

Kelly A. Vaughn
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EDUCATION

- University of Houston** 2015-2018
 Ph.D. Developmental, Cognitive, and Behavioral Neurosciences
 Thesis: The Role of the DLPFC in Bilingual and Monolingual Switching:
 Evidence from MVPA & tDCS
- University of Houston** 2013-2015
 M.A. Psychology
 Thesis: Cortical Thickness in the Cognitive Control Network, Task
 Switching, & Bilingualism
- High Point University** 2010-2013
 B.S. Psychology *Summa Cum Laude*.
 Thesis: English Grammar Knowledge and Foreign Language Proficiency in
 the College Classroom

RESEARCH

- University of Houston** 2013-2018
 fMRI and Genetic Investigations of Cognitive Control in Bilinguals and
 Monolinguals.
Advisor: Dr. Arturo Hernandez
- fNIRS Study of Cognitive and Motor Function in Diabetic Patients. 2016-2018
Advisor: Dr. Stacey Gorniak
- High Point University** 2012-2013
 Bilingual Response to Meaning in Interlingual Homographs
Advisor: Dr. Kimberly Wear

PEER REVIEWED PUBLICATIONS

- Vaughn, K. A., & Hernandez, A. E.** (2018). Becoming a balanced, proficient bilingual:
 Predictions from age of acquisition & genetic background. *Journal of Neurolinguistics*,
 46, 69-77. doi: 10.1016/j.jneuroling.2017.12.012
- Rodriguez, M. R., Archila-Suerte, P., **Vaughn, K. A.**, Chiarello, C., & Hernandez, A. E. (2017).
 Anterior insular thickness predicts speech sound learning ability in bilinguals.
NeuroImage, 165, 278-284. doi: 10.1016/j.neuroimage.2017.10.038
- Vaughn, K. A.**, Ramos-Nuñez, A. I., Greene, M. R., Munson, B., Lee, M., Grigorenko, E., &
 Hernandez, A. E. (2016). Individual differences in the bilingual brain: The role of
 language background and DRD2 genotype in verbal and non-verbal cognitive control.
Journal of Neurolinguistics, 40, 112-127. doi: 10.1016/j.jneuroling.2016.06.008
- Vaughn, K. A.**, Greene, M. R., Ramos Nuñez, A. I., & Hernandez, A. E. (2015). The importance
 of neuroscience in understanding bilingual cognitive control. *Cortex*, 73, 373-374.
 doi:10.1016/j.cortex.2015.06.010

Hernandez, A. E., Greene, M. R., **Vaughn, K. A.**, Francis, D. J., & Grigorenko, E. (2015). Beyond the bilingual advantage: The potential role of genes and environment on the development of cognitive control. *Journal of Neurolinguistics*, 35, 109-119. doi:10.1016/j.jneuroling.2015.04.002

Vaughn, K. A. (2013). First language grammar knowledge predicting second language anxiety and proficiency. *Innovation: Journal of Creative and Scholarly Works*, 1, 74-82.

MANUSCRIPTS SUBMITTED FOR PUBLICATION

Vaughn, K. A., Archila-Suerte, P., & Hernandez, A. E. (2018). *Parietal lobe volume distinguishes attentional control in bilinguals and monolinguals: A structural MRI study*. Manuscript under revision.

POSTER PRESENTATIONS

Vaughn, K. A., Watlington, E. M., Linares, P., Tamber-Rosenau, B. J., & Hernandez, A. E. (September 2018). *Effects of tDCS on bilingual task switching*. Poster presented at the ARMADILLO Conference. Houston, TX.

Vaughn, K. A. & Hernandez, A. E. (May 2018). *Language proficiency predicts cortical thickness in bilinguals and monolinguals*. Poster presented at the Bilingual Research Conference. Houston, TX.

Vaughn, K. A. & Hernandez, A. E. (March 2018). *Managing two languages relates to managing two goals: fMRI evidence from task-switching*. Poster presented at the annual meeting of the Cognitive Neuroscience Society. Boston, MA.

Vaughn, K. A. & Hernandez, A. E. (November 2017). *Becoming a balanced, proficient bilingual: Predictions from age of acquisition & genetic background*. Poster presented at the annual meeting of the Society for the Neurobiology of Language. Baltimore, MD.

Claussenius-Kalman, H., Archila-Suerte, P., **Vaughn, K. A.**, & Hernandez, A. E. (November 2017). *Cortical thickness differs between bilinguals and monolinguals according to age of acquisition*. Poster presented at the annual meeting of the Society for the Neurobiology of Language. Baltimore, MD.

Vaughn, K. A., Archila-Suerte, P., & Hernandez, A. E. (March 2017). *Bilingualism interacts with cognitive control to predict parietal grey matter volume*. Poster presented at the annual meeting of the Cognitive Neuroscience Society. San Francisco, CA.

Vaughn, K. A., Munson, B., & Hernandez, A. E. (November 2016). *Neural Mechanisms of Bilingual and Monolingual Cognitive Control: Evidence from the Shape-Color and Simon Tasks*. Poster presented at the annual meeting of the Psychonomic Society, Boston, MA.

