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**Research Interests**

Broadly stated, my current research interests include investigating the neural correlates of cognitive processes and disease-related phenotypes. More specifically, I am interested in examining working memory and attentional control processes in the EEG/MEG environment. I am also interested in imaging genetics; investigating the role of specific genes in human brain structure and function. My current work employs a multi-modal research design to evaluate the correlations between candidate genes and neuro-anatomical and cognitive processing phenotypes, in humans as well as animal models of genetically-mediated diseases.

**Education**

August 2011-Present **PhD. Neuroscience, Departments of Cellular Biology and Psychology,** The University of Georgia

August 2007-May 2011 **B.A. Cognitive Science,** The University of Georgia

**Honors and Awards**

* Franklin Foundation Fellowship Award July 2014-present
* Franklin Foundation Travel Award Spring 2014
* Wellcome Trust Bursary Award for Travel Spring 2014
* National Science Foundation: Graduate Research Fellowship Program Honorable Mention Spring 2011
* Athletic Academic Director’s Roundtable Award Spring 2010
* Psi Chi Conference for the Behavioral Sciences, 2nd place: Undergraduate Poster Competition Spring 2010
* Presidential Scholar (GPA: 4.0) Fall 2009-Spring 2010
* Dean’s List (GPA: >3.5) Spring 2008-Fall 2010
* SEC Honor Roll Fall 2007-Spring 2010
* Coach’s Association Award Spring 2008-Spring 2010
* Psi Chi National Honor Society in Psychology 2009-present
* Sigma Alpha Lambda National Leadership and Honors Organization Fall 2008-present
* Delta Epsioln Iota Honor Society Spring 2009-present
* NCAA Letterman Award, Varsity Equestrian Team 2008, 2009, 2010

**Research Experience**

* Research Assistant Summer 2010-present Cellular Biology/Developmental Neurobiology, University of Georgia Study design, data collection and analysis of auditory processing in Aniridia; human PAX6 genetic mutation screening; structural MRI study in small eye mice. Also assisted in electrophysiology and calcium imaging studies in larval zebrafish investigating neural activity during seizures. Responsible for data collection and processing; using MATLAB software. Advisor: James Lauderdale, PhD
* Research Assistant Summer 2010-present Cognitive Clinical Neuroscience Lab, University of Georgia Data collection and analysis in projects involving basic sensory processing in schizophrenia and aniridia, as well as investigating visual steady state response and prospective memory in the EEG environment in healthy participants and subjects with schizophrenia. Responsible for running experiments and collecting/scoring data; data analysis; using Electrical Geodesics 257 electrode net, BESA, and MATLAB software. Advisor: Brett Clementz, PhD

* Undergraduate Research Assistant Summer 2009-Spring 2010 Memory, Attention and Individual Differences Lab, University of Georgia Assisted in research involving directed forgetting and the role of context in long-term memory. Responsible for running experiments and collecting/scoring data; using E-prime and SPSS software. Advisor: Nash Unsworth, Ph.D
* Undergraduate Research Assistant Spring 2010 Kinesiology Department, University of Georgia Assisted in research examining the reliability of a concussion evaluation software. Responsible for running experiments and collecting/scoring data. Advisor: Jake Resche, PhD

**Scholarly Work**

**Publications**

Hamm, J.P., **Bobilev, A.M.**, Hayrynen, L.K., Hudgens-Haney, M.E., Oliver, W.T., Parker, D.A., McDowell, J.E., Buckley, P.A. & Clementz, B.A. Stimulus train duration but not attention moderates γ-band entrainment abnormalities in schizophrenia. Schizophrenia Research, *Under Review.*

Branch, A.E., **Bobilev, A.M.**, Negrao, N.W., Cai, H. & Shen, P. Prevention of palatable diet-Induced hyperphagia in rats by central injection of a VEGFR kinase inhibitor. Behavioral Brain Research, *In Press.*

Pierce,J.E., Krafft, C.E., Rodrigue, A.L., **Bobilev, A.M.**, Lauderdale, J.D. & McDowell, J.E. Increased functional connectivity in intrinsic neural networks in individuals with aniridia. Frontiers in Human Neuroscience, *In Press.*

**Presentations**

November 2014,  **Bobilev, A.**, Knight, J. & Clementz, B. Getting into a rhythm to remember to remember: Demystifying the oscillatory dynamics of prospective memory retrieval. Poster presented at Society for Neuroscience conference, Washington, DC.

September 2014, Parker, D., Hudgens-Haney, M., Oliver, W., Hayrynen, L., Knight, J.,**Bobilev, A.**, Hamm, J., Arkin, S., Buckley, P., McDowell, J. & Clementz, B. Alpha band dynamics in schizophrenia during an ocular motor inhibition task. Poster presented at Society for Psychophysiological Research conference, Atlanta, GA.

March 2014,  **Bobilev, A.**, Hamm, J., McDougal, M., Oliver, W., McDowell, J., Clementz, B, & Lauderdale, J. Elucidating PAX6 mutations and auditory processing abnormalities in classical aniridia. Poster presented at Wellcome Trust conference: Genomics of Rare Disorders, Cambridge, UK.

