Mark Jaime

Associate Professor of Psychology, Division of Science Indiana University—Purdue University, Columbus 4601 Central Avenue Columbus, IN 47203 (812) 348-7236 / mjaime@iupuc.edu

EDUCATION

2011-2013 2008-2010	Postdoc, Dalhousie University Postdoc, University of Miami
2007	Ph.D. in Psychology/Developmental Science, Florida International University
2005	M.S. in Psychology, Florida International university
2001	B.A. in Psychology, Florida International University

ACADEMIC APPOINTMENTS

2019-Present	Associate Professor of Psychology, Division of Science,
	Indiana University-Purdue University, Columbus (IUPUC)
2013-2019	Assistant Professor of Psychology, Division of Science,
	Indiana University–Purdue University, Columbus (IUPUC)
2011-2013	Postdoctoral Fellow, Department of Psychology & Neuroscience, Department of
	Pediatrics, Dalhousie University
2008-2010	NIH Postdoctoral Fellow, Department of Psychology, University of Miami

PROFESSIONAL ORGANIZATION MEMBERSHIPS

2018-Present	International Society for Autism Research
2008-Present	Society for Social Neuroscience
2007-2009	Sigma XI, The Scientific Research Society
2003-2007	International Society for Developmental Psychobiology

PROFESSIONAL HONORS AND AWARDS

2018	Faculty Development Award, IUPUC Office of the Vice Chancellor and Dean
2017	Outstanding Full-Time Faculty Research, Scholarship, & Creativity Award, IUPUC
2015	Faculty Development Award, IUPUC Office of the Vice Chancellor and Dean
2007	NIH Travel Award, International Society for Developmental Psychobiology
2005	NIH Travel Award, International Society for Developmental Psychobiology
2003	NIH Travel Award, International Society for Developmental Psychobiology

PROFESSIONAL DEVELOPMENT

2019-2020	Next Generation 2.0 Leadership Program (2019-2020 cohort), Office of Academic
	Affairs, Indiana University-Purdue University, Indianapolis
12-5-2018	Autism Diagnostic Observation Schedule 2 nd Ed Advanced Clinical/Research Training,
	Treatment and Research Institute for Autism Spectrum Disorders (TRIAD), Vanderbilt
	University

1

10-19-2017	Autism Diagnostic Observation Schedule 2 nd Ed Clinical Training, Treatment and
	Research Institute for Autism Spectrum Disorders (TRIAD), Vanderbilt University
6-14-2018	Stakeholder Perspectives and Participation: Building Successful Collaborations for
	Research, International Society for Autism Research, Summer Institute
2015-2019	Faculty Mentoring Program, Indiana University-Purdue University, Columbus
9-12-2014	Write Winning Grant Proposals, Indiana University School of Medicine
9-27-2013	Ins and Outs of Applying for NIH Funding, Office of the Vice
	Chancellor for Research, Indiana University Purdue University, Indianapolis
9-17-2013	Finding Funding, Office of the Vice Chancellor for Research, Indiana University
	Purdue University, Indianapolis
9-6-2013	Research Orientation, Office of the Vice Chancellor for Research, Indiana University-
	Purdue University Indianapolis
8-17-2013	Faculty Development Mini-Conference, Indiana University Purdue University
	Columbus

TEACHING

PSY-B 105	Psychology as a Biological Science	3 credit hours (lecture)
PSY-B 311	Research Methods in Psychology	3 credit hours (lecture/lab)
PSY-B 320	Behavioral Neuroscience	3 credit hours (lecture)
PSY-B 334	Perception	3 credit hours (lecture)
PSY-B 425	Capstone in Psychology	3 credit hours (lecture)

MENTORING

2018-2019	Isaac G. Rojas	Office of Student Research Grant	Role: Faculty Mentor
2017-2018	Isaac G. Rojas	Office of Student Research Grant	Role: Faculty Mentor
2015-2016	Megan Taylor	Office of Student Research Grant	Role: Faculty Mentor
2014-2015	Megan Taylor	Office of Student Research Grant	Role: Faculty Mentor
2014-2015	Rodney Burton	Office of Student Research Grant	Role: Faculty Mentor
2013-2014	Lloyd Dobbins	Office of Student Research Grant	Role: Faculty Mentor

