Samuel David McDougle, Ph.D.

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Positions

Yale University (2020-Present)

Assistant Professor, Psychology Program Faculty, Cognitive Science Program, Interdepartmental Neuroscience Program Affiliated Faculty, Wu Tsai Institute

University of California, Berkeley (2018-2020)

Postdoctoral Fellow, Psychology

Education

Ph.D., Psychology & Neuroscience, <u>Princeton University</u> (2018) BA, Neuroscience & Behavior, <u>Vassar College</u> (2009)

Research Program

Producing skilled action is an exquisitely complex task, one that requires virtually every cognitive tool we have. However, researchers who study motor behavior, typically engineers and neurobiologists, often neglect the study of the mind. One of my goals as a cognitive psychologist/neuroscientist studying action is to address this issue by investigating the 'cognitive-motor interface.' Using a combination of psychophysics, computational modeling, and neuroscience methods, I aim to understand how the motor system and the rest of the human mind work together to produce our species' singularly vast repertoire of skills. My work also reaches beyond psychology, touching on rehabilitation, robotics, virtual reality, and pedagogy in music, dance, and athletics.

Honors & Awards (selected)

- Arthur Greer Memorial Prize for Outstanding Scholarly Research (2025), Yale University
- Early Career Award (2024), The Society for the Neural Control of Movement
- Ruth L. Kirschstein National Research Service Award (2019-2020), National Institutes of Health
- Young Researcher Award (2017), Karniel Computational Motor Control Workshop
- Graduate Research Fellowship (2015-2018), National Science Foundation
- Centennial Scholar Fellowship (2013-2017), Princeton University

Research Funding (active)

• <u>National Institutes of Health</u>, R01NS132926, \$2,093,750; "Generalized Prediction Errors in the Human Cerebellum"; Role: **PI**

- <u>National Institutes of Health</u>, R01NS134754, \$2,277,758; "Fundamental Predictive Computations in Upper-Limb and Speech Adaptation"; Role: **PI** (MPIs: Caroline Niziolek, Benjamin Parrell, & Jordan Taylor)
- <u>National Institutes of Health</u>, R01MH133886, \$3,652,686; "Neural Computations of Learning, Decision-Making, and Memory"; Role: **Co-I** (PI: Ifat Levy)
- Meta, \$25,000; Unrestricted research gift; Role: PI

Research Funding (past)

- <u>Wu Tsai Institute, Yale University</u>, \$150,000; "Domain-General Neural Algorithms for Motion Detection"; Role: **Co-PI** (w/ Damon Clark)
- <u>Yale University</u>, Seesel Endowed Award for Postdoc Recruitment, \$75,000; "The Role of the Cerebellum in Reward-Based Learning: Implications for Neural Computation"; Role: **PI**
- National Institutes of Health, F32MH119797, \$121,708; "Modeling and mapping multiple computational processes in human reinforcement learning"; Role: PI (postdoc fellowship)

Publications

- 1. Zekun Sun & Samuel D. McDougle (2025). Perceiving event structure in brief actions. <u>Cognitive Psychology</u> [Accepted].
- 2. Parisa A. Vaziri, Samuel D. McDougle*, & Damon A. Clark* (2025). Humans can use positive and negative spectrotemporal correlations to detect rising and falling pitch. Nature Human Behaviour [Accepted] *co-authorship.
- 3. Samuel D. McDougle & Hanna Hillman (2025). Motor working memory. <u>Trends in Cognitive Sciences</u> [In Press].
- 4. Juliana E. Trach & Samuel D. McDougle (2025). Mental graphs structure the storage and retrieval of visuomotor associations. <u>Nature Human Behaviour</u>, 9: 1898-1912.
- 5. Ham Huang, Samuel D. McDougle, & Anne G.E. Collins (2025). Dual effects of dual-tasking on instrumental learning. Cognition, 264: 106228.
- 6. Juliana E. Trach, Megan T. deBettencourt, Angela Radulescu, & Samuel D. McDougle (2025). Rewards transiently and automatically enhance sustained attention. <u>Journal of Experimental Psychology</u>: General, 154(4): 1063-1079.
- 7. Xiuyuan Zhang, Samuel D. McDougle, & Julia A. Leonard (2025). People accurately predict the shape but not the parameters of skill learning curves. <u>Cognition</u>, 258: 106083.
- 8. Tal Boger, Sami R. Yousif, Samuel D. McDougle, & Robb B. Rutledge (2025). Random behavior is stable across tasks and time. Journal of Experimental Psychology: General, 154(6): 1571-1582.
- 9. Jonathan S. Tsay, Hyosub E. Kim, Samuel D. McDougle, Jordan A. Taylor, Adrian Haith, Guy Avraham, John W. Krakauer, Anne G.E. Collins, & Richard B. Ivry (2024). Fundamental processes in sensorimotor learning: Reasoning, Refinement, and Retrieval. eLife, 13: e91839.
- 10. Naser Al-Fawakhiri & Samuel D. McDougle (2024). Independent influences of movement distance and visual distance on Fitts' Law. <u>Journal of Experimental Psychology: General</u>, 153(8): 2160-2173.
- 11. Hanna Hillman, Tabea Botthof, Alexander D. Forrence, & Samuel D. McDougle (2024). Dissociable codes in motor working memory. Psychological Science, 35(2): 150-161.

