

Mandy J. Maguire

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Callier Center for Communication Disorders
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Current Position

Assistant Professor 8/05 – present
School of Behavioral and Brain Sciences
The University of Texas at Dallas, Richardson, TX

Education

Postdoctoral Fellow: Developmental Neuroscience Laboratory 8/03 – 7/05
University of Louisville, Louisville, KY
Mentor: Dennis Molfese

Ph.D. in Developmental Psychology 8/99 – 10/03
Temple University, Philadelphia PA
Dissertation Advisor: Kathy Hirsh-Pasek
Dissertation: Children use universal and language-specific cues in verb learning

B.A. in Psychology 8/94 – 5/98
The Pennsylvania State University, State College, PA

Publications

- Maguire, M.J., Brier, M.R., & Ferree, T.C. (2010). Differences in EEG theta and alpha responses reveal qualitative differences in processing taxonomic and thematic semantic relationships. *Brain and Language* 114(1), 16-25.
- Maguire, M.J., Hirsh-Pasek, K., Golinkoff, R.M., Imai, M., Haryu, E., Vengas, S., Okada, H., Pulverman, R., & Sanchez-Davis, B. (2010). A developmental shift from similar to language specific strategies in verb acquisition: A comparison of English, Spanish, and Japanese. *Cognition*, 114(3), 299-319.
- Brier, M.R., Ferree, T.C., Maguire, M.J., Moore, P., Tillman, G.D., Hart, J., Kraut, M.A. (in press). Frontal theta and alpha power and coherence changes are modulated by semantic complexity in a go/nogo task. *International Journal of Psychophysiology*.
- Tillman, G.D., Green, T.A., Ferree, T.C., Calley C.S., Maguire, M.J., Briggs, R., Hart, J., Haley, R.W., & Kraut, M.A. (in press). Impaired response inhibition in ill Gulf War veterans. *Journal of Neurological Sciences*.

- Krawczyk, D.C., McClelland, M.M. Donovan, C.E., Tillman, G.D. & Maguire, M.J. (2010). An fMRI investigation of cognitive stages in reasoning by analogy. *Brain Research*, 1342, 63-73.
- Maguire, M.J., Brier, M. R., Moore, P. S., Ferree, T. C., Ray, D., Mostofsky, S., Hart, J., Jr. & Kraut, M. A. (2009). The influence of perceptual and semantic categorization on inhibitory processing as measured by the N2-P3 inhibitory responses. *Brain and Cognition*, 71(3), 196-203.
- Maguire, M. J., Hirsh-Pasek, K., Golinkoff, R.M., & Brandone, A. (2008). Focusing on the relation: Fewer exemplars facilitate children's initial verb learning and extension. *Developmental Science*, 11(4), 628-634.
- Maguire, M.J. & Dove, G.O. (2008). Speaking of events: What event language can tell us about event representations and their development. In T.F. Shipley and J. Zacks (Eds.), *Understanding events: From perception to action* (pp. 193-220). New York, NY: Oxford University Press.
- Brier, M., Maguire, M.J., Tillman, G.D., Hart, J., & Kraut, M. (2008) Event-related potentials in semantic memory retrieval. *Journal of the International Neuroscience Society*, 14, 815-822.
- Shipley, T.F. & Maguire, M.J. (2008). Geometric information for event segmentation. In T.F. Shipley and J. Zacks (Eds.), *Understanding events: From perception to action* (pp. 415-435). New York, NY: Oxford University Press.
- Maguire, M. J. (2007). Getting more action: Fewer exemplars facilitate verb extensions. In B. Skarabela, S. Fish, & A. H.J. Do (Eds.), *Proceedings of the Boston University Annual Conference on Language Development* (pp. 418-429). Somerville, MA: Cascadilla Press.
- Hart, J., Anand, R., Zoccoli, S., Maguire, M., Gamino, J, Anand, R. King, R. & Kraut, M. A. (2007). Neural substrates of semantic memory. *Journal of International Neuropsychology Society*, 13, 865-880.
- Brandone, A., Golinkoff, R. M., Pulverman, R., Maguire, M. J., Hirsh-Pasek, K., & Pruden, S. M. (2007). Speaking for the wordless: Methods for studying cognitive linguistic constructs in infants. In M. Gonzalez-Marquez, I. Mittelberg, S. Coulson, & M. Spivory (Eds.), *Methods in cognitive linguistics* (pp. 345-366). John Benjamins: Amsterdam.
- Maguire, M.J., Hirsh-Pasek, K., & Golinkoff, R.M (2006). A unified theory of verb learning: Putting verbs in context. In K. Hirsh-Pasek and R. M. Golinkoff (Eds.), *Action meets word: How children learn verbs* (pp.364-391). New York: Oxford University Press.
- Hirsh-Pasek, K., Golinkoff, R. M., Hennon, E. A., Maguire, M. J., & Sootsman, J. (2006). O modelo "emergentista" de colalizãõ da aprendizagem de palavras: uma nova maneira de se pensar na psicologia do desenvolvimento (The emergentist coalition