RESEARCH ACTIVITY

Grants in Research

Completed

- 1. Neurocognitive Indices of Social Competence in Autism Spectrum Disorder, Research Support Funds Grant (RSFG), Office of the Vice Chancellor for Research, IUPUI, Effort 17%, \$34,925, 2017-2018, Role: P.I.
- 2. Neurocognitive Indices of Social Competence in Autism Spectrum Disorder, Release Time for Research Grant (RTR), Office of the Vice Chancellor for Research, IUPUI, Effort 40%, \$10,000, Spring 2018, Role: P.I.
- 3. Neurocognitive Indices of Social Competence in Autism Spectrum Disorder, Release Time for Research Grant (RTR), Office of the Vice Chancellor for Research, IUPUI, Effort 40%, \$10,000, Fall 2015, Role: P.I.
- 4. The Temporal Parameters of Visual-Proprioceptive Integration in Autism, Development/Innovative Grant, Nova Scotia Health Research Foundation Canada, \$15,000, 2011-2012, Role: co-I.

2

5. The Effects of Proprioceptive Processing on Mu Suppression in Autism, Marino Autism

Research Institute, \$8000, 2009-2010, Role: P.I.

Pending

- 1. Neurocognitive and Homeostatic Indices of Social Competence in Autism Spectrum Disorder, National Institutes of Health R21, Requested Amount: \$411,297, Role: P.I.
- 2. An Integrated Simulation Environment for Multi-Modal Sensing and Predicting Brain Health, NASA, TRISH Biomedical Advances for Space Health, Requested Amount: \$744,117, Role: Co-PI

Submitted but not funded

- 1. Connecting Brain Function and Visual Behavior during Social Interaction with ASD, Simons Foundation Autism Research Initiative Research Award, Requested Amount: \$2.1M, Role: Co-P I
- 2. Using Eye Movements & Psychometric measurements to Identify and Respond to ADHD, Small Collaborative Research Grant, National Science Foundation, Requested Amount: \$404,384, Role: Co-P.I.

Competitive(Peer-Reviewed) and Invited Presentations (Research)

Invited Talks

- 1. Visual-Proprioceptive Integration and its Role in Body Self-Awareness. Developmental Cognitive Neuroscience Lab, Department of Psychological and Brain Sciences, Indiana University, Bloomington (2016).
- 2. Psychophysical and Psychophysiological Indices of Social Awareness. Department of Psychology, University of Tennessee, Knoxville (2014).
- 3. Exploring Prenatal Intersensory Perception and the Early Development of Gaze Following Behaviors: A Comparative Approach. Colloquium presented at the Department of Psychology, University of Miami (2007).

Peer-reviewed Poster Presentations

- 1. **Jaime, M.**, Harshaw, C., & Garcia Rojas, I. M. (2019, May). *Frontal EEG and thermal asymmetries during the ADOS predict ASD severity*. Poster presented at the International Society for Autism Research, Montreal, Quebec, Canada.
- 2. Taylor, M., Brinkers, C. & **Jaime, M.** (2016, May). *Children's discrimination of body action in self-generated first-person videos*. Poster accepted to the 46th Annual Meeting of The Jean Piaget Society, Toronto, Canada.
- 3. **Jaime, M.,** Isenor, K., Ritchie, I. & Moore, C. (2016, May). *Get in shape! Exploring toddler's representations of body position.* Poster accepted to the 46th Annual Meeting of The Jean Piaget Society, Toronto, Canada.
- 4. Taylor, M. A. & **Jaime, M.** (2016, November). Developmental differences in children's self-recognition of optic flow. Poster presented at the International Society for Developmental Psychobiology, San Diego, CA.
- 5. **Jaime, M.** & Taylor, M. (2015, June). *Recognition of subjective action in children*. Poster presented at the 45th Annual Meeting of The Jean Piaget Society, Toronto, Canada.
- 6. **Jaime, M.,** Longard, J., Bryson, S. E., & Moore, C. (2014, May). *No evidence for deficits in the multisensory integration of self-generated movement in children with autism spectrum disorder.* Poster presented at the International Meeting for Autism Research, Atlanta, GA.

