

Annie Brandes-Aitken

NSF Graduate Research Fellow
Developmental Psychology · New York University
✉ aba396@nyu.edu ☎ 303 653 4404

Education

Ph.D. in Developmental Psychology 2022 (anticipated)
New York University
New York, NY

B.S. in Psychology with Honors, Minor in Statistics 2014
California Polytechnic State University
San Luis Obispo, CA

Research Experience

NSF Graduate Research Fellow
Neuroscience and Education Laboratory 2017-present
New York University
Advisors: Clancy Blair, PhD & Natalie Brito, PhD

Research Assistant
Education and Neuroscience Lab, Neuroscape Center 2015-2017
University of California, San Francisco
Advisors: Melina Uncapher, PhD & Adam Gazzaley PhD, MD

Research Coordinator
Sensory Neurodevelopment and Autism Program 2014-2017
University of California, San Francisco
Advisors: Elysa Marco, MD & Joaquin A. Anguera, PhD

Undergraduate Research Student
Department of Psychology 2012-2014
California Polytechnic State University
Advisors: Laura Freberg, PhD & Carrie Langner, PhD

Summer Research Assistant
Language Lab & Psychoinformatics Lab 2013
University of Colorado, Boulder
Advisors: Eliana Colunga, PhD & Tal Yarkoni, PhD

Peer Reviewed Publications

Marco, E.J., **Brandes-Aitken, A.N.**, Prakas Nair, V., de Gente, G., Thomas, S., Sherr, E.H (2018). Burden of de novo mutations and inherited rare single nucleotide variants in children with sensory processing dysfunction (SPD): A prospective cohort study. BMC Medical Genomics.

Brandes-Aitken, A. N., Anguera, J.A., Rolle, C.E., Desai, S. S., Skinner, S.S., Gazzaley, A., Marco, E. (2017). Characterizing cognitive & visuomotor control in children with sensory processing dysfunction & autism. Neuropsychology. 32(2); 148-160.

Anguera, J.A., **Brandes-Aitken, A. N.** (co-first authored), Antovich, A. D. Rolle, C.E., Desai, S. S., Marco, E. J. (2017). A pilot study to determine the feasibility of enhancing cognitive abilities in children with sensory processing dysfunction. *PLoS One*. 12(4); 1-19.

Demopoulos, C., Yu, N., Tripp, J., **Brandes-Aitken, A. N.**, Desai, S. S., Hill, S. S., Antovich, A. D., Harris, J., Honma, S., Mizuiri, D., Nagarajan, S., Marco, E. J. (2017). Imaging Auditory and Somatosensory Cortical Responses in Children with Autism and Sensory Processing Dysfunction. *Frontiers in human neuroscience*. 11; 259.

Anguera, J.A., **Brandes-Aitken, A. N.**, Rolle, C.E., Skinner, S.N., Desai, S.S., Bower, J.D., Martucci, E.W., Chung, W.K., Sherr, E.H., Marco, E.J. (2016). Characterizing cognitive control abilities in children with 16p11.2 deletion using adaptive “video game” technology: a pilot study. *Translational Psychiatry*. 6(9):e893.

Chang, Y.S., Gratiot, M., Owen, J.P., **Brandes-Aitken, A. N.**, Desai, S.S., Hill, S. S., Arnett, A.B., Harris, J., Marco, E.J., Mukherjee, P (2015). White matter microstructure is associated with auditory and tactile processing in children with and without sensory processing disorder. *Frontiers in Neuroanatomy*. 9:196.

Demopoulos, C., **Brandes-Aitken, A. N.**, Desai, S. S., Hill, S. S., Antovich, A. D., Harris, J., & Marco, E. J. (2015). Shared and Divergent Auditory and Tactile Processing in Children with Autism and Children with Sensory Processing Dysfunction Relative to Typically Developing Peers. *Journal of the International Neuropsychological Society*, 21(06), 444-454.

Publications in Submission or Under Review

Tavassoli, T., **Brandes-Aitken, A.N.**, Chu, R., Porter, R., Schoen, S., Miller, L.J., Chang, Y.S., Owen, J., Mukherjee, P., Marco, E.J. Sensory Over-Responsivity: Parent Report, Direct Assessment, and Neural Architecture.

