

Alfredo Dominguez Bolaños

Education

- 2016 – 2019 MA, Psychology (*concentration: Cognition and Perception*)
New York University, New York, NY, USA
Thesis- Prioritizing Visual Information in Working Memory: Neural Response in Visual Field Maps Mirror Probability
- 2014 – 2016 NIH Post-Baccalaureate Research and Education Program (PREP)
The University of New Mexico, Albuquerque, NM, USA
- 2011 – 2012 BSc (Hons) Psychology Study Abroad (*one-year exchange program*)
London Metropolitan University, London, UK
- 2010 – 2014 BA, Psychology
San Francisco State University, San Francisco, CA, USA

Research Experience

- 08/2016 – 01/2019 Graduate Research Assistant, Department of Psychology
New York University, New York, USA
Supervisor: Dr. Clayton E. Curtis
- Eye tracking data collection and analysis
 - fMRI data collection and analysis
 - TMS data collection
 - Analysis script creation through Python, R, UNIX, and Matlab
 - Presented results from fMRI and eye tracking data
- 08/2014 – 08/2016 Research Assistant, The Mind Research Network
University of New Mexico, Albuquerque, USA
Supervisor: Dr. Julia M. Stephen
- Participant recruitment and scheduling
 - MEG and EEG data collection
 - Administered a battery of neuropsychological tests
 - Analyzed MEG data from NIH NIAAA P20 study on FASD
 - Presented results generated from FASD data
- 11/2015 – 08/2016 NSF EPSCoR Research Assistant, The Mind Research Network
University of New Mexico, Albuquerque, USA
Supervisor: Dr. Julia M. Stephen
- Participant recruitment and scheduling
 - MEG data, MRI data, and DNA sample collection
- 06/2015 – 08/2015 UCSD STARS Research Assistant, Department of Neurosciences
University of California, San Diego, USA
Supervisor: Dr. Doris A. Trauner
- Analyzed diffusion tensor imaging data with DTI studio from patient population (perinatal stroke) and normally developing children
 - Presented results of DTI data from perinatal stroke sample

- 09/2014 – 11/2014 Research Assistant, Department of Neurosciences
University of New Mexico, Albuquerque, USA
Supervisor: Dr. Fernando Valenzuela
- Administered patch clamp recording and in vitro electrophysiological recording on rat brains
 - Retrieved mice brain and created tissue slices from the central nervous system of rats
- 08/2013 – 05/2014 Undergraduate Research Assistant, Cognitive Psychophysiology Laboratory
San Francisco State University, San Francisco, USA
Supervisor: Dr. Mark W. Geisler
- Collected, analyzed, and cleaned data with AcqKnowledge Data Acquisition and Analysis Software
 - Carried out study's methodology; applied EEG cap and monitored participants
- 08/2013 – 05/2014 Undergraduate Research Assistant, Personality and Well-Being Lab
San Francisco State University, San Francisco, USA
Supervisor: Dr. Ryan T. Howell
- Worked with dataset generated from websites to extract relevant findings
 - Compiled, maintained, and analyzed large datasets for further analysis through SPSS predictive analytics software

Other Professional Experience

- 2019 – 2020 Reviewer of Professional Development Proposals, Travel Scholarship, and abstracts for SACNAS The National Diversity in STEM Conference
- 2016 Panelist for the Panel Discussion at the STEM Cultural Colloquium: Getting at the Gap, University of New Mexico
- 2014 – 2016 Mentor position for one on one mentoring at the Project for New Mexico Graduates of Color (PNMGC), University of New Mexico
- 2014 Reviewer for the Student Research Grant Competition, Association for Psychological Science Student Caucus (APSSC)
- 2014 Evaluator for Student Presentations at the Biomedical Research Symposium, University of New Mexico
- 2011 – 2012 Undergraduate Tutor for Psychology 200: General Psychology, San Francisco State University

