Taraz G. Lee, Ph.D. tarazlee@umich.edu 3266 East Hall (Department of Psychology) University of Michigan 530 Church St. Ann Arbor, MI 48109

ACADEMIC POSITIONS

Assistant Professor, Department of Psychology University of Michigan, Ann Arbor	2017 - Present
Diversity Postdoctoral Fellow, Department of Psychology University of Michigan, Ann Arbor	2015 - 2017
Postdoctoral Fellow, Department of Psychological and Brain Sciences University of California, Santa Barbara, Santa Barbara, CA Advisor: Scott Grafton, M.D	2012 - 2015
EDUCATION	
University of California, Berkley, Berkeley, CA PhD, Psychology with a concentration in Cognition, Brain, and Behavior Advisor: Mark D'Esposito, M.D.	2007 - 2012
Standford University, Stanford, CA BS, Symbolic Systems with a concentration in Neurosciences	2000 - 2005
AWARDS AND HONORS	
Psychonomic Society Early Career Award Psychonomic Society	2024
Psychonomic Society Fellow Psychonomic Society	2023
Graduate Mentoring Award Department of Psychology, University of Michigan	2023
Wilbert J. McKeachie Award for Excellence in Lecture Based Teaching Department of Psychology, University of Michigan	2022
Stanley Fahn Junior Faculty Award Parkinson's Foundation	2021
4x Golden Apple Nomination for Best Undergraduate Instructor (Student-nominated and student-selected university-wide award) <i>University of Michigan</i>	2017 - 2021
GRANTS AND FUNDING	

ACTIVE

NSF2342319 (Lee)	
NSF	

Toward a Psychological and Neural Model of Conflict Resolution

Cognitive life depends on performing goal-directed tasks in the face of competition from habitual tendencies. Driving on the left side of the road in England if one is used to driving in the United States, for example, requires one to avoid the tendency to drive on the right. How is it that such competition from habitual tendencies is overcome? We here propose a novel method to investigate this issue that allows the tracking of habitual and goal-directed tendencies. This method has yielded telling data about the time course of habitual and goal-directed tendencies. We propose a model of these tendencies that is tied to neural structures principally in frontal cortex, and we test this model using functional MRI, electromyography, and transcranial magnetic stimulation. This model makes clear that in cases of conflict between differing tendencies, there are two processes that compete to control responding with different time courses.

\$628.961

05/01/2024 - 4/30/2027

Role: Principal Investigator

07/01/2023-06/30/2026 NSF2238151 (Jonides, Lee) 1.0 Mos NSF \$659.877

Probing attentional allocation with a novel forced-response method

Cognitive life depends on performing goal-directed activities in the face of distraction. One frequent source of distraction is stimulation from external sources, stimulation that is irrelevant to the task at hand. The proposed research is about applying a novel method, the forced-response technique, to allow us to model underlying processes that are engaged by this task and to address a number of important issues concerned with distraction, suppression of distracting stimulation, modulation of distractibility, and individual differences in susceptibility to distraction. Role: Co-Principal Investigator

1R21MH (Jonides)

NIH

\$429,000 Investigating interference-control in ADHD using a novel forced-response method Attention Deficit Hyperactivity Disorder (ADHD) is a condition that affects tens of millions of adults and is often associated with increased susceptibility to interference by irrelevant external stimulation which can adversely affect home and work life. In this project, we propose to (1) use a new method to study susceptibility to interference from irrelevant external information, (2) model the results from this method

01/01/2023 - 12/31/2024

to uncover the underlying processing difficulties faced by those with ADHD, and (3) apply this method to two different tasks both of which feature the need to control interference. Role: Co-Investigator

Stanley Fahn Junior Faculty Award (Lee)	07/01/2021 – 6/30/2025	1.0 Mos.
Parkinson's Foundation	\$299,640	

Causal examinations of the attention-motor interface in gait and falls

Control of gait and balance requires extensive integration of cognitive, motor, and sensory function in an Attentional Motor Interface (AMI). The goal of this proposal is to provide strong causal evidence via non-invasive brain stimulation that motor deficits in persons with Parkinson's disease are often due to dysfunction in brain regions known to be important in executive functions such as attention. Role: Principal Investigator

LSA Social Science Research Award (Lee)	07/01/2021 – 06/30/2024	No Effort
University of Michigan	\$28,642	

Investigating the Features of Cognitive Control with the Forced-Response Paradigm The vast majority of behavioral research examining cognitive control has relied on the use of free response times to infer the function of cognitive processes of interest. However, recent work has shown that choosing when to respond after response preparation is complete is itself a control parameter, thus undermining the use of free response times as a dependent variable. This project aims to better understand the microstructure of cognitive control processes by applying a forced-response paradigm and computational modeling of behavior.