- 12. Sami R. Yousif & Samuel D. McDougle (2024). Oblique warping: A general distortion of spatial perception. <u>Cognition</u>, 247: 105762.
- 13. Sami R. Yousif, Alexander D. Forrence, & Samuel D. McDougle (2023). A common format for representing spatial location in visual and motor working memory. <u>Psychonomic Bulletin & Review</u>, 31: 697-707.
- 14. Christopher L. Hewitson, Naser Al-Fawakhiri, Alexander D. Forrence, & Samuel D. McDougle (2023). Metacognitive judgments during visuomotor learning reflect the integration of error history. <u>Journal of Neurophysiology</u>, 130: 264-277.
- 15. Ashleigh V. Rutherford, Samuel D. McDougle, & Jutta Joormann (2023). "Don't [ruminate], be happy": A cognitive perspective linking depression and anhedonia. <u>Clinical Psychology Review</u>, 101: 102255.
- 16. Olivia A. Kim, Alexander D. Forrence, & Samuel D. McDougle (2022). Motor learning without movement. <u>Proceedings of the National Academy of Sciences</u>, 119(30): e2204379119.
- 17. Guy Avraham, Jordan A. Taylor, Assaf Breska, Richard B. lvry, & Samuel D. McDougle (2022). Contextual effects in sensorimotor adaptation adhere to associative learning rules. <u>eLife</u>, 11: e75801.
- 18. Samuel D. McDougle*, Jonathan Tsay*, Benjamin Pitt, Maedbh King, William Saban, Jordan A. Taylor, & Richard B. Ivry (2022). Continuous manipulation of mental representations is compromised in cerebellar degeneration. <u>Brain</u>, 145(12): 4246-4263 *co-authorship.
- 19. Juan A. Gallego, Tamar R. Makin, & Samuel D. McDougle (2022). Going beyond primary motor cortex to improve brain-computer interfaces. Trends in Neurosciences, 45(3): 176-183.
- 20. Samuel D. McDougle, Ian C. Ballard, Beth Baribault, Sonia J. Bishop & Anne G.E. Collins (2022). Executive function assigns value to novel goal-congruent outcomes. <u>Cerebral Cortex</u>, 32(1): 231:247.
- 21. Samuel D. McDougle, Sarah A. Wilterson, Nicholas B. Turk-Browne, & Jordan A. Taylor (2022). Revisiting the role of the medial temporal lobe in motor learning. <u>Journal of Cognitive</u> Neuroscience, 34(3): 532-549.
- 22. Samuel D. McDougle (2022). Post-error slowing during instrumental learning is shaped by working memory-based choice strategies. Neuroscience, 486: 37-45.
- 23. Faisal Mushtaq, Samuel D. McDougle, Matt P. Craddock, Darius E. Parvin, Jack Brookes, Alexandre Schaefer, Mark Mon-Williams, Jordan A. Taylor, & Richard B. Ivry (2022). Distinct processing of selection and execution errors in neural signatures of outcome monitoring. <u>Journal of Cognitive Neuroscience</u>, 34(5): 748-765.
- 24. Anne G.E. Collins & Samuel D. McDougle (2021). Context is key for learning motor skills. <u>Nature</u>, 600: 387-388 [News & Views].
- 25. James W. Antony, Thomas H. Hartshorne, Ken Pomeroy, Todd M. Gureckis, Uri Hasson, Samuel D. McDougle, & Kenneth A. Norman (2021). Behavioral, physiological, and neural signatures of surprise during naturalistic sports viewing. Neuron, 109: 377-390.
- 26. Lisa Langsdorf, Jana Maresch, Mathias Hegele, Samuel D. McDougle*, & Raphael Schween* (2021). Prolonged response time helps eliminate residual errors in visuomotor adaptation. <u>Psychonomic Bulletin & Review</u>, 28: 834-844 *co-authorship.