3

7. Vaillant, J., Harshaw, C., **Jaime, M.**, Bahrick, L. E., & Lickliter, R. (2010, November). Selective attention during prenatal development: Redundancy across auditory and vibrotactile stimulation facilitates learning in quail embryos. Poster presented at the

- International Society for Developmental Psychobiology, San Diego, CA.
- 8. Hileman, C., Henderson, H., Mundy, P., **Jaime, M.** & Newell, L. (June, 2010). *Face processing in students with autism: A focus on specific emotions*. Poster presented at the Institute of Education Sciences Conference, Washington, D.C.
- 9. Hileman, C., Henderson, H., Newell, L., **Jaime, M.**, & Mundy, P. (2010, May). *Metacognitive awareness of face processing in high functioning autism*. Poster presented at the International Meeting for Autism Research, Philadelphia, PA.
- 10. **Jaime, M.**, Henderson, H., Hileman, C., Newell, L., & Mundy, P. (2010, May). *EEG coherence of adolescents with high functioning autism during social perception*. Poster presented at the International Meeting for Autism Research, Philadelphia, PA.
- 11. Mohapatra, L., Henderson, H., Ono, K., Hileman, c., Kojkowski, N., **Jaime, M.**, & Mundy, P., (2010, May). *The heterogeneous presentation among children with higher functioning autism: the influence of approach/withdrawal tendencies on self-regulatory behaviors*. Poster presented at the International Meeting for Autism Research, Philadelphia, PA.
- 12. Ono, K., Henderson, H., Mohapatra, L., Hileman, C., Kojkowski, N., **Jaime, M.**, & Mundy, P. (2010, May). *Moderating Effect of Temperament on the Relation between Symptom Severity and Age of First Parental Concern: A Retrospective Study*. Poster presented at the International Meeting for Autism Research, Philadelphia, PA.
- 13. **Jaime, M.** *The Effect of Spatial Incongruity on Gaze Following Behavior in Children with High Functioning Autism: An Eye Tracking* Study (2009, March). Symposium presented at the Meeting of the Society for Research in Child Development Denver, Co.
- 14. **Jaime, M.**, Gamber, B., Hileman, C., Newell, L. C., Henderson, H., & Mundy, P. (2009, May). *Spatial incongruity affects the looking behavior of children with high functioning autism during joint attention eliciting videos: an eye tracking study*. Poster presented at the International Meeting for Autism Research, Chicago, IL.
- 15. Vaillant, J., Harshaw, C., **Jaime, M.**, Bahrick, L. E., & Lickliter, R. (2009, November). *Distribution of sensory stimulation affects prenatal auditory learning in northern bobwhite quail.* Poster presented at the *International Society for Developmental Psychobiology*, Chicago, IL.
- Jaime, M., Lopez, J.P., & Lickliter, R. (2008, November). Emergence of gaze following behavior in Bobwhite quail neonates. Poster presented at the International Society for Developmental Psychobiology, Washington, D.C.
- 17. Lopez. J. P., **Jaime, M.,** & Lickliter, R. (2007, October). *Bobwhite quail neonates track human eye gaze to direct their avoidance behavior*. Poster presented at the International Society for Developmental Psychobiology, San Diego, CA.
- 18. **Jaime, M.**, Bahrick, L., & Lickliter, R. (2007, October). *Audiovisual temporal synchrony facilitates Prenatal perceptual learning in bobwhite quail embryos*. Poster presented at the International Society for Developmental Psychobiology, San Diego, CA.
- 19. Hileman, C., **Jaime, M.**, Schwartz, C. B., Zahka, N. E., Inge, A. P., Kojkowski, N., Coman, D., Henderson, H., & Mundy, P. C. (2007, April). *Motivation and self-monitoring as predictors of symptom severity in autism*. Poster presented at the Society for Research in Child Development. Boston, MA.
- 20. Hileman, C., **Jaime, M.**, Schwartz, C. B., Zahka, N. E., Inge, A. P., Kojkowski, N., Coman, D., Henderson, H., & Mundy, P. C. (2007, May). *Motivation and self-monitoring as predictors of symptom severity in autism*. Poster presented at the International Meeting for Autism Research. Seattle, WA.
- 21. **Jaime, M.**, Lickliter, R. & Bahrick, L. E. (2006, May). *Exploring the temporal boundaries of Intersensory redundancy during prenatal development*. Poster presented at the International

4

- Conference on Infant Studies. Kyoto, Japan.
- 22. **Jaime, M.**, Lickliter, R. & Bahrick, L. E. (2005, November). *The role of temporal synchrony in the salience of intersensory redundancy during prenatal development*. Poster presented at the International Society for Developmental Psychobiology. Washington, D.C.
- 23. **Jaime, M.** & Lickliter, R. (2005, March). *The effect of prenatal exposure to temporal and spatial properties on postnatal responsiveness to spatial contiguity in bobwhite quail chicks.* Poster presented at the Comparative Cognition Society. Melborne, FL.
- 24. **Jaime, M.** & Lickliter, R. (2003). *Prenatal exposure to temporal synchrony affects postnatal responsiveness to spatial contiguity in bobwhite quail chicks*. Poster presented at the International Society for Developmental Psychobiology. New Orleans, LA.

