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## **Education**

- 2009 - 2017      *Ph.D., Computational Neuroscience, Boston University, Boston, MA.*  
Dissertation: "Molecular neuroanatomy: Mouse-human homologies and the landscape of genes implicated in language disorders."  
Advisor: Jason W. Bohland
- 1999 - 2004      *B.A., Cognitive Science, Vassar College, Poughkeepsie, NY*  
Thesis: "Kin recognition in *Linepithema Humile*: An evolutionary and neural model."

## **Research Experience**

- May 2017 -      *Post-doctoral Associate, Quantitative Neuroscience Laboratory (Jason W. Bohland, PI), Boston University, Boston, MA*  
Assist in the creation of NeuroDataX, an online open course in neural data analysis (NIH-funded project). Continue research using neuroanatomical gene expression datasets.
- 2010 – 2017      *Research Assistant, Quantitative Neuroscience Laboratory (Jason W. Bohland, PI), Boston University, Boston, MA*  
Designed, coded (MATLAB and R), conducted, and interpreted analyses of high-throughput gene expression datasets from the human and mouse brain. Curated literature for a database of genetic and neuroimaging results related to speech and language disorder phenotypes.
- 2010 – 2013      *Research Assistant, Vision Laboratory (Ennio Mingolla, PI), Dept. of Cognitive & Neural Systems, Boston University, Boston, MA*  
Designed and conducted a visual psychophysics experiment exploring perception of motion in depth.
- 2006 – 2009      *Laboratory technician, McGovern Institute (Robert Desimone, PI), Massachusetts Institute of Technology, Cambridge, MA*  
Equipped laboratory spaces for electrophysiological recording in awake behaving monkeys. Trained monkeys on visually oriented tasks. Managed laboratory inventory and other maintenance.

2004 - 2006 *Post-baccalaureate IRTA, Laboratory of Neuropsychology (Robert Desimone, PI), National Institute of Mental Health (NIMH)*  
Conducted electrophysiological recordings in monkey visual to investigate the relationship between spike-field synchrony and selective attention. Wrote and conducted analyses in MATLAB of performance and neural activity. Aided in surgical procedures. Managed laboratory inventory.

2002 - 2004 *Research Assistant, Psychology Department (Gwen Broude, Chair), Vassar College, Poughkeepsie, NY*  
Designed and conducted a categorization and category learning psychophysical study, and analyzed resulting data. Assisted in manuscript writing.

### **Published peer-reviewed articles**

**Myers EM**, Bartlett CW, Machiraju R, Huang K, Bohland JW (2015). An integrative analysis of regional gene expression profiles in the human brain. *Methods*, 73, 54-70. PMID: 25524419.

Bohland JW, **Myers EM**, Kim E (2014). An informatics approach to integrating genetic and neurological data in speech and language neuroscience. *Neuroinformatics*, 12(1), 39-62. PMID: 23949335.

Léveillé J, **Myers EM**, Yazdanbakhsh A (2014). Object-centered reference frames in depth as revealed by induced motion. *Journal of Vision*, 12(3), 15. PMID: 24618108.

### **Manuscripts in progress**

**Myers EM**, Feng D, Hawrylycz MJ, Bohland JW. Molecular organization in the mouse and human brain: A comparative study of high-resolution gene expression datasets.

### **Presentations**

\* indicates presenting author

**Myers EM\***, Bohland JW. The transcriptional landscape of genes implicated in stuttering. Poster presented at Boston Speech Motor Control Mini-Symposium, Boston, 2017.

Bohland JW\*, **Myers EM**. The transcriptional landscape of genes implicated in speech and language disorders. Oral presentation at American Speech-Language-Hearing Association, Philadelphia, 2016.

**Myers EM\***, Feng D, Hawrylycz MJ, Bohland JW. Regional molecular homologies between the mouse and human brain. Poster presented at NeuroHAM (Neural processing in humans, animals, and machines), Boston, 2015.

**Myers EM\***, Bohland JW. Region-specific molecular signatures in the human and mouse brain. Poster presented at Intelligent Systems for Molecular Biology, Boston, 2014.

**Myers EM\***, Bohland JW. Region-specific molecular signatures in the human and mouse brain. Poster presented at Annual meeting of the Society for Neuroscience, Washington D.C., 2014.

Yan R\*, **Myers EM**, Bohland JW. A survey of gene expression across cortical areas in adult mouse and human brains. Poster presented at Annual meeting of the Society for Neuroscience, Washington D.C., 2014.

**Myers EM\***, Bohland JW. A data-driven study of comparative molecular neuroanatomy. Oral presentation at International Conference on Cognitive and Neural Systems, Boston, 2013.

**Myers EM\***, Bohland JW. A database and analyses of gene expression patterns related to heritable disorders of speech and language. Poster presented at Annual meeting of the Society for Neuroscience, New Orleans, 2012.

### **Teaching**

Fall 2011                      *Teaching Fellow, Sargent College, Boston University, Boston, MA*  
Course: Introduction to computational neuroscience of speech, language, and hearing. Helped supervise in-person laboratory sessions, held office hours, graded lab reports.

### **Honors and Awards**

Psi Chi National Honor Society in Psychology, Vassar College Chapter.

### **Technical skills**

MATLAB, R, bioinformatics, multivariate data analysis, machine learning.