Vaughn, K. A., Munson, B., Greene, M. R., Ramos-Nuñez, A. I., & Hernandez, A. E. (April 2016). *An fMRI comparison of bilinguals and monolinguals during the Simon task: Evidence for different control processes*. Poster presented at the annual meeting of the Cognitive Neuroscience Society, New York, NY.

Munson, B. **Vaughn, K. A.**, Greene, M. R., Ramos-Nuñez, A. I., Archila-Suerte, P., & Hernandez, A. E. (April 2016). *Bilingual and monolingual cognitive flexibility: The role of the DRD2 gene*. Poster presented at the annual meeting of the Cognitive Neuroscience Society, New York, NY.

Ramos-Nuñez, A. I., Vasquez, D., Greene, M. R., **Vaughn, K. A.**, Felton, A., Munson, B., Chiarello, C., & Hernandez, A. E. (December 2015). *The relationship among gray matter*

- cortical thickness, brain activity, and bilingual background variables*. Poster presented at the Baylor College of Medicine, UT Health, and Rice University Annual Neuroscience Poster Session. Houston, TX.
- Vaughn, K. A.,** Ramos-Nuñez, A. I., Greene, M. R., Hernandez, A. E. (October 2015). *Dissociating the effects of genetics and bilingualism during cognitive control: fMRI evidence from Spanish-English bilinguals*. Poster presented at the Society for the Neurobiology of Language. Chicago, IL.
- Melchor, M., **Vaughn, K.,** & Hernandez, A. E. (October 2015). *The relationship between bilingualism, socioeconomic status, and task switching*. Poster presented at the University of Houston Undergraduate Research Day. Houston, TX.
- Havens, K., **Vaughn, K.,** & Hernandez, A. E. (October 2015). *Effects of language learning context on fluency in second language English speakers*. Poster presented at the University of Houston Undergraduate Research Day. Houston, TX.
- Vaughn, K. A.,** Ramos-Nuñez, A. I., Greene, M. R., Vasquez, D., Felton, A., Chiarello, C., & Hernandez, A. E. (May 2015). *Cortical thickness in the cognitive control network, task switching, and bilingualism*. Poster presented at the Bilingualism and Executive Functioning Workshop as part of the International Symposium on Bilingualism. New York, NY.
- Greene, M. R., Ramos-Nuñez, A. I., **Vaughn, K. A.,** & Hernandez, A. E. (May 2015). *Bilingual Proficiency and Age of Acquisition are Independently Related to Non-Verbal Cognitive Control: Evidence from an fMRI Study*. Poster presented at the International Symposium on Bilingualism. New Brunswick, NJ.
- Vaughn, K. A.,** Greene, M. R., Ramos-Nuñez, A. I., & Hernandez, A. E. (March 2015). *Bilingual Proficiency and Left Parietal Activity During Non-Verbal Task Switching*. Poster presented at the annual meeting of the Cognitive Neuroscience Society, San Francisco, CA.
- Ramos-Nuñez, A. I., Greene, M. R., **Vaughn, K. A.,** & Hernandez, A. E. (March 2015). *Naming in Spanish, English, or mixed conditions differentially modulates connectivity strengths among cognitive control regions in bilinguals*. Poster presented at the annual meeting of the Cognitive Neuroscience Society, San Francisco, CA.
- Greene, M. R., Ramos-Nuñez, A. I., **Vaughn, K. A.,** & Hernandez, A. E. (March 2015). *Bilingual Proficiency and Age of Acquisition are Independently Related to Non-Verbal Cognitive Control: Evidence from an fMRI Study*. Poster presented at the annual meeting of the Cognitive Neuroscience Society, San Francisco, CA.
- Hernandez, A., Gorges, M., Greene, M., Munson, B., **Vaughn, K.,** & Wagner, V. (March 2015). *AoA and hours of practice independently affect brain activity in athletes: An fMRI study*. Poster presented at the annual meeting of the Cognitive Neuroscience Society, San Francisco, CA.
- Vaughn, K.,** Ravid, M., Ramos, A., & Hernandez, A. (April 2014). *An fMRI examination of bilingual non-verbal task switching*. Poster presented at the annual meeting of the Cognitive Neuroscience Society, Boston, MA.

TALKS

- Vaughn, K. A.** & Hernandez, A. E. (March 2018). *Managing two languages relates to managing two goals: fMRI evidence from task-switching*. Talk presented as part of the Data Blitz at the annual meeting of the Cognitive Neuroscience Society. Boston, MA.