- model of word learning: A new mode of thinking in developmental psychology). In Corrêa, L. M. S. (Ed.). *Aquisição da Linguagem e Problemas do Desenvolvimento Lingüístico* (Language development and problems in the development of language). Rio de Janeiro: Editora da PUC-Rio.
- Molfese, D. L., Maguire, M. J., Molfese, V. J., Pratt, N., Ratajczak, E. D., Fentress, L. F., & Molfese, P. J. (2005). Brain and Language: Phonological, Lexical, Syntactic and Semantic Disorders in Children. In K. Brown (Ed.), *Encyclopedia of Language and Linguistics, 2nd Edition* (pp. 535-545), Kidlington Oxford, England: Elsevier Ltd.
- Key, A., Dove, G., & Maguire, M.J. (2005). Linking brainwaves to the brain: An ERP component primer. *Developmental Neuropsychology, 27*, 183-216.
- Pruden, S., Hirsh-Pasek, K., Maguire, M. J., & Meyer, M., (2005). Foundations of verb learning: Infants form categories of path and manner in motion events. *Proceedings of the Boston University Annual Conference on Language Development*. Somerville, MA: Cascadilla Press
- Molfese, D. L., Fonaryova-Key, A., Maguire, M.J., Dove, G., & Molfese, V. J. (2005). Event-related evoked potentials (ERPs) in speech perception. In D. Pisoni (Ed.), *Handbook of speech perception* (pp.99-121). Oxford: Blackwell Publishers.
- Molfese, D. L., Fonaryova Key, A., Maguire, M., Dove, G., Peach, K., Fergusson, M., Straub, S., Mosely, M.J., Wettig, C., & Ratajczak, E. (2005). Coordinating a Research Team: Maintaining and Developing a Good Working Laboratory. In F.T. Leong & J.T. Austin (Ed.), *The Psychology Research handbook: A Primer for Graduate Students and Research Assistants, 2nd Edition* (pp. 389-400). Newbury Park, CA: Sage Publishers.
- Hirsh-Pasek, K., Golinkoff, R.M., Hennon, E. A., & Maguire, M. J. (2004). Hybrid theories at the frontier of developmental psychology: The emergentist coalition model of word learning as a case in point. In G. Hall & S. Waxman (Eds.), *Weaving a lexicon* (pp. 173-204). Cambridge, MA: MIT Press
- Maguire, M.J., Hennon, E.A., Hirsh-Pasek, K., Golinkoff, R.M., Slutzky, C.B., & Sootsman, J. (2002). Mapping words to actions and events: How do 18-month-olds learn a verb? In B. Skarabela, S. Fish, & A. H.J. Do (Eds.), *Proceedings of the Boston University Annual Conference on Language Development* (pp. 371-382). Somerville, MA: Cascadilla Press.
- Golinkoff, R.M., Chung, H. L., Hirsh-Pasek, K., Liu, J., Bertenthal, B. I., Brand, R., Maguire, M. J., & Hennon, E. A. (2002). Young children can extend motion verb labels to point-light displays. *Developmental Psychology, 38*, 604-615.
- Just, M.A., Carpenter, P.A., Maguire, M., Diwadkar, V.A., & McMains, S. (2001). Mental rotation of objects retrieved from memory: An fMRI study of spatial processing. *Journal of Experimental Psychology: General, 130*, 493-504.

