Xiaoli Zhang, Ph.D

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Department of Psychology

Michigan State University

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Professional Appointments

2023 –	Michigan State University, U.S. Post-Doctoral Research Associate <u>PI: Dr. Taosheng Liu</u>
2020 – 2023	The George Washington University, U.S. Post-Doctoral Scientist <u>PI: Dr. Sarah Shomstein</u>
May – July 2020	The Ohio State University, U.S. Post Doctoral Scholar <u>PI: Dr. Julie D. Golomb</u>

Education

2014 – 2020	The Ohio State University, U.S. 2016, M.A. in Cognitive Psychology 2020, Ph.D. in Cognitive Psychology <u>Advisor: Dr. Julie D. Golomb</u>
2009 – 2013	Tsinghua University, China B.S. in Psychology <u>Advisor: Dr. Meihong Zheng</u>
Aug. 2010	Tsinghua-Berkeley Psychology Department Summer Exchange Program, University of California-Berkeley, U.S. <u>Academic Advisor: Dr. Kaiping Peng</u>

Awards and Fellowships

March 2023	Cognitive Neuroscience Society 2023 Annual Meeting Post-Doctoral Fellow Award
June 2019	Summer 2019 Graduate Student Interdisciplinary Research Award at Psychology Department, The Ohio State University
June 2017	Summer 2017 Graduate Excellence Award at Psychology Department, The Ohio State University
May 2016	College of Social and Behavioral Sciences (SBS) Fellowship at The Ohio State University
Feb. 2016	H. Dean and Susan Regis Gibson Research Award from Center for Cognitive Behavioral Brain Imaging ($2500), The Ohio State University
2014 - 2015	University Fellowship at The Ohio State University

Jun. 2011	3rd Prize of the 6th "Challenge Cup" Capital Undergraduate Curriculum Academic Science and Technology Works Competition, Tsinghua University
Dec. 2010	Zheng Geru Scholarship at Tsinghua University
Apr. 2010	3rd Prize of the 28th "Challenge Cup" Undergraduate Curriculum Academic Science and Technology Competition, Tsinghua University

Manuscripts and Publications

Zhang, X., Collegio, A.J., Kravitz, D.J., & Shomstein, S. (in prep). Uncertainty modulates task-irrelevant object representations in human early visual cortex.

Zhang, X., Jones, C.M., & Golomb, J.D. (under revision). Decoding 3D spatial location across saccades in human visual cortex.
Preprint: https://doi.org/10.1101/2020.07.05.188458

Shomstein, S., Zhang, X., & Dubbelde, D. (2022). Attention and platypuses. *WIREs Cognitive Science*, e1600.
https://doi.org/10.1002/wcs.1600

Zhang, X., & Golomb, J.D. (2021). Neural representations of covert attention across saccades: comparing pattern similarity to shifting and holding attention during fixation. *eNeuro*, *8*(2).
https://doi.org/10.1523/ENEURO.0186-20.2021

Zhang, X., & Golomb, J.D. (2018). Target localization after saccades and at fixation: Nontargets both facilitate and bias responses. *Visual Cognition*, *26*(9), 734–752.
https://doi.org/10.1080/13506285.2018.1553810

Finlayson, N.J., Zhang, X., and Golomb, J.D. (2017). Differential patterns of 2D location versus depth decoding along the visual hierarchy. *NeuroImage, 147*, 507-516.
https://doi.org/10.1016/j.neuroimage.2016.12.039

Conference Proceedings

Finlayson, N.J., Zhang, X., and Golomb, J.D. (2015). Object Perception, Attention, and Memory (OPAM) 2015 Conference Report 23rd Annual Meeting: The representation and perception of 3D space: Interactions between 2D location and depth. *Visual Cognition, 23(7)*, 832-836.
https://doi.org/10.1080/13506285.2015.1093239

Conference Presentations

Zhang, X. & Liu, T. (Oct 2024). Attention changes the neural representation of features by reducing the dimensionality. Poster presented at the Sixth Annual MSU Precision Health Symposium, East Lansing, MI.

Zhang, X., Collegio, A.J., Kravitz, D.J., & Shomstein, S. (May 2023). Attentional Ungluing: Uncertainty modulates task-irrelevant object representations in human early visual cortex. Talk presented at Annual Meeting of the Vision Science Society, St. Pete Beach, FL.

Zhang, X., Collegio, A.J., Kravitz, D.J., & Shomstein, S. (March 2023). Uncertainty modulates task-irrelevant object representations in human early visual cortex. Poster presented at Annual Meeting of the Cognitive Neuroscience Society, San Francisco, CA.

Zhang, X., Jones, C.M., & Golomb, J.D. (June 2020). Decoding 3D spatial location across saccades in human visual cortex. Talk presented at Annual Meeting of the Vision Science Society, Virtual Conference.

Zhang, X., Jones, C.M., & Golomb, J.D. (Oct 2019). Decoding 3D spatial location across saccades in human visual cortex. Poster presented at Society for Neuroscience, Chicago, IL.

Zhang, X. & Golomb, J.D. (May 2019). Neural representations of attention across saccades: More similar to shifting or to holding covert attention? Poster presented at Annual Meeting of the Vision Science Society, St. Pete Beach, FL.

Zhang, X. & Golomb, J.D. (May 2018). Localizing visual targets across saccades: Do nontarget landmarks really help? Poster presented at Annual Meeting of the Vision Science Society, St. Pete Beach, FL.

Zhang, X. & Golomb, J.D. (Nov 2017). Independent and overlapping neural representations of saccades, attention shifts, and reference frames. Poster presented at Society for Neuroscience, Washington, DC.