Role: Principal Investigator

1.0 Mos.

1R21NS118055 (Vesia)	04/01/2021 - 09/30/2024	0.36 Mos.
NIH	\$429,000	
Leveraging behavioral state to enhar	nce specificity of non-invasive brain stimulation	n on motor circuits
The main goals of this project are to	(i) elucidate the neural mechanism by which r	TMS paired with a
motor task leads to improvements in	motor function and (ii) develop more targeted	network-modulatory
rTMS interventions to enhance motor	function.	-

Role: Co-Investigator

PA-20-185 (Albin, Lee)

PA-20-196 (Lee)

PENDING

NIH

NIH \$2.071.003 Understanding L-Dopa Pharmacodynamics in Parkinson Disease Our ultimate goal is to understand the mechanisms underlying the long duration response (LDR) in dopamine replacement therapy. Our immediate goals are to define the relationship between the LDR, the short-duration response (SDR), and the different components of bradykinesia, and to explore brain network changes accompanying the LDR and SDR. These studies are essential precursors for functional imaging or other detailed mechanistic studies of the LDR. Role: Co-Principal Investigator

04/01/2025 - 4/30/2030

NIH \$424,800 Investigating the relationship between adaptive control of visual attention, working memory, and eye movements

04/01/2025 - 04/30/2027

Everyday activities such as preparing a cup of coffee or driving our daily commute necessitate the ability to select the most relevant information to our current goals in an ever-changing environment. In the research proposed here, we aim to provide mechanistic, biological insight into the adaptive control of our visual attention and whether this mechanism of control is similar to well-established control mechanisms important for our movements. The knowledge gained from this proposal has the potential to aid in the formulation of improved treatment and rehabilitation plans for individuals with deficits related to both eye movements and cognitive functions. Role: Principal Investigator

COMPLETED

1F32MH124268-01 (Brissenden)	04/01/2021 -	- 03/31/2024	No Effort
NIH	\$207,012		
Causal Role of Cortico-Cereb The goal of this training grant combination of transcranial m and computational modeling of Role: Sponsor	is to investigate th agnetic stimulation	ne causal role of the cereb	bellum in WM using a etic resonance imaging (fMRI),
MCubod (Loo Bolk)(asia)	00/01/2019	12/21/2020	No Effort

MCubed (Lee, Polk, Vesia) 09/01/2018 - 12/31/2020 \$60,000 University of Michigan The impact of non-invasive stimulation on brain networks

No Effort

1.2 Mos.

09/01/2019 - 11/30/2024

1R21NS114749 (Albin)

Vigor and the Long Duration Response in Parkinson disease

This project's primary objective is to test the hypothesis that the long duration response (LDR) results from partial restoration of normal movement vigor-motivation. Our secondary objective is to evaluate a potential mechanism underlying the LDR.

Role: Co-Investigator

\$390.000

3.0 Mos.

1.0 Mos.

University of Michigan collaborative research pilot grant that stimulates innovative research and scholarship by distributing real-time seed funding to multi-unit, faculty-led teams and funds a research post-doc.

Role: Principal Investigator

 1R21MH120633 (Taylor)
 08/01/2019 – 05/31/2021
 0.72 Mos.

 NIH
 \$429,000
 \$429,000

Theta burst transcranial magnetic stimulation of fronto-parietal networks: Modulation by mental state This proposal will use functional magnetic resonance imaging to examine the effects of transcranial magnetic stimulation (TMS) on specific brain networks relevant for neuropsychiatric conditions. We will test the broad hypothesis that when TMS is applied to a brain in a controlled mental state, network changes induced by TMS will be facilitated, compared to stimulation when mental state is uncontrolled. Results from this study will be used to optimize TMS therapy for depression by controlling mental state to improve the efficacy of TMS treatment.