Hirsh-Pasek, K., Hennon, E. A., Golinkoff, R. M., Pence, K., Pulverman, R., Sootsman, J., Pruden, S., & Maguire, M. J. (2001). Social attention need not equal social intention: From attention to intention in early word learning. *Brain and Behavioral Sciences*, 24, 1108-1109.

Submitted Manuscripts.

Maguire, M.J., Brier, M.R. & White, J. (submitted August 3, 2010). Abstract categorization influences developmental and sex differences in response inhibitory in middle childhood. *Journal of Cognition and Development*

Maguire, M.J., White, J., & Brier, M. R. (submitted June 21, 2010). How semantic categorization influences inhibitory processing in middle-childhood: An Event Related Potentials study. *Brain and Cognition*

Maguire, M.J., Brumberg, J., Ennis, M., & Shipley, T.F., (submitted June 9, 2010). Similarities in object and event segmentation: A geometric approach to spatiotemporal path segmentation. *Spatial Cognition and Computation: An Interdisciplinary Journal*.

Hart, J., Calley C., Motes, M., Chiang, H-S., Spence, J., Abdi, H., Anand, R., Maguire, M.J., Estevez, L., Briggs, R., Feeman, T., & Kraut, M. (under review, submitted August 9, 2010). Threat as a feature in visual semantic object memory. *Human Brain Mapping*.

Manuscripts in Preparation.

Maguire, M.J., Ogiela, D., & Egbert, R. (in preparation). When is a picture really worth 1000 words? An event related potentials study of object and action recognition.

Maguire, M.J. McClelland, M.M. Donovan, C.E., Tillman, G.D.& Krawczyk, D.C., (in preparation). An ERP and eye tracking study of the cognitive stages of reasoning by analogy. *Journal of Experimental Psychology: Memory, Learning and Cognition*,

Brier, M.R., Maguire, M.J., Ferree, T.C., Gleman, Y., Patel, R.H., Hart, J., & Kraut, M.A. (in preparation). Arithmetic fact recall and number comparison in adolescents and adults as revealed by event-related potentials.

Brier, M.R., Maguire, M.J., Jajal, N., Ferree, T.C., Hart, J., & Kraut, M.A. (in preparation). The influence of left to right number representation on number comparisons. *Cognitive Neuroscience*

Brier, M.R., Maguire, M.J., Hart, J., & Kraut, M.K. (in preparation). The uniqueness of the number zero in mental multiplication: Electrophysiological evidence.

Anand, R., Maguire, M.J., Chapman, S.B., & Hart, J (in preparation). The neurological correlates of gist-based and detail-based processing of information: An ERP study.

Presentations

Papers.

Brier, M. R., Maguire, M.J., Ferree, T. C., Gleman, Y., Patel, R.H., Hart, J., Krat, M. A. (2009, October). *Arithmetic fact recall and number comparison as revealed by event-related potentials*. Paper presented at the annual meeting of the Society for Neuroscience, Chicago, IL.

Maguire, M.J., White, J., Brier, M., Maio, M., Anand, R., Reagor, M.K., & Dove, G. (2009, April) *An ERP study of novel verb processing in young children*. Paper presented at the Society for Research in Child Development, Denver, CO.

Maguire, M.J., Hirsh-Pasek, K., Golinkoff, R.M., Mutsumi, I., Vangas, S. & Pulverman, R. (2009, April). *Language specific strategies to verb acquisition: A comparison of English, Japanese and Spanish*. Paper presented at the Society for Research in Child Development, Denver, CO.

Pulverman, R., Maguire, M.J., Hirsh-Pasek, K., Golinkoff, R.M. (2006, June). *On the beaten path: Multiple cues converge to make verb learning easier in Spanish*. Paper presented at the Biannual International Society for Infancy Research, Kyoto, Japan

Maguire, M. J. (2006, November). *Getting more action: Fewer exemplars facilitate verb extensions*. Paper presented at The Boston University Conference on Language Development.

