

## CURRICULUM VITAE

**Kelly A. Vaughn, Ph.D.**

**Present Title:** Assistant Professor of Pediatrics

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**Office Address:** University of Texas Health Science Center at Houston  
Department of Pediatrics  
Children's Learning Institute  
Suite 1000, Office 10.12  
6655 Travis Street  
Houston, TX 77030

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### EDUCATION:

2019-2020 **University of Texas Health Science Center at Houston**  
Postdoctoral Fellowship in Developmental Neuroscience

2015-2018 **University of Houston**  
Ph.D. Developmental, Cognitive, and Behavioral Neurosciences

2013-2015 **University of Houston**  
M.A. Psychology

2010-2013 **High Point University**  
B.S. Psychology

### ACADEMIC APPOINTMENTS:

2020-present **Assistant Professor of Pediatrics** University of Texas, Houston  
Children's Learning Institute

2019-2020 **Postdoctoral Research Fellow** University of Texas, Houston  
Children's Learning Institute  
Mentor: Dr. Dana DeMaster

2013-2018 **Graduate Research Assistant** University of Houston  
Laboratory for the Neural Bases of Bilingualism  
Mentor: Dr. Arturo Hernandez

2016-2018	<b>Graduate Research Assistant</b> Center for Neuromotor and Biomechanics Research Mentor: Dr. Stacey Gorniak	University of Houston
2012-2013	<b>Undergraduate Research Assistant</b> Mentor: Dr. Kimberly Wear	High Point University
2011-2012	<b>Undergraduate Research Assistant</b> Mentor: Dr. Kirsten Li-Barber	High Point University

#### **HONORS AND AWARDS:**

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

#### **PEER REVIEWED PUBLICATIONS:**

1. Kook, J. H., **Vaughn, K.**, DeMaster D., Ewing-Cobbs, L., & Vannucci, M. (In Press). BVAR-connect: A variational Bayes approach to multi-subject vector autoregressive models for inference on brain connectivity networks. *Neuroinformatics*.
2. Claussenius-Kalman, H. **Vaughn, K. A.**, Archila-Suerte, P., & Hernandez, A. E. (2019). Age of acquisition impacts the brain differently depending on neuroanatomical metric. *Human Brain Mapping*. doi: 10.1002/hbm.24817
3. **Vaughn, K. A.**, Archila-Suerte, P., & Hernandez, A. E. (2019). Parietal lobe volume distinguishes attentional control in bilinguals and monolinguals: A structural MRI study. *Brain and Cognition*, 134, 103-109. doi: 10.1016/j.bandc.2018.12.001
4. Hernandez, A. E., Claussenius-Kalman, H. L., Ronderos, J., & **Vaughn, K. A.** (2018). Symbiosis, parasitism, and bilingual cognitive control: A neuroemergentist perspective. *Frontiers in Psychology*, 9. doi: 10.3389/fpsyg.2018.02171

5. **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
6. 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
7. **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
8. **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
9. 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
10. **Vaughn, K. A.** (2013). First language grammar knowledge predicting second language anxiety and proficiency. *Innovation: Journal of Creative and Scholarly Works*, *1*, 74-82.

#### **BOOK CHAPTERS:**

1. **Vaughn, K. A.**, Moore, B. D., & DeMaster, D. (In Press). Nurturing the developing brain to reduce neurological delay. *The Neuroscience of Development*.
2. DeMaster, D., **Vaughn, K.** & Moore, B. D. (In Press). Normalizing perinatal neurological development via intervention. *The Neuroscience of Development*.

#### **POSTER PRESENTATIONS:**

1. Vaughn, K. A., Castilla-Earls, A., Bick, J., Landry, S. H., & DeMaster, D. M. (May 2020). *Dual-language exposure following preterm birth: Language, executive function, and frontal lobe development*. Poster presented at the Virtual Cognitive Neuroscience Society Conference. Online.
2. **Vaughn, K. A.**, Bick, J., Montroy, J. J., Landry, S. H., & DeMaster, D. M. (December 2019). *The impact of bilingual exposure on toddlers born preterm: Preliminary analysis of language & attention networks*. Poster presented at the Neuroscience Poster Session. Houston, TX.

3. **Vaughn, K. A.**, Bick, J., Montroy, J. J., Landry, S. H., & DeMaster, D. M. (October 2019). *The impact of a bilingual home environment on language and attention networks: Preliminary evidence from toddlers born pre-term*. Poster presented at the Cognitive Development Society Conference. Louisville, KY.
4. **Vaughn, K. A.**, Bick, J., Montroy, J. J., Landry, S. H., & DeMaster, D. M. (September 2019). *Bilingualism in toddlers born preterm: Cognitive, language, and brain development*. Poster presented at the Annual Postdoctoral Science Symposium. Houston, TX.
5. **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.
6. **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.
7. **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.
8. **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.
9. 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.
10. **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.
11. **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.
12. **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.