Chen, J., Zhang, X., & Golomb, J.D. (Nov 2017). Dynamically tracking the neural signatures of visual attention across a saccade. Poster presented at Society for Neuroscience, Washington, DC.

Zhang, X. & Golomb, J.D. (July 2017). Independent and overlapping neural representations of saccades, attention shifts, and reference frames. Poster presented at Gordon Research Seminar and Gordon Research Conference, Lewiston, ME.

Chen, J., Zhang, X., & Golomb, J.D. (July 2017). Dynamically tracking the neural signatures of visual attention across a saccade. Poster presented at Gordon Research Seminar and Gordon Research Conference, Lewiston, ME.

Zhang, X. & Golomb, J.D. (May 2017). Independent and overlapping neural representations of saccades, attention shifts, and reference frames. Poster presented at Annual Meeting of the Vision Science Society, St. Pete Beach, FL.

Chen, J., Zhang, X., & Golomb, J.D. (May 2017). Dynamically tracking the neural signatures of visual attention across a saccade. Poster presented at Annual Meeting of the Vision Sciences Society, St. Pete's Beach, FL.

Zhang, X. & Golomb, J.D. (May 2016). Visual stability across saccades: Do the number and spatial location of non-targets influence target location processing? Poster presented at Annual Meeting of the Vision Science Society, St. Pete Beach, FL.

Barboza, M., Finlayson, N.J., Zhang, X. & Golomb, J.D. (May 2016). Feature-location binding, the "spatial congruency bias", and object-based attention. Poster presented at Annual Meeting of the Vision Science Society, St. Pete Beach, FL.

Zhang, X. & Golomb, J.D. (Nov 2015). Detecting target displacements across eye movements: How can non-targets work as "landmarks"? Poster presented at Annual Workshop on Object Perception, Attention, and Memory, Chicago, IL.

Finlayson, N.J., Zhang, X. & Golomb, J.D. (Nov 2015). The Representation and Perception of 3D Space: Interactions Between 2D Location and Depth. Talk presented at Annual Workshop on Object Perception, Attention, and Memory, Chicago, IL.

Finlayson, N.J., Zhang, X. & Golomb, J.D. (May 2015). Human visual cortex gradually transitions from 2D to 3D spatial representations. Talk presented at Annual Meeting of the Vision Science Society, St. Pete Beach, FL.

Invited Talks

Oct. 2023	Cognitive Forum, Department of Psychology, The Michigan State University
Oct. 2022	Center for Cognitive and Behavioral Brain Imaging (CCBBI) Student Group, The Ohio State University
Oct. 2019	Department of Psychological and Brain Sciences, The George Washington University

Academic Affiliations

2021 – 2022	Organizer, Object Perception, Attention and Memory conference (OPAM)

2020 –	Member, Psychonomic Society
2014 –	Member, Vision Science Society
2017, 2019, 2021	Student/Post-doc member, Society for Neuroscience
2014 – 2020	Member, Center for Cognitive and Brain Sciences, The Ohio State University
2012 – 2013	Student trainee, "Spark" Innovative Talent Cultivation Program for Students of Tsinghua University
2009 – 2012	Student member, Student Academic Center, School of Humanities and Social Sciences, Tsinghua University

Ad-hoc Reviewing
Journals:

Scientific Report	*Attention, Perception, & Psychophysics*
Journal of Experimental Psychology: Human Perception and Performance	*Journal of Experimental Psychology: General*
Imaging Neuroscience	*Psychological Science*
Journal of Neurophysiology	

Grant Agencies: *National Science Foundation (NSF)*

Undergraduate Research Mentoring

May, 2024 –	Sydney George, post-bacc research assistant in Liu Lab, The Michigan State University
	Research project: The number and processing of attentional templates
Dec., 2015 – Aug., 2016	Marina Barboza, undergraduate research assistant in Golomb Lab, The Ohio State University
	Research project: Feature-location binding, the "spatial congruency bias", and object-based attention

Teaching
Instructor: (The George Washington University)
> Grad-level workshop – Introduction to fMRI and advanced analyses: Spring 2023

Instructor: (The Ohio State University)
> Introduction to Psychology: Fall 2017; Spring 2018; Fall 2019

Teaching Assistant: (The Ohio State University)
> Perception and Language: Spring 2017
> Theories of Personality: Fall 2016
> Introduction to Social Psychology: Fall 2016
> Research Methods: Fall 2016
> Memory and Cognition: Spring 2016; Spring 2017
> Cognitive Neuroscience: Fall 2015
> Introduction to Behavioral Neuroscience: Fall 2015
> Introduction to Psychology: Fall 2015; Fall 2016

Volunteering and Outreach

Apr. 2021 & Apr. 2022	Judge. GW Research Showcase at the George Washington University, US.
Dec. 2019	Volunteer. The CCBBI Research Day at The Ohio State University, US.
May 2019	Volunteer. The COSI Science Festival at Columbus OH, US.
June 2017	Panelist. Meeting with visiting prospective graduate students from the TRIO McNair Program at the University of Illinois Urbana-Champaign, at The Ohio State University, US.
Apr. 2017	Judge. Oral poster presentation sessions for Cognitive Psychology Research Course at The Ohio State University, US.
July 2012	Volunteer as teacher. College Student Teaching Support Program from Tsinghua University to Gansu Province, China
July 2011	Volunteer. Group Counseling Program for teachers hired by Fu Hui Education Foundation in Sichuan Province for underprivileged children. Program held by Psychology Department of Tsinghua University and Hong Kong University, China
Aug 2010	Leader. Summer social practice from Tsinghua University: college students' teaching support for poverty-stricken area in Henan Province, China