February 2014, **Bobilev, A**., Hamm, J., Oliver, W., McDowell, J., Clementz, B, & Lauderdale, J. Auditory processing and intrinsic functional connectivity abnormalities in classical aniridia: Investigating functional brain activity as a PAX6 haploinsufficient phenotype. Poster presented at BIRC SEC mini-conference, Athens, GA.

February 2014, Arkin, S., **Bobilev, A**., Rodrigue, A., Oliver, W., Hudgens-Haney, M., Schaeffer, D., Hayrynen, L., Hamm, J., Parker, D., Weinberger, A., McDowell, J., & Clementz, B. Resting state neural activity analysis between schizophrenia patients and high and low working memory capacity controls via EEG and fMR techniques. Poster presented at BIRC SEC mini-conference, Athens, GA.

November 2013, **Bobilev, A**., Hamm, J., Oliver, W., McDowell, J., Clementz, B, & Lauderdale, J. Abnormalities in fine temporal auditory neural entrainment in classical aniridia. Poster presented at Society for Neuroscience Conference, San Diego, CA.

October 2013, Oliver, W., Hamm, J., **Bobilev, A**., Hudgens-Haney, M., Buckley, P., Sweeney, J., McDowell, J. & Clementz, B. Aberrant neuronal oscillatory patterns during sustained visual attention in schizophrenia and high/low working memory span. Poster presented at Society for Psychophysiological Research Conference, Florence, Italy.

August 2013, **Bobilev, A**. Neuroimaging and PAX6: Investigating functional signatures of sensory processing in aniridia. Invited talk presented at the Aniridia Foundation International Conference, Charlottesville, VA.

April 2013, **Bobilev, A**., Hamm, J., Oliver, W., Hudgens-Haney, M., Buckley, P., Dyckman, K., McDowell, J., & Clementz, B. Resting state neural oscillations in schizophrenia and high and low working memory capacity. Oral presentation at The International Congress on Schizophrenia Research, Orlando, FL.

April 2013, Hudgens-Haney, M., **Bobilev, A**., Hamm, J., Oliver, W., Dyckman,K., Buckley, P., McDowell, J. & Clementz, B. Deviant modulation of intrinsic neural activity as a function of task difficulty in schizophrenia. Poster presented at The International Congress on Schizophrenia Research, Orlando, FL.

April 2013, Hamm, J., Oliver, W., Hudgens-Haney, M., **Bobilev, A**., Buckley, P., McDowell, J., & Clementz, B. Stimulus Duration and context moderate gamma-band auditory neural abnormalities in schizophrenia. Poster presented at The International Congress on Schizophrenia Research, Orlando, FL.

March 2013, Pierce, J. E., Rodrigue, A. L., Krafft, C. E., B**obilev, A**., Lauderdale, J. D., & McDowell, J. E. Differences in functional connectivity during resting state fMRI in individuals with aniridia. Poster presented at Cognitive Neuroscience Society Conference, San Fransisco, CA.

July 2012, **Bobilev, A**. The role of pax6 in human brain structure and function: an imaging genetics approach. Oral presentation at the International Aniridia Conference, Oslo, Norway.

March 2011, **Bobilev, A**., Knight, J., Marsh, R. & Clementz, B. Why are unsuccessful tests sometimes beneficial? Poster presented at PSI CHI 2011 Conference at The University of Georgia, Athens, GA.

March 2010, **Bobilev, A**., Spillers, G.J., Brewer, G.A., & Unsworth, N. Variation in working memory capacity and directed forgetting. Poster presented at PSI CHI 2010 Conference at The University of Georgia, Athens, GA.

**Workshops and Courses**

July 2013: **Wellcome Trust Advanced Courses: Human Genome Analysis: Genetic Analysis of Multifactorial Disease.** Wellcome Trust Genome Institute, Hinxton, Cambridge, England.

**Grants Applied For**

November 2010, National Science Foundation Graduate Research Fellowship Program: The Role of PAX6 in Brain Structure and Function: An Imaging Genetics Approach

**Teaching Experience**

Teaching Assistant: Abnormal Psychology, Spring 2012, The University of Georgia

Guest Lecturer: Introduction to Neuroimaging, Spring 2013, Spring 2014, The University of Georgia

**University Involvement**

* Neuroscience Student Association Fall 2011-present
  + Active Member; Liason for Undergraduate Neuroscience Organization
  + Coordinator for Neuroscience for Kids Program; Graduate Student Panels
  + Vice president Summer 2013-Present
* Undergraduate Neuroscience Organization Fall 2009-2011
  + Public Relations Chairperson
  + Organization/participation: MS Walk, Neuroscience for Kids, Pancakes for Parkinson’s
* University of Georgia Varsity Equestrian Team Fall 2007-Summer 2010
  + Varsity Equestrian National Champions 2008, 2009, 2010
  + SEC Champions 2008, 2009
  + Executive Committee Vice President 2009-2010
  + Philanthropy Committee 2008-2010
* Student Athlete Advisory Council: Member and Team Representative Fall 2008-Spring 2010