- Vaughn, K. A.**, Archila-Suerte, P., & Hernandez, A. E. (November 2017). *Becoming a balanced, proficient bilingual: Predictions from age of acquisition & genetic background*. Talk presented as part of the Poster Slam at the annual meeting of the Society for the Neurobiology of Language. Baltimore, MD.
- Hernandez, A. E., **Vaughn, K. A.**, & Munson, B. (November 2016). *Genetic and language history factors influence cognitive control in Spanish-English bilinguals*. Talk presented at the Annual Meeting of the Psychonomic Society. Boston, MA.
- Vaughn, K. A.** (August 2016). *The role of genetic background in bilingual cognitive and language control*. Talk presented at the Sound Brain Laboratory and Laboratory for the Neural Bases of Bilinguals Data Blitz. Houston, TX.
- Vaughn, K. A.** (May 2016). *Introducing genetic variation into the discussion of bilingual cognitive control*. Talk presented at the Research Blitz during the Bilingual Mind, Brain, and Child Development Symposium. Austin, TX.
- Vaughn, K. A.** (May 2016). *The Naked Truth I: Getting into Graduate School*. Panel member at the annual meeting of the Association for Psychological Science. Chicago, IL.
- Vaughn, K. A.** (November 2015). *Understanding the role of genetic variation in the context of bilingual cognitive control*. Talk presented at the Developmental Cognitive Neuroscience Brown Bag. Houston, TX.
- Vaughn, K. A.** (November 2015). *Can learning a second language give you a cognitive edge?* Talk presented at the University of Houston Coog Talks. Houston, TX.
- Vaughn, K. A.** & Wear, K. (April 2013). *Bilingual Processing of Interlingual Homographs: Is There Evidence for Inhibition?*. Paper presented at the Big South Undergraduate Research Symposium, High Point, NC.
- Vaughn, K. A.** & Wear, K. (November 2012). *Response to interlingual homographs in bilinguals*. Paper presented at the State of North Carolina Undergraduate Research & Creativity Symposium, Durham, NC.

HONORS AND AWARDS

University of Houston Graduate International Immigration Research Fellowship	2016
University of Houston Future Faculty Fellowship	2015
University of Houston Recruitment Award	2013
High Point University Department of Psychology Outstanding Psychology Student Award	2013
North Carolina Independent Colleges & Universities Undergraduate Research Grant	2012
High Point University Fellows Presidential Scholarship	2010-2013
Catonsville High School Outstanding Achievement in Life Sciences Award	2010

AFFILIATIONS

Society for the Neurobiology of Language Student Member	2015 - present
Cognitive Neuroscience Society Student Member	2013 - present
Association for Psychological Science (APS) Student Member	2014 - present
American Psychological Association (APA) Student Affiliate	2011 - present
Psi Chi Member	2011 - present

TEACHING

Teaching Fellow: Child Development. University of Houston	Summer 2018-Fall 2018
Teaching Fellow: Cognitive Psychology. University of Houston	Fall 2015-Summer 2016
Teaching Assistant: Cognitive Psychology. University of Houston	Fall 2013-Summer 2015
Teaching Assistant: Child Development. University of Houston	Summer 2014

UNDERGRADUATE RESEARCH SUPERVISION

AoA and Its Relation to Gyrfication: Examining Structural Brain Differences Between Bilinguals and Monolinguals and Within Bilinguals	Fall 2017 - Spring 2018
Senior Honor's Thesis: Erika Ascencio	
Impulsivity in Monolingual & Bilingual Cognitive Control	Fall 2015 - Spring 2016
Senior Honor's Thesis: Angela Medvedeva	
English Language Learning and Context	Summer 2015
Summer Undergraduate Research Fellowship: Kristina Havens	

SERVICE

Developmental, Cognitive, & Behavioral Neurosciences News Committee	2015-present
Ad Hoc Reviewer: NeuroImage	2018
Advanced Placement Research Project Mentor	2017-2018
Student Volunteer for the Cognitive Neuroscience Meeting	2015, 2017, 2018
Student Volunteer for the Society for the Neurobiology of Language Meeting	2017
Ad Hoc Reviewer: Frontiers in Psychology; Psychological Bulletin; Cognition	2017
Ad Hoc Reviewer: Language, Cognition, and Neuroscience	2016
Ad Hoc Reviewer: Frontiers in Human Neuroscience	2016
Reviewer for the RISE Research Award	2014, 2016
APS Graduate Student Mentor	2014 – 2016
Science and Engineering Fair of Houston Judge	2014 – 2016
Houston University Interscholastic League Judge	2016 – present
Houston Urban Debate League Judge	2016 – present
University of Houston Grievance Hearing Panel Student Member	2015
High Point University Psi Chi Vice President	2012 – 2013

SKILLS

Advanced User: MRI/fMRI Scanning at Baylor College of Medicine
 Proficient in analyzing fMRI data using Statistical Parametric Mapping (SPM) software
 Proficient in analyzing MRI data using Freesurfer software
 Proficient in statistical analyses using R
 Proficient in experimental design with E-Prime software
 Experience with administering transcranial direct current stimulation (tDCS)
 Experience with Matlab coding
 Experience with fNIRS data collection and analysis
 Experience with experimental design using Psychtoolbox software
 Experience with statistical analyses using SPSS, SAS, and Mplus
 Experience with fMRI analyses using Analysis of Functional Neuroimaging (AFNI)

Associate level certification with the University of Houston Center for the Integration of Research, Teaching, and Learning