Hirsh-Pasek, K., Maguire, M.J., & Golinkoff, R. (2005, April). *Facilitating verb learning: A window onto what makes verb learning difficult*. Paper for the biennial meeting of the Society for Research in Child Development, Atlanta, GA.

Maguire, M. J., Hirsh-Pasek, K., & Pruden, S. (2003, April). *The way you do that thing you do: Attention to path and manner in action words*. Paper presented at the biannual meeting of the Society for Research and Child Development, Tampa, FL.

Pruden, S., Hirsh-Pasek, K., Maguire, M. J., & Meyer, M., (2003, November). *Foundations of verb learning: Infants form categories of path and manner in motion events*. Paper presented at Boston University Language Conference, Boston, MA.

Maguire, M.J., Hennon, E.A., Hirsh-Pasek, K., Golinkoff, R.M., Slutzky, C.B., & Sootsman, J. (2001, November). *Mapping words to actions and events: How do 18-month-olds learn a verb?* Paper presented at the annual meeting of the Boston University Conference on Language Development, Boston, MA.

Posters.

- Ogeila, D., Maguire, M.J., & Dollaghan, C. (May, 2010). Methodological considerations for the study of morphosyntactic processing children with specific language impairments using event-related potentials: Stimulus development and adult pilot study results. Society for Research in Child Language Development.
- Brier, J. R., Maguire, M.J., Jajal, N.J., Ferree, T.C., Hart, J., & Kraut, M. (April, 2010). *The influence of left to right number representations on number comparison*. The annual meeting of the *Cognitive Neuroscience Society*.
- Kraut, M., Brier, M., Maguire, M., Ferree, T., Hart, J. (April, 2010). Frontal theta and alpha power and coherence changes are modulated by semantic complexity in go/nogo tasks. The annual meeting of the *Cognitive Neuroscience Society*.
- Maguire, M.J., White, J., & Brier, M. R. (April, 2010). *The interaction of inhibition and conceptual-semantic processing in children as measured by the N2-P3 response during three Go-NoGo tasks*. The annual meeting of the *Cognitive Neuroscience Society*.
- Tillman, G. D., Green, T. A., Ferree, T. C., Calley, C.S., Maguire, M.J., Hart, J., Haley, R.W., & Kraut, M. (April, 2010). Impaired response inhibition in ill Gulf War Veterans. The annual meeting of the *Cognitive Neuroscience Society*.
- White, J. Brier, M.R., Egbert, R., Motes, M.A. Hart, J. Jr., Kraut, M.A. & Maguire, M.J. (April, 2010). *Electrophysiological correlates of individual differences in mental arithmetic and number comparisons observed in middle school children*. The annual meeting of the *Cognitive Neuroscience Society*.
- Lugo, M. Brier, M.R., Maguire, M.J., & Hart, J. (2010, April) The number 0 is processed differently in mental multiplication: An ERP study. Center for Brain Health *Reprogramming the Brain Symposium*, Dallas, TX
- Jajal, N.J., Brier, M.R., Maguire, M.J., & Hart, J. (2010, April). Eye-tracking provides insight into how arithmetic order of operations are processed. Center for Brain Health *Reprogramming the Brain Symposium*, Dallas, TX
- Patel, R.H., Brier, M.R., Maguire, M.J., Kraut, M.A., & Hart, J. (2010, April). BA6 is preferentially involved in semantic retrieval judgments: An ERP study. Center for Brain Health *Reprogramming the Brain Symposium*, Dallas, TX
- Anand, R., Motes, M.A., Maguire, M.J., Moore, P.S., Chapman, S.B., & Hart, J. (2009, October). *Neural basis of abstracted meaning*. Conference on the Neurobiology of Language. Chicago, IL.
- Ferree, T., Brier, M., Maguire, M.J., & Spence, J. (2009, June). *Space-Time-Frequency analysis of EEG data in semantic inhibition: Control of false positives in single subjects*. Poster presented at the Annual Conference on Human Brain Mapping. San Francisco, CA.