- 27. Samuel D. McDougle & Anne G.E. Collins (2021). Modeling the influence of working memory, reinforcement, and action uncertainty on reaction time and choice during instrumental learning. Psychonomic Bulletin & Review, 28: 20-39.
- 28. Milena Rmus, Samuel D. McDougle, & Anne G.E. Collins (2020). The role of executive function in shaping reinforcement learning. Current Opinion in Behavioral Sciences, 38: 66-73.
- 29. Raphael Schween, Samuel D. McDougle, Mathias Hegele, & Jordan A. Taylor (2020). Assessing explicit strategies in force field adaptation. Journal of Neurophysiology, 123: 1552-1565.
- 30. Samuel D. McDougle, Peter A. Butcher, Darius Parvin, Faisal Mushtaq, Yael Niv, Richard B. Ivry, & Jordan A. Taylor (2019). Neural signatures of prediction errors in a decision-making task are modulated by action execution failures. Current Biology, 29: 1606-1613.
- 31. Samuel D. McDougle & Jordan A. Taylor (2019). Dissociable cognitive strategies for sensorimotor learning. <u>Nature Communications</u>, 10(1), 40.
- 32. Alexander Mathis, Andrea R. Pack, Rodrigo S. Maeda, & Samuel D. McDougle (2019). Highlights from the 29th annual meeting of the Society for the Neural Control of Movement. <u>Journal of Neurophysiology</u>, 122(4): 1777-1783.
- 33. Darius E. Parvin, Samuel D. McDougle, Jordan A. Taylor, & Richard B. Ivry (2018). Credit assignment in a motor decision making task is influenced by agency and not sensorimotor prediction errors. Journal of Neuroscience, 38(19): 4521-4530.
- 34. Samuel D. McDougle, Krista M. Bond, & Jordan A. Taylor (2017). Implications of plan-based generalization in sensorimotor adaptation. The Journal of Neurophysiology, 118(1): 383-393.
- 35. Samuel D. McDougle, Richard B. Ivry, & Jordan A. Taylor (2016). Taking aim at the cognitive side of learning in sensorimotor adaptation tasks. Trends in Cognitive Sciences, 20(7): 535-544.
- 36. Samuel D. McDougle, Matthew J. Boggess, Matthew J. Crossley, Darius Parvin, Richard B. Ivry, & Jordan A. Taylor (2016). Credit assignment in movement-dependent reinforcement learning. Proceedings of the National Academy of Sciences, 113(24): 6797:6802.
- 37. Samuel D. McDougle, Krista M. Bond, & Jordan A. Taylor (2015). Explicit and implicit processes constitute the fast and slow processes of sensorimotor learning. <u>Journal of Neuroscience</u>, 35(26): 9568-9579.
- 38. Selmaan N. Chettih, Samuel D. McDougle, Luis I. Ruffolo, & Javier F. Medina (2011). Adaptive timing of motor output in the mouse: the role of movement oscillations in eyelid conditioning. <u>Frontiers in Integrative Neuroscience</u>, 5(72).

Preprints

- 1. Juliana E. Trach, Yiran Ou, & Samuel D. McDougle. The human cerebellum encodes temporally sensitive reinforcement learning signals. <u>bioRxiv.</u>
- 2. Hanna Hillman, Taylor McClure, & Samuel D. McDougle. Linking motor working memory to explicit and implicit motor learning. <u>bioRxiv.</u>
- 3. Benjamin Parrell, Chris Naber, Olivia A. Kim, Caroline A. Nizolek, & Samuel D. McDougle. Audiomotor prediction errors drive speech adaptation even in the absence of overt movement. bioRxiv.