Brandes-Aitken, A.N., Anguera, J.A., Chang, Y.S., Demopoulos, C., Desai, S.S., Antovich, A.A., Owen, J.P., Mukherjee, P., Marco, E.J. White Matter Microstructure Associations of Cognitive and Visuomotor Control.

Brandes-Aitken, A.N., Braren, S., Swingler, M., Voegtline, K., Blair, C. Attention in Infancy: A Foundation for the Development of Self-Regulation in Children from Low-SES Backgrounds.

Publications in Preperation

Brandes-Aitken, A.N., Braren, S., Perry, R., Gandhi, J., Camerota, M., Swingler, M., Voegtline, K., Blair, C. Longitudinal Associations between Caregiver Behaviors, Dyadic Joint Attention, and Executive Functions in Low-SES Contexts.

Brandes-Aitken, A.N., Brito, N. The Use of EEG to Study Relations Between Social Interaction and Infant Neural Activity.

Published Abstracts and Conference Presentations:

Brandes-Aitken, A., Braren, S., Perry, R., DeJoseph, M., Blair, C. (2018). Detection of Novelty in Infants from Low-SES Backgrounds: A Functional Near-Infrared Spectroscopy Study. FLUX Congress. Berlin, Germany.

Brandes-Aitken, A., Braren, S., Blair, C. (2018). Joint Attention between Infants and Parents Predicts Executive Functioning and Academic Readiness in Low-Income Communities. International Congress of Infant Studies. Philadelphia, PA.

Brandes-Aitken, A., Braren, S., Blair, C. (2018). Joint Attention Mediates the Effects of Poverty and Parenting on Executive Functioning, Inattention and Academic Readiness. American Psychological Science Annual Convention. San Francisco, CA.

Brandes-Aitken, A., Braren, S., Blair, C. (2018). Physiological and Neurocognitive Predictors of Childhood Executive Functioning Development in Low-Income Communities. FLUX Society Satellite Conference. Chapel Hill, NC.

Braren, S., **Brandes-Aitken, A.,** Blair, C. (2018). Relations Between Hypothalamic-Pituitary-Adrenal Axis and Autonomic Nervous System Activity and Children's Executive Functions in Environments of Early-life Stress. Cognitive Neuroscience Society (CNS), Boston, MA.

Brandes-Aitken, A., Anguera, J., Owen, J., Mukherjee, P., Marco, E. (2017). Assessing White Matter Correlates of Cognitive and Visuomotor Control in Children with SPD. American Academy of Child and Adolescent Psychiatry (AACAP), Washington D.C.

Brandes-Aitken, A., Anguera, J., Owen, J., Mukherjee, P., Marco, E. (2017). Assessing Visuo-motor Deficits in Children with SPD. International Meeting for Autism Research (IMFAR), San Francisco, CA.

Marco, E., **Brandes-Aitken, A.,** Tavassoli, T., Miller, L. J., Schoen, S. A., Owen, J., Mukherjee, P. (2017). Can Parent Report and Direct Assessment Measures Enhance Sensory Over-Responsivity Phenotyping and Inform the Neural Underpinnings of Sensory Processing Symptoms? International Meeting for Autism Research (IMFAR), San Francisco, CA.

Demopoulos, C., Yu, N., Tripp, J., **Brandes-Aitken, A.,** Desai, S., Hill, S. S., Antovich, A. D., Harris, J., Honma, S., Mizuiri, D., Mota Miranda, N. G., Nagarajan, S., Marco, E. (2017). Evidence for Domain Specificity of Cortical Auditory and Somatosensory Response Delays in ASD. International Meeting for Autism Research (IMFAR), San Francisco, CA.

Brandes-Aitken, A., Anguera, J., Rolle, C., Antovich, A., Desai, S., Marco, E. (2016). Differentially Identifying and Remediating Attention Deficits in Children Affected by Sensory Processing Dysfunction. Society for Neuroscience. San Diego, CA.

Anguera, J., **Brandes-Aitken, A.,** Rolle, C., Wu, B., Marco, E., Gazzaley, A. (2016). Attention training in children with SPD. International Meeting for Autism Research (IMFAR), Baltimore, MD.

Brandes-Aitken, A., Skinner, S., Martucci, E., Bowers, J., Anguera, J. Gazzaley, A., Marco, E. (2016). Engaging and adaptive assessment for attention in 16p11.2 deletion carriers. International Meeting for Autism Research (IMFAR), Baltimore, MD.