- Maguire, M.J., Reagor, M.K., White, J., Brier, M.R., Elliott, S.M., Elliott, M.R., & Maio, M. (2009, April). *An ERP study of the neurological processes underlying thematic and categorical relationships in young children*. Poster presented at Society for Research in Child Development, Denver, CO.
- White, J., Maguire, M.J., Miao, M., Brier, M. & Moore, P. (2009, April) *An ERP study of ultra-rapid superordinate categorization in children and adults*. Poster presented at the Society for Research in Child Development, Denver, CO.
- Brier, M. R., Maguire, M. J. Moore, P. S., Gelman, Y., Kraut, M. A., & Hart, J. (November, 2008). N2 amplitude is modulated by semantic complexity in an inhibition task. *Society for Neuroscience*. Washington, D.C.
- Krawczyk, D., McClelland, M. M., Donovan, C., Tillman, G. & Maguire, M.J. (November, 2008). Neural basis of reasoning by analogy. *Society for Neuroscience*. Washington, D.C.
- Anand, R., Maguire, M.J., Chapman, S. B., Hart, J. (April 2008). *Seeing the forest and the tress: Exploring the neurological underpinnings of gist and detail processing*. Annual meeting of the Cognitive Neuroscience Society. San Francisco, CA.
- Brier, M., Ferree, T., Maguire, M.J., Tillman, G., Xavier, P., Hart, J., & Kraut, M. (April 2008). *Neural oscillations in semantic object retrieval*. Annual meeting of the Cognitive Neuroscience Society. San Francisco, CA.
- Maguire, M.J., Reagor, M.K., Anand, R., Sandgren, S., & Elliott, M. (April 2008). *Grammaticality influences the N400 to novel verbs*. Annual meeting of the Cognitive Neuroscience Society. San Francisco, CA.
- Reagor, M.K. & Maguire, M.J. (April 2008). *Electrophysiological measures for remembered, ignored and novel words in a strategic learning task*. Annual meeting of the Cognitive Neuroscience Society. San Francisco, CA.
- Anand, R., Maguire, M.J., Chapman, S. B., & Hart, J. (February, 2008) *Gist-based and detail-based processing of information: Effects of normal cognitive aging*. Poster presented at the Annual meeting of the International Neuroscience Society. Waikoloa, Hawaii.
- Brier, M., Maguire, M.J., Tillman, G., Kraut, M., Hart, J. (February, 2008). *Neurophysiological maker in semantic object retrieval*. Poster presented at the Annual meeting of the International Neuroscience Society. Waikoloa, Hawaii.
- Maguire, M.J., Reagor, M.K., Tillman, G., Calley, C., Gamino, J., Brier, M., Hanten, G. (February, 2008). *The neurological underpinnings of individual differences in learning: Relating ERP responses to self-reported learning strategies*. Poster presented at the Annual meeting of the International Neuroscience Society. Waikoloa, Hawaii.