Role: Co-Investigator

PUBLICATIONS

Mentee / Student co-authors are underlined

- Zhang H, Sellers JA, Lee TG, & Jonides J (accepted). The temporal dynamics of visual attention. Journal of Experimental Psychology: General. PsyArxiv preprint doi: https://doi.org/10.31234/osf.io/e4ktq
- Panda R, Deluisi JA, Lee TG, Davis S, Muñoz-Orozco I, Albin RL, & Vesia M (2024). Improving efficacy of repetitive transcranial magnetic stimulation for treatment of Parkinson disease gait disorders. *Frontiers in Human Neuroscience*, 18, 1445595.
- Goldenkoff ER, <u>Deluisa JA</u>, **Lee TG**, Hampstead BM, Taylor SF, Polk TA, & Vesia M (2024). Repeated spaced cortical paired associative stimulation promotes additive plasticity in the human parietal-motor circuit. *Clinical Neurophysiology*, 166, 202-210.
- Ahn E, Majumdar A, Lee TG, & Brang D (2024). Evidence for a causal dissociation of the McGurk effect and congruent audiovisual speech perception via TMS to the left pSTS. *Multisensory Research*, 1(aop), 1-23.
- Adkins TJ, Zhang, H, & Lee, TG (2024). Errors lead to slips of action. *Nature Communications*, 15(1), 6422.
- Taylor SF, Gu P, Simmonite M, Lasagna C, Tso I, **Lee TG**, Vesia M, Hernandez-Garcia L (2024). Lateral prefrontal stimulation of active cortex with theta burst transcranial magnetic stimulation affects subsequent engagement of the frontopolar network. *Biological Psychiatry: Cognitive Neuroscience and Neuroimaging.*
- Brissenden JA, Scerbak T, Albin RA, Lee TG (2024). Motivational vigor in Parkinson's disease requires the short and long duration response to L-dopa. *Movement Disorders*, 39(1), 76-84.
- Goldenkoff ER, Deluisi JA, Destiny DP, **Lee TG**, Michon KJ, <u>Brissenden JA</u>, Taylor SF, Polk TA, Vesia M (2023). The behavioral and neural effects of parietal theta burst stimulation on the grasp network are stronger during a grasping task than at rest. *Frontiers in Neuroscience*, *1*-17.
- Adkins TJ & Lee TG (2023). Reward accelerates the preparation of goal-directed actions under Conflict. Journal of Cognitive Neuroscience, 1-16.
- Brissenden JA, Adkins TJ, Hsu YT, & Lee TG (2023). Reward influences the allocation but not the availability of resources in visual working memory. *Journal of Experimental Psychology: General*, 152 (7), 1825-1839.

- Gallen CL, Hwang K, Chen AJW, Jacobs EG, Lee TG, & D'Esposito M (2023). Influence of goals on modular brain network organization during working memory. *Frontiers in behavioral neuroscience*, *17*, 1128610.
- Adkins TJ, Lewis R, & Lee TG (2022). Heuristics contribute to sensorimotor decision-making under risk. *Psychonomic Bulletin and Review, 29(1), 145-158.*
- Lasagna CA, Taylor SF, Lee TG, Rutherford S, Greathouse T, Gu P, & Tso IF (2021). Continuous theta burst stimulation to the secondary visual cortex does not impair central vision in humans. *Frontiers in Human Neuroscience*, 491.
- Adkins TJ, Gary BS, & Lee TG (2021). Interactive effects of incentive value and valence on the performance of discrete action sequences. *Sci Rep* **11**, 9327 (2021).
- Adkins TJ, & Lee TG (2021). Reward modulates cortical representations of action. *NeuroImage 228, 117708.*
- Taylor SF, Lee TG, Jonides J, Tso IF, & Hernandez-Garcia L (2020). Theta burst transcranial magnetic stimulation of fronto-parietal networks: Modulation by mental state. *J Psychiatry Brain Sci 5*, e200011
- <u>Anderson SP, Adkins TJ, Gary B</u>, & Lee TG (2020). Rewards interact with explicit knowledge to enhance skilled motor performance. *The Journal of Neurophysiology*, 123 (6), 2476-2490.
- Lee TG, Acuna D, Kording KP, & Grafton ST (2019). Limiting motor skill knowledge via incidental training protects against choking under pressure. *Psychonomic Bulletin and Review* 26(1), 279-290.
- Gazzaley A, Lee TG, & D'Esposito M (2017). The frontal lobes and executive control. In: Miller B., Cummings JL. The Human Frontal Lobes, 3rd Edition, Guilford Publications, New York, NY.
- Wang W, Viswanathan S, Lee TG, & Grafton ST (2016). Coupling between theta oscillations and cognitive control network during cross-modal visual and auditory attention: Supramodal vs Modality-Specific Mechanisms. *PloS one* 11(7), e0158465.
- Lorenc ES, Lee TG, Chen AJW, & D'Esposito M (2015). The effect of disruption of prefrontal cortical function with transcranial magnetic stimulation on visual working memory. *Frontiers in Systems Neuroscience* 9:169.
- Barany DA, Shapiro AD, & Lee TG (2015). Multivariate fMRI approaches to flexible sensorimotor maps in parietal cortex. *The Journal of Neuroscience* 35, 11763-11765.
- Lee TG & Grafton ST (2015). Out of control: Diminished prefrontal activity coincides with impaired motor performance due to choking under pressure. *NeuroImage* 106, 145-155.
- Cohen JR, Gallen CL, Jacobs EG, Lee TG, & D'Esposito M (2014). Quantifying the reconfiguration of intrinsic networks during working memory. *PloS one*, *9*(9).
- Finn AS, Lee T, Kraus A, & Kam CLH (2014). When it hurts (and helps) to try: the role of effort in language learning. *PloS one*, *9*(7).
- Gratton C*, **Lee TG***, Nomura EM, & D'Esposito M (2014). Perfusion MRI indexes variability in the functional brain effects of theta-burst transcranial magnetic stimulation. *PloS one*, *9*(7), e101430.