- 4. Naser Al-Fawakhiri, Sarosh Kayani, & Samuel D. McDougle. Evidence of an optimal error rate for motor skill learning. <u>bioRxiv</u>.
- 5. Eugene Poh, Naser Al-Fawakhiri, Rachel Tam, Jordan A. Taylor, & Samuel D. McDougle. Generalization of motor learning in psychological space. <u>bioRxiv.</u>

Book Chapters

Jordan A. Taylor & Samuel D. McDougle (2019). Visuomotor adaptation tasks as a window into the interplay between explicit and implicit cognitive processes. <u>The Cognitive Neurosciences</u>, 6th edition, MIT Press (ed. Michael S. Gazzaniga).

Peer-Reviewed Conference Proceedings

- 1. Juliana E. Trach, David P. Carcamo, Samuel D. McDougle, & Christopher W. Lynn (2025). Human learning of non-Markov structures. <u>Proceedings of the 47th Annual Conference of the Cognitive Science Society.</u>
- 2. Sabrina J. Abram, Jonathan S. Tsay, Tianhe Wang, Samuel D. McDougle, & Richard B. Ivry (2025). Agency in action selection and action execution produce distinct biases in decision-making. Proceedings of the 6th Multidisciplinary Conference on Reinforcement Learning & Decision Making* *[selected for a talk].
- 3. Juliana E. Trach & Samuel D. McDougle (2025). Structured action preparation during visuomotor decision-making. <u>Proceedings of the 6th Multidisciplinary Conference on Reinforcement Learning & Decision Making.</u>
- 4. Juliana E. Trach & Samuel D. McDougle (2024). Rapid parallel processing dynamics during hierarchical category decisions. <u>Proceedings of the 46th Annual Conference of the Cognitive Science Society.</u>
- 5. Sami R. Yousif & Samuel D. McDougle (2023). A common oblique bias in perception and action. <u>Proceedings of the 45th Annual Conference of the Cognitive Science Society.</u>
- 6. Juliana E. Trach & Samuel D. McDougle (2023). Structured Dynamics of Hierarchical Action Selection. <u>Proceedings of the 45th Annual Conference of the Cognitive Science Society</u> *[selected for a talk].
- 7. Juliana E. Trach & Samuel D. McDougle (2022). Climbing the tree: structured hierarchical representations in visuomotor maps. <u>Proceedings of the 44th Annual Conference of the Cognitive Science Society</u> *[selected for a talk].
- 8. Xiuyuan Zhang, Samuel D. McDougle, & Julia A. Leonard (2022). Thinking about Doing: representations of skill learning. <u>Proceedings of the 44th Annual Conference of the Cognitive Science Society</u> *[selected for a talk].
- 9. Juliana E. Trach, Jed Burde, Megan T. deBettencourt, Angela Radulescu, & Samuel D. McDougle (2022). Reward Prediction Error Modulates Sustained Attention. <u>Proceedings of the 5th Multidisciplinary Conference on Reinforcement Learning & Decision Making.</u>
- 10. Sami R. Yousif, Samuel D. McDougle, & Robb B. Rutledge (2022). A task general model of human

- randomization. Proceedings of the 44th Annual Conference of the Cognitive Science Society.
- 11. Olivia A. Kim, Alexander D. Forrence, & Samuel D. McDougle (2021). Sensory prediction errors are sufficient for implicit adaptation of withheld movements. <u>Motor Learning & Motor Control</u> *[selected for a talk].
- 12. Samuel D. McDougle & Jordan A. Taylor (2016). Mental rotation as a Behavioral and neural model of explicit aiming during visuomotor learning. Motor Learning & Motor Control *[selected for a talk].

Invited Talks & Colloquia (selected)

- 2025: Chaucer Club, University of Cambridge, UK; Perception & Action Seminar, Brown University; Rising Stars Session at Cognitive Neuroscience Society (CNS) Annual Meeting, Boston MA; Neuroscience Symposium Keynote, Vassar College
- 2024: Neuroscience Seminar, EPFL, Lausanne, Switzerland; Early Career Award Keynote Talk, Neural Control of Movement (NCM), Dubrovnik, Croatia; Cognitive Seminar, Dartmouth College; Boston Action Club, Northeastern University; Convention on the Mathematics of Neuroscience and Al, Rome, Italy; Control Processes, University of Birmingham, UK; Cognitive Control of Action Workshop, Princeton University
- 2020-2023: The 8th CiNet Conference, Center for Information and Neural Networks, Osaka, Japan; SfN Minisymposium, San Diego CA; Cerebellar Seminar, Johns Hopkins University; External Seminar Series, Gatsby Computational Neuroscience Unit at University College London, UK; World Wide Neuro: The Learning Salon (public online seminar); Neuroeconomics Forum, Yale University; Centre for Human Brain Health Seminar, University of Birmingham, UK; Biological Sciences Training Program Seminar, Yale University; University of Leeds Colloquium, UK
- 2015-2019: Neural Control of Movement (NCM), Toyama, Japan; Yale Psychology Seminar, Yale University; Cognition and Neuroscience Seminar Series, Stanford University; Berkeley Neuroscience Retreat, UC Berkeley; Cognition and Computation Colloquium, UC Berkeley; Karniel Computational Motor Control Workshop, Beer-Sheva, Israel; Motor Learning and Motor Control, San Diego CA; Gordon Research Conference, Cerebellum: Circuit Physiology, Computation and Disease, Lewiston ME;

