Tianhe Wang

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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 EXPERIENCES

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