- Maguire, M.J., Sanchez-Davis, B., & Vanegas, S. (October 2007). *In a manner of speaking: Verb learning patterns in English, Spanish and Japanese Preschoolers*. Poster presented at the Cognitive Development Society Conference. Sante Fe, N.M.
- Vanegas, S. & Maguire, M.J. (October 2007). *Theory of mind, inhibition and language: One process or many?* Poster presented at the Cognitive Development Society Conference. Sante Fe, N.M.
- Maguire, M.J., Hirsh-Pasek, K., Golinkoff, R.M. (2006, June). *Less is more in verb learning: Fewer exemplars facilitate novel verb*. The Biannual International Society for Infancy Research, Kyoto, Japan
- Maguire, M. J. & Dove, G. O. (2005, February). *An ERP study of imageability and syntactic processing*. A poster for the annual meeting of the International Neuropsychological Society, St. Louis, MO.
- Maguire, M. J. & Dove, G. O. (2005, April). *Imageability and grammatical class in noun and verb learning: An ERP study*. Poster for the biennial meeting of the Society for Research in Child Development, Atlanta, GA.
- Maguire, M.J. & Dove, G.O. (2005, October). *The neurological correlates of grammatical class and imageability development*. Poster presented at the annual meeting of the Cognitive Development Society, San Diego, CA.
- Maguire, M. J., Pruden, S. M., Hirsh-Pasek, K., Meyer, M. & Hansell, N. (2004, April). *Two-year-olds use grammar to learn novel verbs*. Poster presented at the biennial meeting of the International Society on Infant Studies, Chicago, IL.
- Maguire, M. J., Pruden, S.M., Hirsh-Pasek, K., Hansell, N. & Meyer, M. (2004, April). *More isn't always better: Three-year-olds master intransitive verbs*. Poster presented at the biennial meeting of the International Society on Infant Studies, Chicago, IL.
- Pruden, S.M., Maguire, M.J., Meyer, M.A., Hansell, N., & Hirsh-Pasek, K. (2004, April). *Categorization of path and manner in infancy: Building a conceptual foundation for verb learning*. Poster presented at the biennial meeting of the International Society on Infant Studies, Chicago, IL.
- Shiple, T. F., Maguire, M.J., & Brumberg, J. (2004, May). *Segmentation of objects and event paths*. Poster presented at the annual Society for Vision Sciences Conference, Sarasota, FL.
- Mosley, M.J., Molfese, D., Maguire, M.J., Dove, G.O., Fonaryova-Key, A, & Hacet, D. (2004, November). *ERPs with young children using cochlear implants*. Poster presented at the annual American Speech Language Hearing Association Conference, Philadelphia, PA.

Maguire, M. J., Meyers, M., & Salkind, S. (2003, April). *Keeping it simple: Mapping words onto actions*. Poster presented at the biannual meeting of the Society for Research in Child Development, Tampa, FL.

Shipley, T. S., Maguire, M. J., & Brumberg, J. (2003, November). *Top down effects on search for biological motion*. Poster presented at the 44th annual meeting of the Psychonomics Society, Vancouver, BC.

Kovacs, S. L., Maguire, M. J., & Newcombe, N. S. (2002, April). *Young infants' ability to use "what" information when the salience of "where" information is reduced*. Poster presented at the biannual meeting of the International Conference on Infant Studies, Toronto, Canada.

Salkind, S. J., Sootsman, J. L., Golinkoff, R. M., Hirsh-Pasek, K., & Maguire, M. J. (2002, April). *Lights, camera, action! Infants and toddlers create action categories*. Poster presented at the biannual meeting of the International Conference on Infant Studies, Toronto, Canada.

Maguire, M.J., Hennon, E.A., Slutzky, C.B., & Golinkoff, R.M. (2001, April) *Infants' development of lexical categories: Moving from perceptual to social cues*. Poster presented at the biannual meeting of the Society for Research in Child Development, Minneapolis, MN.

Hennon, E. A., Hirsh-Pasek, K., Golinkoff, R. M., Rocroi, C., Arnold, K., Maguire, M. J., Baker, S. & Driscoll, K. (2000, July). *From proper nouns to categories: Infants learn how words work*. Poster presented at the biannual meeting of the International Conference on Infant Studies, London, England.

Invited Talks.

Maguire, M.J. (April, 2009). Using EEG to Study the Development of Semantic Knowledge. Scientists Brown Bag Lecture Series. Center for BrainHealth, University of Texas at Dallas.

Maguire, M.J. (March, 2008). *A developmental shift from universal to language-specific strategies for verb acquisition: A comparison of English, Spanish, and Japanese*. Paper presented at the University of Chicago. Chicago, IL.

Maguire, M.J. (February, 2008). Attention Deficit Disorder and the Brain. Owners Guide to the Brain Lecture Series. The Center for BrainHealth University of Texas at Dallas.

Golinkoff, R. M., Hirsh-Pasek, K., Maguire, M.J., Pulverman, R., & Pruden, S. (August, 2005). *A rose is a rose but a scene is not a scene: Language encodes events differently*. Paper presented at Leigh University.

Presentations Accepted.