Marco, E.J., de Gente, G., Thomas, S., **Brandes-Aitken, A. N.,** Sherr, E.H. (2016). Using Whole Exome Sequencing to investigate the genetics of Sensory Processing Disorders. International Meeting for Autism Research (IMFAR), Baltimore, MD.

Anguera, J., **Brandes-Aitken, A.,** Rolle, C., Wu, B., Marco, E., Gazzaley, A. (2015). Attention training in children with SPD. Bay Area Autism Consortium Symposium, Redwood City, CA.

Brandes-Aitken, A., Demopoulos, C., Desai, S., Marco, E. (2015). Shared and Divergent Sensory Processing in children with ASD and SPD. Bay Area Autism Consortium Symposium, Redwood City, CA.

Brandes-Aitken, A., Skinner, S., Martucci, E., Bowers, J., Anguera, J. Gazzaley, A., Marco, E. (2015). Engaging and adaptive assessment for attention in 16p11.2 deletion carriers. Bay Area Autism Consortium Symposium, Redwood City, CA.

Rolle, C., Anguera, J., **Brandes-Aitken, A,** Wu, B,, Marco, E,, Multi-tasking training in children with Sensory Processing Disorder, (2015), Entertainment Software & Cognitive Neurotherapeutics Society (ESCoNS) Conference, San Francisco, CA.

Brandes-Aitken, A., Freberg, L. Early to bed and early to rise, does it really make a man healthy, wealthy and wise? (2014). The Annual Meeting of the Western Psychological Science. Portland, Oregon.

Brandes-Aitken, A., Freberg, L. Loneliness and Health Promoting Behaviors – the Role of Motivation and Discipline. (2014). The annual meeting of the American Psychological Science. San Francisco, CA.

Williams, J., Hernandez, A., **Brandes-Aitken, A.** Evidence for an Innate Desire for Concealment when Sleeping (2014). The annual meeting of the American Psychological Science. San Francisco, CA.

Anguera, J.A., Rolle, C., Desai, S., **Brandes-Aitken, A.,** Gibbons, J., Harris, J., Gazzaley, A., & Marco,E. The influence of distraction on discrimination and visuomotor tracking in sensory processing deficient & autistic children. (2013) Entertainment Software & Cognitive Neurotherapeutics Society (ESCoNS) Conference, Los Angeles, CA.

Honors, Awards & Fellowships

Graduate Research Fellowship National Science Foundation	2017-2020
Best Research Presentation Award Bay Area Autism Symposium	2015
Research Travel Award Cal Poly	2014
Graduated Magna Cum Laude Cal Poly	2014
Psy Chi Honor Society Cal Poly	2011-2014

Ad Hoc Reviewing

Psychiatry Research	2018
Developmental Science	2018

Trainings and Certifications

Society for Neuroscience Grassroots Advocacy Training New York University Medical Center	2018
Functional Near-Infrared Spectroscopy (fNIRS) Training Martinos Institute for Biomedical Engineering at Harvard University	2017

Autism Diagnostic Observation Session Research Certified 2015
University of Washington

MRI Training and Research Certified 2014
University of California, San Francisco

Volunteer Outreach Experience

Brain Awareness Week Panel on Neuroscience and Policy 2018
Organizer and Co-Moderator

Scientist Action and Advocacy Network 2018-Present
Member

Girls Advancing in STEM 2016-2017
Mentor/Speaker

Cal Poly NCAA Athletic & Academics Department 2013-2014
Statistics Tutor

Intensive Autism Therapy 2009-2011
Assistant Autism Therapist

References

Clancy Blair, PhD
Professor of Psychology
New York University
Clancy.Blair@nyu.edu

Natalie Brito, PhD
Assistant Professor of Developmental Psychology
New York University
Natalie.Brito@nyu.edu

Elysa Marco, MD
Associate Professor of Neurology
University of California, San Francisco
elysa.marco@ucsf.edu

Joaquin Anguera, PhD
Assistant Professor of Neurology
University of California, San Francisco
joaquin.anguera@ucsf.edu

Melina Uncapher, PhD
Assistant Professor of Neurology
University of California, San Francisco
melina.uncapher@ucsf.edu

Laura Freberg, PhD
Professor of Psychology
California Polytechnic State University
lfreberg@calpoly.edu