Professional Membership

- 2014 – present Society for Advancement of Chicanos and Native Americans in Science
- 2014 – 2018 Society for Neuroscience
- 2015 – 2017 Fetal Alcohol Spectrum Disorders Study Group
- 2014 – 2017 Research Society on Alcoholism
- 2014 – 2016 New Mexico Chapter Society for Neuroscience
- 2013 – 2014 Association for Psychological Science
- 2012 – present The International Honors Society (Psi Chi) San Francisco State Chapter

Awards and Honors

- 2018 Graduate Research Assistantship – NIH Research Supplement to Promote Diversity in Health-Related Research Award, National Eye Institute
- 2017 Recipient of the Hispanic Association of Colleges and Universities (HACU) and Southwest Airlines Travel Award
- 2017 Honorable Mention for the 2017 Ford Foundation Fellowship Program at the pre-doctoral level
- 2016 Recipient of the Hispanic Association of Colleges and Universities (HACU) and Southwest Airlines Travel Award
- 2016 Recipient of travel scholarship to attend the 2016 Society for Advancement of Chicanos/Hispanics and Native American in Science (SACNAS) National Conference
- 2016 Peer Mentoring Scholarship from the Project for New Mexico Graduates of Color (PNMGC), University of New Mexico, Albuquerque, NM
- 2016 Research Society on Alcoholism Student Merit Award Recipient for the 2016 RSA Scientific meeting, funded by NIAAA
- 2015 Travel Scholarship to attend the 2016 Emerging Researchers National (ERN) Conference in STEM
- 2015 Travel Scholarship to attend the 2015 Annual Biomedical Research Conference for Minority Students (ABRCMS)
- 2015 University of California, San Diego, Summer Training Academy for Research in the Sciences, funded by Frontiers for Innovation Scholars Program
- 2015 Recipient of the Hispanic Association of Colleges and Universities (HACU) and Southwest Airlines Travel Award
- 2015 Travel Scholarship to attend the 2015 Society for Advancement of Chicanos/Hispanics and Native American in Science (SACNAS) National Conference
- 2015 Research Society on Alcoholism Student Merit Award Recipient for the 2015 RSA Scientific meeting, funded by NIAAA
- 2015 Scholarship awarded for poster presentation and exhibit at the annual Shared Knowledge Conference, Albuquerque, NM.
- 2014 National Institutes of Health (NIH) funded Post-Baccalaureate Research and Education Program (PREP) at The University of New Mexico
- 2014 Travel Scholarship Recipient, Purdue University, to attend the Big Ten+ Graduate School Expo

Publications

- Bolaños, A. D.,** Coffman, B. A., Candelaria-Cook, F. T., Kodituwakku, P., & Stephen, J. M. (2017). Altered Neural Oscillations During Multisensory Integration in Adolescents with Fetal Alcohol Spectrum Disorder. *Alcoholism: Clinical and Experimental Research*, 41(12), 2173-2184.

Conference Presentations

Talks:

- A.D. Bolanos**, G.E. Hallenbeck, C.E. Curtis, (2017, September) Don't procrastinate, prioritize: prioritizing working memory. Presented at the 2017 Program in Cognition & Perception 38th Annual Miniconvention, New York, NY.
- A.D. Bolanos**, B.A. Coffman, P. Kodituwakku, J.M. Stephen, (2016, August) Don't Look: Cerebellar and cortical activity during an antisaccade task in adolescents with FASD. Presented at the 2016 Summer Biomedical Research Symposium, Albuquerque, NM.
- A.D. Bolanos**, B.A. Coffman, P. Kodituwakku, J.M. Stephen, (2016, March) Don't Look: Cerebellar and cortical activity during an antisaccade task in adolescents with FASD. Presented at the 25th annual Research Day, Albuquerque, NM.
- A.D. Bolanos**, B.A. Coffman, J.F.L. Pinner, P. Kodituwakku, J.M. Stephen, (2016, February) Altered Neural Oscillations during Multisensory Integration in Adolescents with Fetal Alcohol Spectrum Disorder. Presented at the 2016 Emerging Researchers National (ERN) Conference in STEM, Washington, D.C.
- A.D. Bolanos**, B.A. Coffman, J.F.L. Pinner, P. Kodituwakku, J.M. Stephen, (2015, October) Magnetoencephalography study on multisensory integration in adolescents with fetal alcohol spectrum disorder. Presented at the Society for Advancement of Chicanos/Hispanics and Native American in Science (SACNAS) National Conference, Washington, D.C.
- A.D. Bolanos**, D.A. Trauner, (2015, August) Does the integrity of the superior longitudinal fasciculus in infants with a perinatal stroke affect language development? Presented at UCSD Summer Research Conference, San Diego, CA.

