 - 2005, currently in medical school at University of Maryland)

Undergraduate Research Assistants

Caitlyn Miller (2014- present), Karlee Moyer (2014- present), Wen Sun (2014- present), Matt Downing (2014- present), Brianna Alexander (2014- present), Jenelle Smith (2014- present), Sarah Danehower (2012 - 2014), Mary Elizabeth McLaughlin (2013 - 2014), Anthony Pecoraro (2012 - 2013), Jennifer Yland (2013), Mona Ascha (2011 - 2012), (Maria) Paula Daneri (2012), Caryn McCarthy (2012), Lucy Bell (2011 - 2012)

LEADERSHIP EXPERIENCE

My role as Director of Human Imaging at the Social, Life, & Engineering Sciences Imaging Center (SLEIC) at Penn State and my previous experience as Assistant and then Associate Director of the Brain Imaging and Analysis Center (BIAC) at Duke includes research, financial, and operational oversight of the center. In this capacity, I participated in a variety of duties (e.g. budget planning, personnel issues, center operations, resource development and allocation, grant development). Currently, I directly

supervise 11 individuals and indirectly supervise many more. While at Duke, I had the opportunity to participate in two, career development training opportunities: the Duke Leadership Academy and the Certified Financial Manager Program. The Duke Leadership Academy focused on broad goals of leadership and work culture, while the Financial Management Program focused on best practices for fiscal and compliance issues.

UNIVERSITY SERVICE

Director of Human Imaging, Social, Life, & Engineering Sciences Imaging Center
Management of Core Instruments & Facilities for Research Steering Committee, Member
University-wide Research Computing Advisory Committee, Member
CLA Research Computing Advisory Committee, Member
Bilingualism Matters Steering Committee, Member
SLEIC Faculty Advisory Committee, Director
SLEIC Student Advisory Committee, Director
Focus Group Participant (ad-hoc)
Search Committee, Member (ad-hoc)

PROFESSIONAL AFFILIATIONS

Cognitive Neuroscience Society
Society for the Neurobiology of Language
Society for Neuroscience
Organization for Human Brain Mapping

NIH STUDY SECTION REVIEWER

Language and Communication Study Section (LCOM, ad hoc Nov 2014, Dec 2014; Standing Member 7/1/15 – 6/30/18)
NIDCD Communication Disorders Review Committee (ad hoc, June 2013, Nov 2014)
NIDCD Special Emphasis Panel – VSL fellowship review (Feb 2014, June 2014, Oct 2014, Feb 2015, June 2015)

MANUSCRIPT REVIEWER

Applied Psycholinguistics
Brain Research
Brain Topography
Clinical Neurophysiology
Frontiers in Neuroscience
Journal of Cognitive Neuroscience
Language and Linguistic Compass
NeuroImage
Neuropsychology
Brain and Language
Brain Research Bulletin
Cerebral Cortex
Developmental Science
Human Brain Mapping
Journal of Psychiatric Research
Neurobiology of Aging
Neuropsychologia