*These authors contributed equally to this work and are listed alphabetically

- Blumenfeld RS, Lee TG, & D'Esposito, M (2014). The effects of lateral prefrontal theta-burst stimulation on item memory encoding. *Neuropsychologia* 53, 197-202.
- Gratton G, Lee TG, Nomura EM, & D'Esposito M. (2013). The effect of theta-burst TMS cognitive control networks measured with resting state fMRI. *Frontiers in systems neuroscience, 7.*
- Lee TG, Blumenfeld RS, & D'Esposito, M (2013). Disruption of dorsolateral but not ventrolateral prefrontal cortex improves unconscious perceptual memories. *The Journal of Neuroscience* 33, 13233-13237.
- Lee TG, & D'Esposito M (2012). The dynamic nature of top-down signals originating from prefrontal cortex: A combined fMRI-TMS study. *The Journal of Neuroscience* 32: 15458-15466.

PREPRINTS AND PENDING MANUSCRIPTS

- Lee TG, <u>Sellers JA</u>, Jonides J, <u>Zhang H</u> (in revision). The forced-response method: A new chronometric approach to measuring conflict processing. *PsyArXiv preprint. https://doi.org/10.31234/osf.io/byzqf*
- Nguyen QN, Michon KJ, Lee TG (in revision). Dissociable causal roles of dorsolateral prefrontal cortex and primary motor cortex as a function of motor skill expertise. *bioRxiv preprint. https://doi.org/10.1101/2023.10.20.563280*
- Zhang H, Sellers JA, Lee TG, Jonides J (in revision). The temporal dynamics of visual attention. *PsyArxiv* preprint. https://doi.org/10.31234/osf.io/e4ktq
- Brissenden JA, Vesia M, Lee TG (submitted). Errors of attention adaptively warp spatial memory. *bioRxiv* preprint. https://doi.org/10.1101/2024.05.15.594205
- Goldenkoff ER, Deluisa JA, Lee TG, Hampstead BM, Taylor SF, Polk TA, Vesia M (in revision). Repeated spaced cortical paired associative stimulation promotes additive plasticity in the human parietal-motor circuit.

INVITED TALKS AND PRESENTATIONS

Princeton University, Princeton, NJ Cognitive Control of Action Workshop	2024
Parkinson's Foundation, Bethesda, MD Annual Grantee Summit	2023
University of Michigan, Ann Arbor, MI Critical Conversations Discussion Series	2023
Advances in Motor Learning and Motor Control, Washington, D.C. Plenary Speaker	2023
Stanford University, Palo Alto, CA <i>Wu Tsai Neuroscience Seminar Series</i>	2023
University of Pennsylvania, Philadelphia, PA MindCORE seminar series	2023
University of Michigan, Ann Arbor, MI	2023