Posters with published abstract:

- A.D. Bolanos**, B.A. Coffman, P. Kodituwakku, J.M. Stephen, (2016, November) Don't Look: Cerebellar and cortical activity during an antisaccade task in adolescents with FASD. Presented at the 46th Annual Society for Neuroscience National Meeting, San Diego, CA.
- A.D. Bolanos**, B.A. Coffman, P. Kodituwakku, J.M. Stephen, (2016, June) Don't Look: Cerebellar and cortical activity during an antisaccade task in adolescents with FASD. Presented at the 39th annual RSA Scientific Meeting, New Orleans, LA
- A.D. Bolanos**, B.A. Coffman, J.F.L. Pinner, P. Kodituwakku, J.M. Stephen, (2015, October) Magnetoencephalography study on multisensory integration in adolescents with fetal alcohol spectrum disorder. Presented at the 45th Annual Society for Neuroscience National Meeting, Chicago, IL.
- A.D. Bolanos**, B.A. Coffman, J.F.L. Pinner, P. Kodituwakku, J.M. Stephen, (2015, June) Multisensory Integration in Adolescents with a Fetal Alcohol Spectrum Disorder. Presented at the 38th Annual RSA Scientific Meeting, San Antonio, TX.

Posters:

- A.D. Bolanos**, G.E. Hallenbeck, C.E. Curtis, (2017, September) Don't procrastinate, prioritize: prioritizing working memory. Presented at the 2017 Program in Cognition & Perception 38th Annual Miniconvention, New York, NY.
- A.D. Bolanos**, B.A. Coffman, P. Kodituwakku, J.M. Stephen, (2016, August) Don't Look: Cerebellar and cortical activity during an antisaccade task in adolescents with FASD.