Training & Mentoring

- <u>Postdoctoral Scholars</u>: Dawei Bai (2025-present), Zekun Sun (2023-present), Christopher Hewitson (2022-24; now research scholar at the Max Planck Institute, Universität Tübingen), Olivia Kim (2020-22, visiting postdoc; now assistant professor at Bates College)
- <u>PhD Students</u>: Griffin Light (2025-present), Sanghoon Kang (2023-present), Apoorva Sharma (2023-present), Jay Gandhi (2023-present), Hanna Hillman (2020-present), Juliana Trach (2020-present), Liang Zhou (2022-23, visiting from UCL); Ani Jordan (2025, INP rotation student); Ryan Henry (2024, INP rotation student)
- <u>Postbac Researchers</u>: Taylor McClure (2025-present), Yiran Ou (2024-present), Naser Al-Fawakhiri (2022-23, now MD/PhD student at Johns Hopkins University), Alexander Forrence (2020-23, now Research Support Engineer at the Wu Tsai Institute, Yale University)
- <u>Dissertation Committees (Yale)</u>: Kimberly Wong, Xiuyuan Zhang, Vlad Chituc, Rowena Chin, Kathryn Graves, Michael Lopez-Brau, Ashleigh Rutherford, Siqi Fan, Sami Yousif, Lena Skalaban

- <u>External Dissertation Committees</u>: Matthias Will (Universität Magdeburg, Germany), Sébastien Hausmann (École Polytechnique Fédérale de Lausanne, Switzerland), Lisa Langsdorf (Justus-Liebig-Universität Giessen, Germany)
- <u>Prospectus/Qualifying Exam Committees (or equivalent)</u>: Sanghoon Kang, Apoorva Sharma, Amanda Royka, Erica Busch, Huichao Ji, Sylvia Blackmore, Jamie Masthay, Helen Borges, Prabaha Gangopadhyay, Ashleigh Rutherford, Hanna Hillman, Juliana Trach, Wanchen Zhao, Aalap Shah, Krystian Loetscher (INP), Max Greenwald (INP), Marie McCusker (INP), Neil Savalia (INP), Emily Burke (INP), Muhammad Noman Almani (BME)
- <u>Undergraduate Student Researchers</u>: Jia Dunsby (2025-present), Catalina Ossmann (2024-present), Christen McCann (2024-25), Hyder Jafri (2024-25, visiting from Wesleyan), Taylor McClure (2023-25), Tess Levy (2023-present), Tolu Adanri (2022-25), Parisa Vaziri (2021-24, now PhD student at Harvard), Liz Pandolpho (2023-24), Steaphanie Hu (2023-24), Luke Smith (2023, visiting from Cal Poly), Samantha Goodcase (2022-24), Ophelia Pilkinton (2022-23, now MD student U Tennessee), Sarosh Kayani (2022, now postgraduate RA at Yale), Sabrina Santos De-Leon (2022, visiting from U Puerto Rico), Addison Beer (2021-22, now postgraduate RA at Yale), Tal Boger (2021-22, now PhD student at Johns Hopkins), Katherine Chou (2021-22), Michael Irias (2012-22, now PhD student at U Florida), Tabea Buthof (2021-22, now professional hockey player in Sweden), Jed Burde (2021-22), Cameron Berg (2021-22, now software engineer at Meta), Eddie Yu (2020-21), David Zheng (2020-21)
- <u>Undergraduate Theses</u>: Taylor McClure, Tolu Adanri (Yale Psychology 2025 Angier Prize winning thesis), Tess Levy, Zack Haaland, Emma Kohlmayer, Samantha Goodcase, Tal Boger, Tabea Botthof, Ophelia Pilkinton, Aparajita Chauhan, Addison Beer, Yehia Elkersh, Sarosh Kayani, Cameron Berg (Yale Cognitive Science 2022 Yale Glushko Prize winning thesis), Patrick Brown, Alex Lance, Sonia Lingos-Utley, Sam Ryan, Arielle Tessier
- <u>Academic and First-Year Advising</u>: Anika Shethia, Stephanie Stainton, Gabriella Pavlov, Margarita Blackwood, Jessica Na, Lusangelis Ramos, Sarah Feng, Pippa Millstone, Darren Parades, Michaela Snyder-Braasch, Santiago Calderon, Mark Akladious, Liya Kebede, Ke Ren Tan, William Wei, Daniela Naumov, Samantha Goodcase, Derek Song, Owen Hacker, Anjal Jain, Modupe Karimi, Hugo Lehrach, Katie Shin, Ali Otuzoglu, Sam Tucker-Smith