Biopsychology colloquium

Yale University, New Haven, CN Current works in Neuroscience, Genetics, and Behavior Seminar Series	2023
Portland Trail Blazers, Portland, OR Front Office Seminar	2022
University of Leeds, Leeds, United Kingdom School of Psychology Research Seminar	2022
Duke University, Durham, NC Center for Cognitive Neuroscience Colloquium Series	2022
Michigan State University, Lansing MI Cognition and Cognitive Neuroscience Brown Bag Series	2022
Dartmouth College, Hanover, NH Department of Cognitive Science Seminar Series	2022
Harvard Medical School, McLean Imaging Center, Belmont, MI McLean Hospital Imaging Center Speaker Series	2022
Tufts University, Medford, MA <i>Cognitive and Brain Science Seminar Series</i>	2022
University of Texas at Dallas, Dallas, TX Center for Vital Longevity Colloquium Series	2022
Rotman Research Institute, Toronto, ON Rounds Series	2021
University of New Mexico, Albuquerque, NM Department of Psychology Colloquium Series	2021
University of California at Riverside, Riverside, CA Cognition and Cognitive Neuroscience Brownbag Series	2021
University of Michigan, Ann Arbor, MI Movement Disorder Conference	2021
Cognitive Neuroscience Society Annual Meeting (virtual) Affirming Black Excellence in Cognitive Neuroscience Symposium	2021
NYU Abu Dhabi, Abu Dhabi, United Arab Emirates NeuroAD speaker series	2021
Brown University, Providence, RI Cognitive Seminar Series, Department of Cognitive, Linguistic, and Psychological Sciences	2021
Georgetown University, Washington, D.C. Interdisciplinary Program in Neuroscience seminar	2021
Northwestern University, Evanston, IL Cognitive Brain Mapping Group, Department of Psychology	2021

Muhlenberg College, Allentown, PA Neuroscience department seminar	2021
University of Washington, Seattle, WA Cognitive psychology departmental seminar	2021
Purdue University, West Lafayette, IN Cognitive colloquium, Department of Psychology	2021
University of Wisconsin, Madison, WI Cognitive proseminar	2021
University of Indiana, Bloomington, IN Neuroscience and Cognitive Science Symposium	2020
Harvard University, Caimbridge, MA Cognition, Brain, and Behavior Research Seminar	2020
University of Texas, Austin, TX Cognitive Neuroscience Seminar	2020
Stanford University, Stanford, CA Developmental Area Brownbag	2020
Texas A & M, College Station, TX Cognition and Cognitive Neuroscience Brownbag	2020
University of Notre Dame, South Bend, IN Department of Psychology, Cognition, Brain, and Behavior colloquium	2020
University of Michigan, Ann Arbor, MI Department of Psychology, Biopsychology Colloquium	2018
University of Michigan, Ann Arbor, MI Udall Center for Excellence in Parkinson's Disease, Udall Research Update	2018
University of Oregon, Eugene, OR Department of Human Physiology, Department Seminar Series	2018
University of North Carolina, Chapel Hill, NC Department of Psychology, Cognitive Area Colloquium	2017
UC Santa Barbara, Santa Barbara, CA Summer Institute for Cognitive Neuroscience	2014
UC Santa Barbara, Santa Barbara, CA Cognition, Perception, and Cognitive Neuroscience seminar	2012
UC Berkeley, Berkeley, CA Berkeley-Stanford Talks – Cognition, Brain, and Behavior	2011
UC Berkeley, Berkeley, CA Bay Area Memory Meeting	2011
Stanford University, Stanford, CA	2010