- Presented at the 2016 Summer Biomedical Research Symposium, Albuquerque, NM.
- G.E. Hallenbeck, **A.D. Bolanos**, T.C. Sprague, C.E. Curtis, (2018, May) Frontal and parietal cortex make distinct contributions to the storage and allocation of resources that support WM. Presented at the 18th Annual Vision Sciences Society Meeting, St. Pete Beach, FL.
- J.M. Stephen, J. Pinner, **A. Bolanos**, E. Kodituwakku, P. Kodituwakku, (2017, June) Probing Neurophysiological Changes Across The Developmental Spectrum Due To Prenatal Alcohol Exposure. Presented at the 40th Annual RSA Scientific Meeting, Denver, CO.
- J.F.L. Pinner, B.A. Coffman, **A.D. Bolanos**, P. Kodituwakku, J.M. Stephen, (2017, June) Joint Independent Component Analysis of Brain Structure and Function in Adolescents with FASD. Presented at the 40th Annual RSA Scientific Meeting, Denver, CO.
- A.D. Bolanos**, B.A. Coffman, P. Kodituwakku, J.M. Stephen, (2016, October) Don't Look: Cerebellar and cortical activity during an antisaccade task in adolescents with FASD. Presented at the Society for Advancement of Chicanos/Hispanics and Native American in Science (SACNAS) National Conference, Long Beach, CA.
- A.D. Bolanos**, B.A. Coffman, P. Kodituwakku, J.M. Stephen, (2016, March) Don't Look: Cerebellar and cortical activity during an antisaccade task in adolescents with FASD. Presented at the annual Health Sciences Center Neuroscience Day, Albuquerque, NM.
- A.D. Bolanos**, B.A. Coffman, J.F.L. Pinner, P. Kodituwakku, J.M. Stephen, (2015, November) Altered Neural Oscillations during Multisensory Integration in Adolescents with a Fetal Alcohol Spectrum Disorder. Presented at the 2015 Annual Biomedical Research Conference for Minority Students (ABRCMS), Seattle, WA.
- A.D. Bolanos**, B.A. Coffman, J.F.L. Pinner, P. Kodituwakku, J.M. Stephen, (2015, October) Magnetoencephalography study on multisensory integration in adolescents with fetal alcohol spectrum disorder. Presented at the 45th Annual Society for Neuroscience National
- A.D. Bolanos**, B.A. Coffman, J.F.L. Pinner, P. Kodituwakku, J.M. Stephen, (2015, September) Magnetoencephalography study on multisensory integration in adolescents with fetal alcohol spectrum disorder. Presented at The Mind Research Network Annual Research Day Meeting, Albuquerque, NM.
- A.D. Bolanos**, B.A. Coffman, J.F.L. Pinner, P. Kodituwakku, J.M. Stephen, (2015, April) Magnetoencephalography study on sensory information processing in adolescents with a fetal alcohol spectrum disorder. Presented at the annual Shared Knowledge Conference, Albuquerque, NM. Awarded 2nd place in the poster exhibit.
- A.D. Bolanos**, B.A. Coffman, P. Kodituwakku, J.M. Stephen, (2015, March) Auditory–Somatosensory Integration in Adolescents with a Fetal Alcohol Spectrum Disorder. Presented at the 24th annual Research Day, Albuquerque, NM.
- A.D. Bolanos**, B.A. Coffman, J.F.L. Pinner, P. Kodituwakku, E. Kodituwakku, J.M. Stephen, (2015, March) A closer look at sound and touch processing in adolescents exposed to alcohol before birth. Presented at the annual Health Sciences Center Neuroscience Day, Albuquerque, NM.
- A.D. Bolanos**, S.P. Niblett, T. Jackson, J. Miller, A. Ben-Zeev, and M.W. Geisler, (2014, May). Event-related potential (ERP's) reveal White participants reduce attention towards counter-stereotypic out-group members. Presented at the annual College of Science and Engineering Graduate Showcase, San Francisco, CA.
- A.D. Bolanos**, R.T. Howell, (2014, May) Do Time Perspectives Predict Experiential Consumption? Presented at the annual convention for the Association for Psychological Science, San Francisco, CA.

Employment Experience

- 01/2016 – AVID Tutor, Albuquerque Public Schools, Albuquerque, New Mexico, US
05/2016
- Managed and facilitated tutorial session for middle and high school students on a weekly basis
- 12/2012 – Lead Mentor/Mentor, College Spring, San Francisco, California, US
06/2014
- Lead a team of mentors through lesson planning for the delivery of SAT study material to a classroom of high school students on a weekly basis
- 04/2013 – AVID Tutor, San Francisco City Unified School District, California, US
05/2014
- Managed and facilitated tutorial session for middle and high school students on a weekly basis
- 09/2012 – Team Leader, Jumpstart, San Francisco, California, US
05/2014
- Allocated roles to a team of five corps members to execute a preschool
- 09/2010 – Corps Member, Jumpstart, San Francisco, California, US
05/2011
- Executed weekly lesson plans for a group of five pre-k children to increase literacy, phonological, and reading comprehension skills

Additional Information

Proficient in office applicable software:

Microsoft office, Excel, Publisher and Powerpoint

Proficient in data analysis software:

Python, R, DTI Studio, FreeSurfer, Analysis of Functional NeuroImages (AFNI), FSL,
Linux/Unix operating system, Neuromag, SPSS, Matlab, Octave, SQL

Proficient in stimuli presentation software and data collection techniques:

SR Research- Experiment Builder, MGL, Presentation, EyeTracker, MEG, EEG/EGI
EEG, TMS, Neuropsychological Assessments, Psychtoolbox

Languages:

Spanish –spoken and written fluently