SERVICE

University Service

Department 2017-2018	Chair	Faculty Search Committee, IUPUC
Campus		
2019-2020	Mentor	Faculty Mentoring Program, IUPUC
2018	Discussion Leader	Midwest Regional Gender Studies Consortium
2017-present	Senator	Division of Science, IUPUC
2017	Member	Donor Funded Scholarship Selection Committee, IUPUC
2016-2017	Senator, At-large	Faculty Senate, IUPUC
2014-2016	Member	Budgetary and Resources Policy Committee, IUPUC

Professional Service

Ad-Hoc Reviewer

Animal Cognition
Biomedical Signal Processing & Control
Child Development
Cortex
Journal of Autism & Developmental Disorders
Journal of Experimental Child Psychology

PUBLICATIONS

Peer-reviewed Conference Proceedings and Papers

- 1. Jayawardana, Y., **Jaime, M.**, & Jayarathna, S. (2019, July). *Analysis of temporal relations between ASD and brain activity through EEG and machine learning*. Paper presented at the IEEE 20th International Conference on Information Reuse and Integration for Data Science. Los Angeles, CA.
- 2. Haputhanthri, D., Brihadiswaran, G., Gunathilaka, S., Meedeniya, D., Jayawardana, Y., Jayarathna, S., & **Jaime**, **M.** (2019, July). *An evaluation of EEG data based classifiers and feature sets foe autism spectrum disorder*. Paper presented at the 5th International Multidisciplinary Enginneering Research Conference. Moratuwa, Sri Lanka.
- 3. Thapaliya, S., Jayarathna, S., & **Jaime. M.** (2018, December). Evaluating the EEG and eye movements for autism spectrum disorder. Paper presented at IEEE Big Data Conference Special Session on Intelligent Data Mining. Seattle, WA.

5

Book Chapters

1. Jayarathna, S., Jayawardana, Y., **Jaime, M.** & Thapaliya, S. (2019). Electroencephalogram (EEG) for delineating objective measure of autism spectrum disorder. In C. Chen and S. S. Cheung (Eds.), *Computational models for biomedical reasoning and problem solving* (pp. 34-65). IGI Global. Hershey, PA.

Peer-reviewed Journal Articles

- 1. **Jaime, M.**, O'Driscoll, K., & Moore, C. (2016) Visual discrimination of delayed self-generated movement reveals the temporal limit of proprioceptive-visual intermodal integration. *Consciousness & Cognition*, 43, 27-37.
- 2. **Jaime, M.**, McMahon, C. M., Davidson, B. C., Newell, L. C., Mundy, P. C., & Henderson, H. A. (2016). Brief report: Reduced temporal-central alpha EEG coherence during joint attention perception in adolescents with autism spectrum disorder. *Journal of Autism and Developmental Disorders*, 46, 1477-1489.
- 3. McMahon, C. M., Henderson, H. A., Newell, L., **Jaime, M.**, & Mundy, P. (2015). Metacognitive awareness of facial affect in higher-functioning children and adolescents with autism spectrum disorder. *Journal of Autism and Developmental Disorders*, 46, 882-898.
- 4. **Jaime, M.**, Longard, J., & Moore, C. (2014). Developmental changes in the visual-proprioceptive integration threshold of children. *Journal of Experimental Child Psychology*, 125, 1-12.
- 5. Hileman, C., Henderson, H., Mundy, P., Newell, L., & **Jaime, M.** (2011). Developmental and individual differences on the P1 and N170 ERP components in children with and without autism. *Developmental Neuropsychology*, *36*, 214-236.
- 6. **Jaime, M.**, Bahrick, L., & Lickliter, R. (2010). The critical role of temporal synchrony in the salience of intersensory redundancy during prenatal development. *Infancy*, 15, 1-22.
- 7. **Jaime, M.**, Lopez, J. P., & Lickliter, R. (2009). Bobwhite quail (*Colinus virginianus*) hatchlings track the direction of human gaze. *Animal Cognition*, 12, 559-565.
- 8. **Jaime, M.** & Lickliter, R. (2006). Prenatal exposure to temporal and spatial stimulus properties affects postnatal responsiveness to spatial contiguity in bobwhite quail chicks. *Developmental Psychobiology*, 48, 233-242.