Zhiyan Wang

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Education

2016-	**Ph.D. candidate in Psychology** Cognitive and Perceptual Learning Lab Department of Cognitive, Linguistic and Psychological Sciences Brown University Advisor: Takeo Watanabe
2016-2018	**M.A. in Psychology** Department of Cognitive, Linguistic and Psychological Sciences Brown University *Master Thesis: The mechanisms of visual perceptual learning*
2012-2016	**B.S. in Psychology** Department of Cognitive and Psychological Sciences Peking University, China *Thesis: Lateral Interactions and Grouping in Adaptation*

Professional Experience

2019 – 2020	**Trainee for T32 Training Grant Interactionist Cognitive Neuroscience** Robert J. & Nancy D. Carney Institute for Brain Science Brown University PIs: Takeo Watanabe, Yuka Sasaki, Michael Frank, David Badre, Christopher Moore
2013 - 2016	**Research Assistant in Accurate Vision Lab** Department of Cognitive and Psychological Sciences Peking University, China PI: Cong Yu
2015.7 - 2015.9	**Visiting Research Assistant in Cognitive and Perceptual Learning Lab** Department of Cognitive, Linguistic and Psychological Sciences Brown University PI: Takeo Watanabe
2014 - 2015	**National Undergraduate Innovative Research Program** Department of Cognitive and Psychological Sciences Peking University, China *Project: Feature-based attention and its influence on the transfer of visual perceptual learning*

Publications

Peer-reviewed journal article
Tan Q*., **Wang Z.***, Sasaki Y., Watanabe T. (2019). Category-induced transfer of visual perceptual learning. *Current Biology*. 29 (8): 1374-1378. (*equal contributions)
Tamaki, M., **Wang, Z.**, Watanabe, T., & Sasaki, Y. (2019). Trained-feature–specific offline learning by sleep in an orientation detection task. *Journal of vision*, 19(12), 12-12.

Preprints and journal articles under review
Wang Z., Kim D., Pedroncelli G., Sasaki Y., Watanabe T.(preprint) Reward evokes visual perceptual learning following reinforcement learning rules. doi: https://doi.org/10.1101/760017
Tamaki M., **Wang Z**., Barnes-Diana T., Berard V.A., Walsh E., Watanabe T., Sasaki Y. (preprint). Opponent neurochemical and functional processing in NREM and REM sleep in visual learning. doi: https://doi.org/10.1101/738666. Under review.

In preparation
Wang Z., Kim D., Sasaki Y., Watanabe T. (in preparation). Different degrees of generalization following reward and alertness induced learning.

Conference Presentations

Wang Z., Kim D., Sasaki Y., Watanabe T. (2017) Reward may explain how reward evokes visual perceptual learning. Poster presentation at *2017 Vision Science Society Annual Meeting*, Tampa, Florida / Poster presentation at '*Atoms, Axons, and Asteroids: Big Data in STEM' – Young Scholar Conference 2017*, Providence, Rhode Island
Wang Z., Tamaki M., Shibata K., Worden M., Sasaki Y., Watanabe T. (2018) Feature-based plasticity revealed by decoded fMRI neural feedback (DecNef). Poster presentation at 2018 *Vision Science Society Annual Meeting*, Tampa, Florida.
Wang Z., Kim D., Hu C., Sasaki Y., Watanabe T. (2018) Reward may evoke visual perceptual learning following reinforcement learning rules. Poster presentation at *2018 Society for Neuroscience Annual Meeting*, San Diego, California.
Tamaki, M., **Wang, Z.**, Barnes-Diana, T., Yamada, T., Walsh, E. G., Watanabe, T., & Sasaki, Y. (2019). Different but complementary roles of NREM and REM sleep in facilitation of visual perceptual learning associated with neurotransmitters changes revealed by magnetic resonance spectroscopy. Poster presentation at 2019 *Vision Science Society Annual Meeting*, Tampa, Florida.

Honors and Awards

2019-2020	Trainee of T32 Training Grant Interactionist Cognitive Neuroscience
2016-2017	Brown University Graduate Student Fellowship
2015-2016	Peking University Wusi Fellowship, China
2014-2015	Peking University Award for Good Academic Standing, China
2014-2015	National Innovation Award for Undergraduate Research, China

Services

2017-2018   **Organizer, Perception and Action Seminar Series**
Department of Cognitive, Linguistic and Psychological Sciences
Brown University

Certificates

2018   Sheridan Teaching Certificate – Level 2 (Course Design)
2017   Sheridan Teaching Certificate – Level 1
2020   Brown University MRI Research Facility – Level 3

Teaching

2017 Fall   Teaching assistant for CLPS 0900 Statistical Methods
2018 Spring   Teaching assistant for CLPS 0900 Statistical Methods
2018 Fall   Teaching assistant for CLPS 0120 Introduction to Sleep
2019 Spring   Teaching assistant for CLPS 0710 The Psychology and Philosophy of Happiness

Mentoring

Undergraduate   Chun Hu
Master/ Intern   Giorgia Pedroncelli

Professional Memberships

2018- present   Society for Neuroscience
2015- present   Vision Science Society