Maguire, M.J. Ogiela, D., & Egbert, R. (accepted) A picture is worth 1000 words, sometimes: ERP differences in nouns and verbs during a picture identification task. *Neurobiology of Language*, San Diego, CA.

Ogeila, D., Maguire, M.J., & Dollaghan, C. (accepted). ERP differences in Noun Phrase and Verb phrase processing. *Neurobiology of Language*, San Diego, CA.

Presentations Under Review.

Hao, M., Maguire, M.J., Golinkoff, R.M., Hirsh-Pasek, K. (under review). What does it mean? The SICL continuum predicts lexical acquisition in Chinese toddlers. Society for Research in Child Development. Montreal, Canada.

Grant Support

Funded.

Title: "Improving developmental visual EEG with eye tracking"

Principal Investigator(s): Mandy J. Maguire

Funding Agency: NIH, NICHD

Amount: \$50,000 over 1 year

Major goals: To effectively link eye tracking and EEG data collection in real-time to improve EEG data collection in children.

Dates: 9/1/2010 – 8/31/2011

Title: "Establishing Neurological Markers of Inhibition for ADHD Diagnosis and Treatment Assessment"

Principle Investor: Mandy Maguire

Funding Agency: UT Southwestern's Department of Clinical Sciences North and Central Texas Clinical and Translational Science Initiative

Amount: \$24,000 over 1 year

Major goals: To use Event Related Potentials (ERPs) to establish neurological markers of inhibitory processes for normally developing adolescents and those with ADHD

Dates: 5/30/08-5/30/09

Title: "Syntactic event related potentials in children with specific language impairment"

Principle Investor: Diane Ogiela

Role: Mentor

Funding Agency: UT Southwestern's Department of Clinical Sciences North and Central Texas Clinical and Translational Science Initiative

Amount: \$30,560 over 1 year

Major goals: To uncover biological correlates of language processing deficits in children with specific language impairment, specifically comparing noun phrase and verb phrase processing differences.

Dates: 3/01/00-2/28/09

Title: "Center for Advanced ADHD Research, Treatment and Education (CAARTE)"
Principal Investigators: Collaboration between UTSW, UTD and Shelton School
Funding Agency: Sparrow Foundation
Amount: \$3 million over 3 years
Major Goals: This project aims to (1) identify children in early phases of ADHD to develop preschool interventions with parents and adults to reduce or eliminate the need for medication, (2) compare the effectiveness of two non-medical interventions with Routine Clinical Practices on ADHD behaviors, and (3) measure changes in brain activation using ERP and fMRI longitudinally and in relation to specific interventions in children with ADHD compared to age/sex-matched controls.
Dates: January 1, 2007 – December 31, 2010

Title: The Gulf War Project: EEG and ERP Core
Principle Investigators: John Hart, Jr.
Role: Co-investigator
Funding Agency: Department of Veterans Affairs
Amount: \$5 million over 5 years
Major Goals: This project aims to study the neurological ramifications of Gulf War Syndrome both in terms of structure (white matter density, conductivity, etc.) and processing (BOLD response, neurophysiology, etc). The goal of the EEG core is to investigate the neurophysiological processes in patients suffering from Gulf War Syndrome. My particular part is in designing and overseeing projects implementing Event Related Potentials as the primary methodology.
Dates: September 2007 – September 2011

Title: "Word Retrieval Project"
Principle Investigators: John Hart, Jr. & Mandy J. Maguire
Sponsor: UTSW/Department of Veteran Affairs
Amount: \$221,992 for 1 year
Major Goals: This project specifically using fMRI and EEG to investigate word finding difficulties associated with Gulf War Syndrome.
Dates: 2008-2009.

Pending.

Title: "Real time bi-directional communication between EEG and eye tracking"
Principle Investigator (s): Mandy J. Maguire
Funding Agency: McKnight Endowment's Technological Innovations in Neuroscience Award
Amount: \$200,000 over 2 years
Submitted: December 1, 2009

Title: "The neuronal underpinnings of nouns and verbs in children: From concept to phrase structure.