Teaching

Yale

- Primary Instructor, Fall 2025, Foundations of Psychology (enrollment: 14; graduate)
- Primary Instructor, Fall 2024, Introduction to Psychology (enrollment: 240)
- Primary Instructor, Fall 2023, Introduction to Psychology (enrollment: 194)
- Primary Instructor, Fall 2022, The Science & Culture of Memory* (enrollment: 23)
 - *[selected by FAS Dean's office in a competitive cross-divisional, co-taught course proposal call; joint course offered by the Psychology & English Departments]
- Primary Instructor, Spring 2022, Learning & Memory (enrollment: 102)
- Primary Instructor, Fall 2021, Human Skill Learning (enrollment: 19)
- Primary Instructor, Spring 2021, Cognitive Psychology (enrollment: 14; graduate)
- Primary Instructor, Fall 2020, Human Skill Learning (enrollment: 17)

 Standing Guest Instructor, Foundations of Psychology I: Cognitive Psychology & Neuroscience; Standing Guest Instructor, Principles of Neuroscience; Standing Guest Instructor, Cognitive Science Junior Symposium

Other

- Co-Instructor, Introduction to Psychology (Yale Prison Education Initiative; co-instructor: Prof. Yarrow Dunham)
- Co-Instructor, The Cerebellum & Cognition (UC Berkeley, co-taught online course; co-instructor: Prof. Richard B. Ivry)
- Lead Lecturer, Introduction to Psychology (Princeton Prison Teaching Initiative)

Editorial Positions

- Associate Editor, Open Mind
- Editorial Board, Journal of Neurophysiology
- Guest Reviewing Editor, Journal of Experimental Psychology: General
- Guest Reviewing Editor, eLife
- Guest Reviewing Editor, PNAS Nexus

Service (to scientific field)

- Conference and Workshop Chairing/Organizing: CoCoA: Cognitive Control of Action (bi-annual workshop), Co-chair and Co-founder (2022-present); Motor Learning & Motor Control (Society for Neuroscience annual satellite meeting), Co-chair (2023-present); The Cerebellum Beyond Motor Control: Insights Into Health & Disease (Society for Neuroscience Minisymposium), Co-chair (2022); Cerebellar Function and Pathology: Progress on Cellular, Behavioral and Computational Principles (Gordon Research Seminar), Co-chair (2017)
- <u>Boards & Advisory Panels</u>: Elected Board Member, The Society for the Neural Control of Movement (2023-present); Faculty Advisor, Innovators in Cognitive Neuroscience (2022-present)
- <u>Grant Reviewing</u>: NIH: Motor Function, Speech, and Rehabilitation study section (standing member); Learning, Memory, and Decision Neuroscience study section (panelist); NSF/NIH: Collaborative Research in Computational Neuroscience Program (panelist); NSF (ad hoc reviewer); Wellcome Trust, UK (ad hoc reviewer); Israel Science Foundation (ad hoc reviewer)
- <u>Journal Reviewing:</u> Behavioral Neuroscience, Brain, Cerebral Cortex, Cognition, Cognitive, Affective, and Behavioral Neuroscience, Consciousness & Cognition, Current Biology, Current Opinion in Behavioral Sciences, eLife, eNeuro, Experimental Brain Research, Imaging Neuroscience, Journal of Cognitive Neuroscience, Journal of Experimental Child Psychology, Journal of Experimental Psychology: General, Journal of Experimental Psychology: Human Perception & Performance, Journal of Mathematical Psychology, Journal of Neurophysiology, Journal of Neuroscience, Journal of Vision, Molecular Psychiatry, Nature Communications, Nature Human Behavior, Neural Computation, Neurolmage, Neuroscience, Neuroscience and Biobehavioral Reviews, npj Science of Learning, PLoS Biology, PLoS Computational Biology, PLoS ONE, PNAS, Psychonomic Bulletin & Review, Quarterly Journal of Experimental Psychology, Science Advances, Scientific Reports, Trends in Cognitive Sciences, Trends in Neurosciences
- <u>Conference Proceeding Reviewing:</u> COSYNE, Motor Learning & Motor Control (MLMC), Reinforcement Learning & Decision Making (RLDM)