13. 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.
14. 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.
15. **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.
16. 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.
17. 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.
18. **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.
19. 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.
20. **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.
21. 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.

22. 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.
23. 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.
24. **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:

1. **Vaughn, K. A.** (December 2019). *Bilingualism and the Brain*. Talk presented to the Barbara Bush Literacy Foundation. Houston, TX.
2. **Vaughn, K. A.** (November 2019). *Bilingual language exposure after preterm birth: Consequences for language and attention*. Talk presented to the Rice University Cognitive Tea. Houston, TX.
3. **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.
4. **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.
5. **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.
6. **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.
7. **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.
8. **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.

9. **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.
10. **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.
11. **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.

### TEACHING EXPERIENCE:

Fall 2018	Child Development (PSYC 2350) University of Houston Teaching Fellow (Instructor)
Summer 2018	Child Development (PSYC 2350) University of Houston Teaching Fellow (Instructor)
Summer 2016	Introduction to Cognitive Psychology (PSYC 3350) University of Houston Teaching Fellow (Instructor)
Spring 2016	Introduction to Cognitive Psychology (PSYC 3350) University of Houston Teaching Fellow (Instructor)
Fall 2015	Introduction to Cognitive Psychology (PSYC 3350) University of Houston Teaching Fellow (Instructor)
Summer 2015	Introduction to Cognitive Psychology (PSYC 3350) University of Houston Teaching Assistant
Spring 2015	Introduction to Cognitive Psychology (PSYC 3350) University of Houston Teaching Assistant
Fall 2014	Introduction to Cognitive Psychology (PSYC 3350) University of Houston Teaching Assistant

- Summer 2014    Child Development (PSYC 2350)  
University of Houston  
Teaching Assistant
- Spring 2014    Introduction to Cognitive Psychology (PSYC 3350)  
University of Houston  
Teaching Assistant
- Fall 2013        Introduction to Cognitive Psychology (PSYC 3350)  
University of Houston  
Teaching Assistant

**PROFESSIONAL SERVICE:**

**Memberships in Professional Societies**

Society for the Neurobiology of Language

Cognitive Development Society

Cognitive Neuroscience Society

Association for Psychological Science

**Undergraduate Research Supervision**

- 2017 - 2018    Senior Honor's Thesis  
Erika Ascencio  
University of Houston
- Summer 2015    Summer Undergraduate Research Fellowship  
Kristina Havens  
University of Houston
- 2015-2016    Senior Honor's Thesis  
Angela Medvedeva  
University of Houston

**Editorial Positions**

- 2020            Ad Hoc Reviewer: Language, Cognition, and Neuroscience
- 2019, 2020    Ad Hoc Reviewer: International Journal of Bilingualism
- 2019, 2020    Ad Hoc Reviewer: Journal of Neurolinguistics

2018, 2019 Ad Hoc Reviewer: NeuroImage  
 2019 Ad Hoc Reviewer: Cortex  
 2017 Ad Hoc Reviewer: Frontiers in Psychology  
 2017 Ad Hoc Reviewer: Psychological Bulletin  
 2017 Ad Hoc Reviewer: Cognition  
 2016 Ad Hoc Reviewer: Language, Cognition, and Neuroscience  
 2016 Ad Hoc Reviewer: Frontiers in Human Neuroscience

### **Academic Service**

2020 Cognitive Science Society Annual Meeting Abstract Reviewer  
 2019 UTHealth Postdoc Career Development Focus Group  
 2019 UTHealth Postdoc Travel Award Reviewer  
 2015 - 2018 Developmental, Cognitive, & Behavioral Neurosciences News Committee  
 2015, 2017-18 Student Volunteer - Cognitive Neuroscience Meeting  
 2017 Student Volunteer - Society for the Neurobiology of Language Meeting  
 2014, 2016 Reviewer for the RISE Research Award  
 2015 University of Houston Grievance Hearing Panel Student Member

### **Community Service**

2016 - 2020 Houston University Interscholastic League Judge  
 2019 Girls in STEM Conference Volunteer  
 2019 UTHealth Brain Night at the Museum Volunteer  
 2017 - 2018 Carnegie Vanguard Advanced Placement Research Project Mentor  
 2016 - 2017 Houston Urban Debate League Judge  
 2014 - 2016 Science and Engineering Fair of Houston Judge