CONFERENCE ABSTRACTS

- Panda R, Proctor ES, Li Y, Nguyen QN, Albin RL, Vesia M, Lee TG (2023). Causal evidence for the role of cognitive control networks in motor performance in Parkinson's Disease: a combined fMRI-TMS approach. *Society for Neuroscience,* Annual Meeting.
- Sellers JA, Adkins TJ, Zhang H, Jonides J, Lee TG (2023). Causal evidence for the role of lateral prefrontal cortex in the time course of interference resolution. *Society for Neuroscience,* Annual Meeting.
- Goldenkoff ER, Deluisi JA, Lee TG, Brissenden JA, Taylor SF, Polk TA, Vesia M (2023). State-dependent effects of parietal stimulation on cortical plasticity and action control. *Society for Neuroscience,* Annual Meeting.
- Deluisi JA, Goldenkoff ER, Lee TG, Brissenden JA, Taylor SF, Polk TA, Wittenberg GF, Vesia M (2023). DSgrid: a dual-site TMS grid-search targeting method for personalized functional stimulation of parietal-frontal circuits involved in actions. *Society for Neuroscience,* Annual Meeting.
- Deluisi JA, Goldenkoff ER, Lee TG, Brissenden JA, Taylor SF, Polk TA, Vesia M (2023). State-dependent effects of parietal intermittent theta burst stimulation on visuomotor control circuits. *Society for Neuroscience,* Annual Meeting.
- Nguyen QN, Michon KJ, Brissenden JA, & Lee TG (2023). Dynamic causal roles of lateral prefrontal cortex and primary motor cortex in the expression of novice and expert motor skills. Society for *Neuroscience,* Annual Meeting.
- Brissenden JA & Lee TG (2023). Differential causal roles of parietal cortex, frontal cortex, and cerebellum in spatial working memory. *Society for Neuroscience,* Annual Meeting.
- Brissenden JA & Lee TG (2022). Causal contribution of cortico-cerebellar regions to visual working memory. *Society for Neuroscience,* Annual Meeting.
- Nguyen Q & **TG Lee** (2022). Causal roles of cortical circuits in long-term motor expertise. *Society for Neuroscience,* Annual Meeting.
- Brissenden JA & Lee TG (2022). Exogenous attention errors induce adaptation of spatial working memory. *Cognitive Neuroscience Society,* Annual Meeting.
- Nguyen Q & **TG Lee** (2022). Representational geometry in the middle frontal gyrus predicts idiosyncratic performance in a rewarded motor task. *Cognitive Neuroscience Society,* Annual Meeting.
- Brissenden JA & Lee TG (2021). Reward influences the flexible allocation of resources in working memory. *Psychonomic Society,* Annual Meeting.
- Adkins TJ, & Lee TG (2021). Reward accelerates the preparation of goal-directed actions. *Psychonomic Society,* Annual Meeting.
- Adkins TJ, & Lee TG (2021). Reward modulates cortical representations of action. *Neuromatch 3.0*, Neuromatch virtual meeting.
- Lee TG, & Nguyen Q (2020). Distinct causal roles of DLPFC and M1 in long-term motor expertise: a combined TMS-fMRI study. *Cognitive Neuroscience Society*, Annual Meeting.

- Adkins TJ, & Lee TG (2019). Incentives modulate fronto-striatal BOLD representations of skilled action. Society for Neuroscience, Annual Meeting.
- Lee TG, & Adkins TJ (2019). Distinct causal roles of DLPFC and M1 in long-term skill learning: A combined TMS-fMRI study. *Society for Neuroscience,* Annual Meeting,
- Goldenkoff E, Lee TG, Polk TA, & Vesia M (2019). Effect of cerebellar theta burst stimulation on plasticity of interconnected parietal and motor areas, *Society for Neuroscience*, Annual Meeting.
- Anderson SP, Adkins TJ, Gary, BA, & Lee TG (2019). Explicit cues lead to reward-related enhancements in motor skill performance. *Cognitive Science Society*, Annual Meeting.
- Adkins TJ, & Lee TG (2018). The impact of monetary incentives on multi-voxel decoding of motor skill representations. *Society for Neuroscience,* Annual Meeting.
- Adkins TJ, & Lee TG (2018). Human visuo-motor decision making under risk is not optimal. Interdisciplinary Symposium on Decision Neuroscience.
- Lee, TG (2016). Explicitly trained sequences display vulnerability to performance pressure due to monetary incentives while implicitly trained sequences do not. Society for Neuroscience, Annual Meeting.
- Volz LJ, Asturias A, Cieslak M, Lee TG, & Grafton ST (2016). Monetary incentives differentially modulate fast and slow motor learning. *Society for Neuroscience,* Annual Meeting.
- Shapiro AD, Volz LJ, Lee TG, & Grafton ST (2016). Intentional binding with sustained visual feedback: A paradigm compatible with chronometric TMS. *Society for Neuroscience,* Annual Meeting.
- Lee TG, Barany DA, & Grafton ST (2015). Choking under pressure due to high incentives as a change in state distinct from motivated performance. *Society for Neuroscience,* Annual Meeting.
- Gallen CL, Hwang K, Lee TG, & D'Esposito M (2015). Influence of selective attention on brain network reconfiguration during working memory. *Society for Neuroscience,* Annual Meeting.
- Torgerud W, Mussack D, Lee TG, Maffei G, Cotugno G, & Schrater P (2015). Arousal decreases conservativeness in a random dot motion decision making task. *Society for Neuroscience,* Annual Meeting.
- Butcher PA, Osborne TG, Lee TG, & Taylor, JA (2015). Movement kinematics while choking under pressure. Society for Neuroscience, Annual Meeting.
- Lee TG, & Grafton, S (2014). TMS disruption of reward modulation in right dorsolateral prefrontal cortex impairs incentivized motor performance and modifies choking under pressure. Society for Neuroscience, Annual meeting.
- Lee TG, Panescu, AS, & Grafton, S (2014). Explicit, but not implicit motor sequence training contributes to choking under pressure due to large rewards. *Society for Neuroscience*, Annual meeting.
- Lee TG & Grafton, S (2014). Impulsivity and frontal activity contribute to choking under pressure due to monetary incentives. *Society for Neuroscience,* Annual Meeting.

