

Education

2013 – PhD in Neuroscience, Princeton Neuroscience Institute, Princeton, NJ
2009 – 13 BA in Neuroscience, Johns Hopkins University, Baltimore, MD

Research Experience

2013 – Graduate Student, Princeton Neuroscience Institute
Asif A. Ghazanfar – Developmental Neuromechanics & Communication Lab
2010 – 13 Research Assistant, Johns Hopkins Medical Institutions
John E. Desmond – Neuroimaging and Modulation Lab
Cherie L. Marvel – Cognitive Neuropsychiatric Lab

Publications

Manuscripts

Liao, D.A., Zhang, Y.S., Cai, L.X., & Ghazanfar, A. A. Internal States and Extrinsic Factors both determine monkey vocal production. PNAS, 2018 Apr 10.

Takahashi D.Y., **Liao, D.A.**, & Ghazanfar, A.A. Vocal Learning Via Social Reinforcement by Infant Marmoset Monkeys. Current Biology. 2017 Jan 1.

Liao, D.A., Kronemer, S.I., Yau, J.M., Desmond, J.E., & Marvel, C.L. Motor System Contributions to Verbal and Non-verbal Working Memory. Frontiers in Human Neuroscience. 2014 Aug 1

Yau, J.M., Hua, J., **Liao, D.A.**, & Desmond, J.E. Efficient and Robust Identification of Cortical Targets in Concurrent TMS-fMRI Experiments. Neuroimage. 2013 Mar 16.

Reviews and Commentaries

Liao, D.A., and Ghazanfar, A.A. Ephemeral Connections for Reaching and Grasping. Commentary on Mordinano I-C et al., PNAS, 2018 Jan 23.

Ghazanfar, A.A. and **Liao, D.A.** Constraints and Flexibility during vocal development: Insights from Marmoset monkeys. Current Opinion in Behavioral Science, 2017 Dec 6.

Abstracts & Posters (selected)

D.A. Liao, Y.S. Zhang, D.Y. Takahashi, El Hady, A. & A.A. Ghazanfar. The Anterior Cingulate Cortex as a nexus for vocal communication and energy allocation in marmoset monkeys. Society for Neuroscience, 2018 (Submitted)

Y.S. Zhang, T.J. Pisano, D.Y. Takahashi, A. El Hady, **D.A. Liao**, S.S.-H. Wang, & A.A. Ghazanfar. Neurovascular anatomy of the marmoset brain, links to the default mode network. Society for Neuroscience, 2018 (Submitted)

D.A. Liao, Y.S. Zhang, D.Y. Takahashi, & A.A. Ghazanfar. Social Distance modulates the spectro-temporal properties of vocalizations via arousal fluctuations in marmoset monkeys. Gordon Research Conference. Neuroethology: Behavior, Evolution, & Neurobiology, July 2017, Les Diablerets, Switzerland

D.A. Liao, Y.S. Zhang, L.X. Cai, & A.A. Ghazanfar. A unique central pattern generator for every vocalization? Exploring the roles of arousal and biomechanics on vocal diversity in marmoset monkeys. Society for Neuroscience, 2015. Chicago, IL.

D.A. Liao, M.L. Faulkner, J.J. Rilee, V. Azimi, J.E. Desmond & C.L. Marvel. fMRI and TMS Studies of Motor-Cognitive Interactions. American Neurological Association, October 13-15, 2013. New Orleans, Louisiana.

F.E. Garcea, **D.A. Liao**, & B.Z. Mahon. Parcellation of left parietal cortex by functional connectivity with the ventral and dorsal streams. Rovereto Workshop on Concepts, Actions, and Objects: Functional and Neural Perspectives. May 2013. Rovereto, Italy.

D.A. Liao, J.M. Yau, J.E. Desmond & C.L. Marvel. Contributions of the Motor System to Verbal and Non-Verbal Working Memory: a TMS Study. Society for Neuroscience, October 13-17, 2012. New Orleans, Louisiana.

D.A. Liao, J.M. Yau, D.M. Echavarria, M.L. Faulkner, J.E. Desmond & C.L. Marvel. Using fMRI and TMS to Study Interactions of the Motor System and Working Memory. Organization for Human Brain Mapping, June 10-14, 2012. Beijing, China.

Awards and Honors

2013 – 2017	NSF Graduate Research Fellowship Program (GRFP)
2017	Mentor for ReMatch Summer Undergraduate Research Program
2014	Best Student Project: Barcelona Cognition, Brain, & Technology (BCBT) Summer School
2012 – 2013	John J. Tatum Scholarship: Johns Hopkins University
2012	Summer Fellowship: Schmitt Foundation for Integrative Brain Research, University of Rochester
2012	Grants-in-aid of Research (Psychology): Sigma Xi, the scientific research society
2012	Provost's Undergraduate Research Award: Johns Hopkins University
2011 – 2012	Travel Award (3x): Johns Hopkins Neuroscience Department

Professional Memberships

2010 – 2013	Nu Rho Psi: Undergraduate Neuroscience Honor Society
2012 – 2013	Organization for Human Brain Mapping
2012 –	Society for Neuroscience
2014 –	Convergent Science Network of Biomimetics and Neurotechnology