Tianhe Wang

Email   tianhewang@berkeley.edu

ORCID   orcid.org/0000-0002-0131-850X

RESEARCH INTERESTS

Flexibility in human learning and decision-making. Computational principles of motor control and skill acquisition. The role of the cerebellum in cognition.

EDUCATION

2020-2026 PhD in Psychology, concentration in Cognitive Neuroscience
Department of Psychology, University of California Berkeley, Berkeley, CA USA
Advisor: Richard Ivry

2016-2020 Bachelor of Science in Biological Science
Honor Thesis: How children and adolescents balance between equity and efficiency
School of Life Science, Peking University, Beijing, China

PUBLICATIONS

Manuscripts under review

2024 **T Wang***, Y Fang, D Whitney
Sequential effects in reaching reveal efficient coding in motor planning
BioRxiv.

2024 **T Wang***, J Li, RB Ivry
Attention defines the context for implicit sensorimotor adaptation
BioRxiv.

2024 **T Wang***, RB Ivry
Contextual effects during sensorimotor adaptation are an emergent property of population coding in the cerebellum
BioRxiv.

Peer-reviewed manuscripts

2024 **T Wang**, RJ Morehead, JS Tsay, RB Ivry
The origin of movement biases during reaching
Elife

2024 **T Wang**, G Avraham, JS Tsay, SJ Abram, RB Ivry
Perturbation variability does not influence implicit sensorimotor adaptation
PLOS Computational Biology

2024 **T Wang**, G Avraham, JS Tsay, T Thummala, RB Ivry
Advanced feedback enhances sensorimotor adaptation
Current Biology

2023 S Chen, **T Wang**, Y Bao
Serial dependence in timing at the perceptual level being modulated by working memory
PsyCh Journal

2023   NM van Mastrigt, JS Tsay, **T Wang**, G Avraham, SJ Abram, K van der Kooij, JBJ Smeets, RB Ivry
Implicit reward-based motor learning
Experimental Brain Research

2023   **T Wang**, Y Luo, RB Ivry, JS Tsay, E Pöppel, Y Bao
A unitary mechanism underlies adaptation to both local and global environmental statistics in time perception
PLOS Computational Biology

2022   JS Tsay, T Najafi, L Schuck, **T Wang**, RB Ivry
Implicit sensorimotor adaptation is preserved in Parkinson's disease
Brain Communications

2021   **T Wang**, JA Taylor
Implicit adaptation to mirror reversal is in the correct coordinate system but the wrong direction
Journal of neurophysiology

2021   **T Wang**, Z Zhu, I Kana, Y Yu, H He, K Wei
Accuracy of hand localization is subject-specific and improved without performance feedback
Scientific Reports

FELLOWSHIPS & AWARDS

2025   NCM Scholarship award, Society for the Neural Control of Movement
2022   Travel Fellowship, University of California Berkeley
2021   Department Fellowship, University of California Berkeley
2020   Shentong Distinguished Graduate Award, Peking University

TALKS

2025   Contextual effects during implicit recalibration are an emergent property of population coding in a cerebellar model
Neural Control of Movement Conference, Panama City, Panama

2025   Cerebellar ataxia patients exhibit accurate representation of a temporal prior despite noisy evidence
Cerebellum Gordon Research Seminar, Vaud, Switzerland

2023   A cerebellar population coding model for sensorimotor adaptation
2023 Berkeley Neuroscience Conference, Taheo City, CA

2023   A cerebellar population coding model for sensorimotor adaptation
Advances in Motor Learning and Motor Control, Washington DC, USA

2022   Serial dependence reveals an active suppression in the sequential motor planning
Advances in Motor Learning and Motor Control, San Diego, CA

2021   Why is online feedback more effective than endpoint feedback for sensorimotor adaptation?
Advances in Motor Learning and Motor Control, Virtual Conference

2021   Sequential effect in duration reproduction is from both perception and response

International Conference on Spatial Cognition, Rome, Italy

PROFESSIONAL EXPERIENCE

Teaching Experience

2023	Graduate student instructor Human Neuroanatomy Department of Psychology, UC Berkeley
2021	Graduate student instructor Cognitive Neuroscience Department of Psychology, UC Berkeley
2018	Undergraduate teaching instructor Methods in Psychology Research Department of Psychology, Peking University

Service Experience

2023-2024	Member of Searching Committee for the Biological Basis of Behavior, UC Berkeley
2023	Graduate Student Mentor for Research Experience Pathways in Psychology Program, UC Berkeley

Ad Hoc Reviewer

Journal of Neuroscience; Cerebral Cortex; Communications Biology; Journal of Neurophysiology; Scientific Reports; NPJ Science of Learning; Human movement science; Journal of Behavioral and Brain Science

ADVISING & MENTORSHIP

Undergraduate Students (*indicates honors thesis student)

2025-present	Noah A Math - UC Berkeley
2025-present	Mihail Dimitrov - UC Berkeley
2025-present	Ijin Yu - UC Berkeley
2025-present	Suqing Xie - UC Berkeley
2024	Mary Swanson-Wunder - UC Berkeley
2024-present	Maoxin M Xia* - Wuhan University
2024-present	Amber Jiang - UC Berkeley
2023-present	Yuling Li - UC Berkeley
2023	Marina J Armstrong - UC Berkeley
2022-2024	Tony Lam - UC Berkeley
2022-2024	Yifan Fang - UC Berkeley
2021-2023	Jialin J Li - UC Berkeley
2021-2024	Tanvi Thummala* - UC Berkeley