- Gratton G, Lee TG, Nomura EM, & D'Esposito M (2012). The effect of theta-burst TMS on cognitive control networks. *Society for Neuroscience,* Annual Meeting.
- Lee TG, Blumenfeld, RS, & D'Esposito M (2011). Disruption of prefrontal cortical function improves memory performance without awareness. *Society for Neuroscience,* Annual Meeting.
- Blumenfeld, RS, Lee TG, Fidalgo, A, & D'Esposito M (2011). The effects of lateral prefrontal theta-burst stimulation on item memory encoding. *Cognitive Neuroscience Society*, Annual Meeting
- Lee TG & D'Esposito M (2010). TMS induced deactivation of prefrontal cortex alters enhancement of task-relevant representations in extrastriate cortex. *Society for Neuroscience,* Annual Meeting.
- Lee TG & D'Esposito M (2009). Disrupting top-down modulation in a Stroop task via repetitive transcranial magnetic stimulation to inferior prefrontal cortex. *Society for Neuroscience*, Annual Meeting.
- Fegen, D, Lee TG, Rissman, J, Buchsbaum, B, Badre, D, & D'Esposito M (2009). Cross-modal and attentional modulation effects in the thalamus and early sensory cortices, Cognitive Neuroscience Society, Annual Meeting.

TEACHING EXPERIENCE

Assistant Professor, Department of Psychology

University of Michigan, Ann Arbor, MI

"Introduction to Cognitive Psychology"

(Psych 240: Large Lecture Course)

- 2023 Student Evaluation: 4.9 out of 5
- 2021 Student Evaluation: 4.8 out of 5, Golden Apple Award Nomination; Housing Honored Instructor Award
- 2020 Student Evaluation: 4.7 out of 5, Golden Apple Award Nomination
- 2018 Student Evaluation: 4.7 out of 5, Golden Apple Award Nomination
- 2017 Student Evaluation: 4.9 out of 5, Golden Apple Award Nomination

"Basic Cognitive Processes' (Psych 741: Graduate Seminar)

- 2022 Student Evaluation: 5.0 out of 5
- 2020 Student Evaluation: 5.0 out of 5

"Expertise: Cognitive, Perceptual, and Motor Skill Learning/Performance" (Psych 748: Graduate Seminar)

- 2023 Student Evaluation: 5.0 out of 5
- 2021 Student Evaluation: 5.0 out of 5
- 2019 Student Evaluation: 5.0 out of 5

Postdoctoral Researcher, Department of Psychology

University of Michigan, Ann Arbor, MI

"Introduction to Cognitive Psychology" (Psych 240: Discussion Section)

• 2016 – Student Evaluation: 4.9 out of 5

Instructor, Academic Study Associates Summerfuel program

University of California, Berkeley, Berkeley, CA

"Abnormal Psychology – Human Neuropsychology" (Seminar)

- 2012, Summer
- 2011, Summer
- 2010, Summer

Graduate Student Instructor, Department of Psychology

University of California, Berkeley, Berkeley, CA

"Cognitive Neuroscience"

• 2009 – Student Evaluation: 6.17 out of 7

"Human Neuropsychology"

• 2008 – Student Evaluation: 6.36 out of 7

MENTORING EXPERIENCE

MENTEE AWARDS

National Science Foundation Graduate Research Fellowship Program Honorable Mention to Rupsha Panda	2024
Arthur Miller Creative Arts Honors Thesis Award to Sean Anderson	2021
Ruth L. Kirschstein Postdoctoral Individual National Research Service Award to James Brissenden	2021
National Science Foundation Graduate Research Fellowship Program Honorable Mention to Quynh Nguyen	2021
National Science Foundation Graduate Research Fellowship Program Honorable Mention to Tyler Adkins	2019
Rackham Merit Fellowship to Tyler Adkins	2017

GRADUATE / POSTDOCTORAL PRIMARY MENTORSHIP

- James Brissenden, Current postdoctoral fellow, Department of Psychology, University of Michigan
- Quynh Nguyen, Current PhD student, Department of Psychology, University of Michigan
- Jacob Sellers, Current PhD student, Department of Psychology, University of Michigan
- Rupsha Panda, Current PhD student, Department of Psychology, University of Michigan
- Tyler Adkins, PhD, Department of Psychology, University of Michigan (2022)