Principal Investigator(s): Mandy J. Maguire
Funding Agency: NSF
Amount: \$524,000 over 3 years
Submitted: January 14, 2010

Professional Awards and Recognition

University of Texas at Dallas Chancellors Council Outstanding Teaching Award Nomination

Received: March 2009

University of Texas at Dallas Undergraduate Research Award, Mentor

Received: January 2009 , Amount \$300

American Speech-Language-Hearing Association's Lessons for Success Award, covered travel and conference fees.

Received: February, 2008. Conference: March 26-29, 2008.

The Sandy Friel-Patti Research in Child Language International Travel Award from the Texas Speech-language and Hearing Association

Received: March 26, 2006, Amount: \$2,750.00

Early Career Research Travel Award from The Aprica Foundation of Japan in conjunction with the International Society for Infancy Research

Received: June 22, 2006, Amount: \$1000.00

Teaching Experience

Classes.

Developmental Psychology, Graduate Student Assistant
Temple University, Main Campus, Fall '99

Research Methods: Developmental Psychology, Graduate Student Assistant
Temple University, Main Campus, Spring '00

Developmental Psychology, Instructor
Temple University, Ambler Campus, Fall '00
Temple University, Center City Campus, Summer, '00, '02, '03
Estimated class sizes: 30-40 students

Research Methods: Developmental Psychology, Instructor
Temple University Main Campus, Spring '02
Temple University Ambler Campus, Fall '01, (co-instructor – Stacie Kovacs)
Estimated class sizes: 20-30 students

Lifespan Development, Instructor
University of Louisville, Belknap Campus, Spring '04
Estimated class size: 200 students

Language Development (graduate), Instructor
University of Louisville, Belknap Campus, Summer '04
Estimated class size: 15 students
University of Texas, Dallas, Spring 06 – Spring 09
Estimated class size: 85 students

The Neurological Basis of Language Development (graduate), Instructor University of
Texas, Dallas, Callier Center Campus, Fall '05, '06
Class size: 8 students

Graduate Students Advised.

Master's Theses
Sandra Vanagas

Defense Committees.

Dissertations:
Jacquelyn Gamino
Kristi Buckley
Raska Anand
Ariela Jokel
Carol Trautman
Master's Theses:
Elva Alicia Granado

Service

Ad hoc Reviewer.

Developmental Neuropsychology, Fall, 2005
Psychological Science, Spring 2007
Cognitive Psychology
Child Development, Fall 2008
International Society for Infancy Research Biannual Meeting
Neurobiology of Language Conference, Summer 2009

University Committee and Service Work.

- Fall 2000: Organized Temple University's Developmental Psychology graduate student orientation.
- Summer 2001: Held training sessions in cognitive development for volunteers at the Franklin Institute Science Museum.
- Fall 2001: Organized Temple University's Developmental Psychology colloquium series.
- Spring 2002: Graduate Student Member of Temple University's Developmental Psychology Ph.D. admissions board.
- May 2004: Judge for undergraduate and graduate poster presentations, Kentucky Psychological Association.
- Fall 2006-present: Member of UTD's Committee for the Support of Diversity and Equity
 - Subcommittee on Data Collection and Reporting

- Fall 2006-present: Member of the Callier Center Committee for Continued Improvement in Research.
 - Co-chair of the Callier Postdoctoral Fellowship Hiring Committee.
- February 2008: Science fair judge, Vine High School, Plano, TX.
- March 2008: Presented “Using EEG as a tool to studying cognitive development” in the “Opportunities in Behavioral and Brain Sciences” series to promote diverse studies in high school students with a computer programming/science background
- November 2008: Spoke at Ennis Rotary about applications of brain research in various treatments.
- November 2008: Gave lab tour for potential undergraduates in BBS.
- March 2009: Gave Callier Preschool Staff Training session on early brain development and cognition.
- ** Colloquium co-chair for BBS 2009-2010
- Judge for poster session awards for the Reprogramming the Brain Symposium (April 2010).
- Gave a talk for the Center for Children and Families Lecture Series (March, 2010).

Professional Affiliations.

American Psychological Association
Cognitive Development Society
International Society for Infancy Studies
Society for Research in Child Development
Cognitive Neuroscience Society