 Public Outreach & Interdisciplinary Events: Invitee, Yale Center for British Art, "Conversations on Perception" (2025); Speaker, Pint of Science Festival US, "How Brains See, Move, and Navigate in the World" (2025); Panelist, Yale Schwarzman Center & The Dance Theater of Harlem, "Brain and the Barre: Human Cognition Made Visible Through Dance" (2024); Panelist, The Helix Center New York City Public Seminars, "The Technē of Memory" (2023)

Service (to Yale)

- Director (2025-present), Wu Tsai Institute Graduate Certificate Program in Brains, Minds, & Machines
- Executive, Steering, & GPAC: Member, Cognitive Science Executive Committee (2024-present); Member, Brainworks Steering Committee (2024-present); Member, Psychology Graduate Program Advisory Committee [GPAC] (2024-present)
- <u>Search Committees</u>: Psychology Social Area Search Committee (2025); Psychology Clinical Area Search Committee (2024); Wu Tsai Institute Search Committee (2023); Psychology Clinical Area Search Committee (2023); Psychology Neuroscience Area Search Committee (2023); Psychology Neuroscience Area Search Committee (2021); Psychology Open Area Search Committee (2021)
- Other Department Committees & Service: Co-chair, Committee for Racial Equity & Justice [CREJ] (2023); Member, Wu Tsai Institute Speaker Series Committee (2023); Member, Wu Tsai Institute Conference Committee (2023); Member, Committee for Racial Equity & Justice (2020-2023); Member, Psychology Hiring Reading Group (2020-22); Member, Psychology Student Awards Committee (2021-22); Organizer, Current Works in Developmental & Cognitive Psychology (2021); Judge, Angier Prize (2021); Judge, NSCI Major Neuroscience Prize: Kavli Institute of Neuroscience (2023-24); Reader, Senior Essays and Theses in Psychology, Cognitive Science, and Neuroscience (2021-present)
- <u>University-Wide Committees & Service</u>: Member, Yale Fulbright Research Grants Committee (2024-present); Reviewer, Yale College Dean's Summer Research Fellowship (2023-present); Judge, Spring Minorities Symposium (2022); Panelist, Yale Postgrad Research Symposium (2022); Judge, Senior Showcase (2020); Fellow, Silliman College (2021-present)
- <u>Teaching Outreach</u>: Instructor and initiator of YPEI's Psychology curriculum, Yale Prison Education Initiative (2021-present)

Other Activities

Science Journalist/Contributor

• Popular science writing for media outlets including *The Atlantic, Motherboard (Vice Media)*, and *The World Science Festival* (2004-present); Science and technology writing for Samsung/Razorfish LLC while developing a tech and culture mobile app (2011)

Musician & Music Educator

• Bluegrass performer and competition fiddler/mandolinist/guitarist: Former member of musical groups *The Powder Kegs* and *Tumbling Bones* (2005-2013), included US and European touring at folk festivals and music venues, and a 2007 appearance on American Public Media's "A Prairie Home Companion"; Private fiddle/mandolin/guitar instructor (2009-12); Current member, "Audrey Mae" (CT-based bluegrass band); Competition: Roxbury Connecticut Fiddle Contest, blue ribbon in band competition (2022 & 2023), blue ribbons in old-time fiddle and mandolin (2023), red ribbon in bluegrass guitar (2022); Charlie Poole Music Festival North Carolina, red ribbon in old-time fiddle (2010), red ribbon in bluegrass guitar (2010);