PhD / MASTERS THESIS COMMITTEE

- Madelyn Quirk, PhD, Department of Psychology, University of Michigan (expected 2024)
- Hammad Ahmad, PhD, Computer Science and Engineering, University of Michigan (expected 2024)
- Yuwei "Emily" Bao, PhD, Computer Science and Engineering, University of Michigan (expected 2024)
- Elana Goldenkoff, PhD, School of Kinesiology, University of Michigan (2024)

- EunSeon Ahn, PhD, Department of Psychology, University of Michigan (2023)
- Dalia Khammash, PhD, Department of Psychology, University of Michigan (2022)
- Lauren Grant, PhD, Department of Psychology, University of Michigan (2021)
- Lilian Cabrera-Haro, PhD, Department of Psychology, University of Michigan (2021)
- Tessa Abagis, PhD, Department of Psychology, University of Michigan (2020)
- Anastasiia Mikhailova, MSc, Cognitive Science, Ruhr-University Bochum, Germany (2018)

UNDERGRADUATE RESEARCH ADVISING & THEIR CURRENT POSITIONS

- Yiran Li (Graduate Student in Computer Science, University of Waterloo)
- Sean Anderson (Graduate Student in Psychology, Stanford University)
- Leo Zekelman (Graduate Student in Speech, Hearing, Bioscience and Technology, Harvard University)
- Kyle LaFollette (Graduate Student in Psychology, Case Western Reserve University)
- Sophia Larriva (Pulmonary Function Technician, University of California, San Francisco)
- Jason Moreno (BCBA, MFT, Marriage and Family Therapy Intern, Dublin, California)
- Nicholas Alonso (Masters Student in Philosophy, Georgia State University)
- James Lim (Postdoctoral Research Associate, Molecular and Celllular Biology, University of Arizona)
- Max Egan (Graduate Student in Psychology, University of Illinois, Urban-Champaign)
- Anca Stefania Panescu (Trainee in Clinical Psychology, Cambridgeshire and Peterborough NHS Foundation Trust)
- Mengyuan (June) Liu (Graduate Student in Psychology, Hong Kong University, Hong Kong)
- Alexander Yood
- Erin Proctor
- Alice Yin
- Danielle Destiny
- Jack Rallo
- Brendan Duff
- Amanda Hsu
- Sara Pisanelli
- Annalise Harrison
- Rebecca O'Brien
- Sari Muallem
- Jonathan Hochberg
- Ermioni Carr

SERVICE AND LEADERSHIP

Department of Psychology, University of Michigan, Ann Arbor	
Chair, Admissions Committee for Cognition and Cognitive Neuroscience Area	2024
Executive Committee	2022 - 2023
Search Committee for Junior Faculty Hire in Cognition and Cognitive Neuroscience	2021
Diversity Committee	2017 - 2021
Chair, Recruitment Committee for Cognition and Cognitive Neuroscience Area	2020
Admissions Committee for Cognition and Cognitive Neuroscience Area	2017, 2018

Department of Psychology, University of California, Berkeley, Berkeley, CA	
Member, Diversity Student Alliance	2007 - 2012
Co-organizer, Berkeley-Stanford Talks – Cognition, Brain, and Behavior	2010
President, Graduate Assembly of Students in Psychology	2008

PROFESSIONAL ACTIVITIES AND AFFILIATIONS

EDITORIAL POSITIONS

Board of Reviewing Editors <i>eLife</i>	2019 - Present
Board of Consulting Editors Journal of Cognitive Neuroscience	2020 - Present
Program Committee Advances in Motor Learning and Motor Control Conference	2020

AD HOC REVIEWER

Cognitive Science Society; eLife; eNeuro; Human Brain Mapping; Journal of Cognitive Neuroscience; Journal of Memory and Language; Journal of Neuroscience; Journal of Neurophysiology; Advances in Motor Learning and Motor Control Conference; NeuroImage; Neuropsychologia; PLOS ONE; Proceedings of the National Academy of Sciences; Psychological Review; Scientific Reports

PROFESSIONAL SOCIETY AFFILITATIONS

- Psychonomics Society
- Society for the Neural Control of Movement
- Cognitive Neuroscience Society
- Society for Neuroscience
- Cognitive Science Society
- Association for Psychological Science
- SPARK Society
- BlackInNeuro