November 4, 2026

Michael J. Kahana, Ph.D.

Professional

- 2025 — present, CEO, Nia Therapeutics
- 2026 — present, Edmund and Louise Kahn Term Professor (adjunct), University of Pennsylvania
- 2024 — present, Visiting Professor, Department of Physiology, Gray School of Medicine, Tel Aviv University
- 2019 — 2026, Edmund and Louise Kahn Term Professor of Psychology, University of Pennsylvania
- 2004 — present, Professor, Department of Psychology, University of Pennsylvania
- 2000 — 2004, Associate Professor, Department of Psychology and Center for Complex Systems, Brandeis University.
- 1994 — 2000, Assistant Professor, Department of Psychology and National Center for Complex Systems, Brandeis University

Education

- 1989 B. A., Case Western Reserve University.
- 1993 Ph.D., University of Toronto (Psychology); (Ph.D. Thesis: *Interactions between item, associative, and serial order information*, B. B. Murdock, chair).
- 1993–1994 Postdoctoral Fellow, Harvard University (Psychology). Individual National Research Service Award (N.I.H. Grant NS09559, Sponsor: W. K. Estes) *A temporal coding model of human memory*)

Honors and Awards

- Grossman Award, *Society of Neurological Surgeons*, 2021
- Invited Address – Wu Tsai Symposium, Stanford University, 2020
- Plenary Address – World Society for Stereotactic and Functional Neurosurgery, New York, NY, 2019
- Howard Crosby Warren Medal, *Society of Experimental Psychologists*, 2018.
- Mid-Career Award, *Psychonomic Society*, 2018
- Troland Award, *National Academy of Sciences*, 2010.
- Fellow, *Society of Experimental Psychologists*, 2008
- Fellow, *American Psychological Society*, 2010
- Merritt-Putnum Distinguished Lecture — American Epilepsy Society, 2017
- Keynote address, *The 6th International Conference on Memory*, 2016
- Plenary address – 40th Annual Meeting of the Society for Mathematical Psychology, Irvine, CA, 2007
- Plenary address – Computational Cognitive Neuroscience Conference, Houston, 2006

- Featured Alumnus – Centennial Celebration of the University of Toronto Graduate Program in Psychology, 1997

Editorial Activities

- Associate Editor: *Psychological Review*, 2015 – 2021
- Associate Editor: *Cognitive Psychology*, 2005 – 2009
- Associate Editor: *Memory & Cognition*, 2001 – 2005
- Guest Editor: *NeuroImage* special issue "New Horizons for Neural Oscillations", 2014
- Consulting Editor: *Journal of Experimental Psychology: General*, 2008 – 2010
- Consulting Editor: *Journal of Mathematical Psychology*, 2012 –
- Consulting Editor: *Psychonomic Bulletin & Review*, 2005 – 2007.
- Consulting Editor: *Memory & Cognition*, 1997 – 2001.
- Consulting Editor: *Journal of Experimental Psychology: Learning, Memory and Cognition*, 1999 – 2001.

Patents

- Kahana, M. J. and Rizzuto, D. S. (2019). Method and apparatus for improving cognitive performance. U.S. Patent No. 15,545,927; 16,569,205. *U.S. Patent and Trademark Office.*
- Kahana, M.J., and Rizzuto, D.S., Method and apparatus for improving cognitive performance through cortical stimulation, U.S. Patent No. 16,318,718. *U.S. Patent and Trademark Office.*

Other Professional Activities

- Founder and Organizer of the Context and Episodic Memory Symposium, an annual meeting since 2002.
- Chair of the 2023 meeting of the *Society of Experimental Psychologists*
- Director of graduate studies, Psychology Graduate Group, University of Pennsylvania, 2008-2011
- Chair of the 2010 meeting of the *Society of Experimental Psychologists*
- Member, BBBP-4 (Cognition and Perception) study section, *Centers for Scientific Review, National Institutes of Health*, 2003–2007
- Member, Scientific Advisory Board of the International Cogitate Team
- Member, Advisory Board, Princeton Neuroscience Institute, 2012
- Organizer – 39th Annual Meeting of the Society for Mathematical Psychology, 2006
- Member, Advisory Panel. Doris Duke Charitable Foundation, 2005
- Member, Advisory Panel. N.I.H. Silvio O. Conte Center for Neuroscience Research: Cognitive and Neural Mechanisms of Conflict and Control (Princeton University), 2003
- N.I.M.H. First Award, 1996
- **Invited Lectures/Colloquia:** Albert Einstein College of Medicine, Albert-Ludwigs-Universität Freiburg, Bar Ilan University, Bocconi University in Milan, Boston Univer-

sity, Brandeis University, Brown University, California Institute of Technology, Carnegie Mellon University (2), Columbia University (Psychology), Columbia University (Neuroscience), Cornell University, Courant Institute (NYU), Dartmouth College, Donders Institute, Nijmejen, Netherlands, Duke University, Georgia Tech Neurointerface Featured Speaker, Harvard University, Hebrew University (Psychology), Edmund and Lily Safra Center for Brain Sciences (Jerusalem), Hungarian Academy of Sciences, Indiana University (2), Jerusalem Brain Institute, Johns Hopkins University, Max Planck Institute-Berlin, McGill University, Monell Research Institute, Montreal Neurological Institute, National Institute of Neurological Disorders and Stroke, New York University (2), Northwestern University, Ohio State University (2), Princeton University, Rutgers University, Salk Institute, Shriver Center, Stanford University, Swiss Federal Institute of Technology (EPFL), Syracuse University, Tel Aviv University, Thomas Jefferson University, Tufts University, University of Bochum, University of California, Davis, University of California, Irvine, U.C.L.A. School of Medicine, U.C.L.A Psychology, University of California, San Diego, University of California at San Francisco, University of Delaware, University of Massachusetts at Amherst, University of New Mexico, University of Toronto, University of Zurich, Switzerland, Washington University, Weizmann Institute of Science, Williams College, Yale University (2).

Professional Society Memberships:

- Psychonomic Society
- Society for Neuroscience
- American Psychological Society (Elected Fellow)
- Memory Disorders Research Society
- Society for Cognitive Neuroscience
- Society for Mathematical Psychology
- Society of Experimental Psychologists

Grant Support

- NIH Grant 5R01 MH55687 *Associative Processes in Episodic Memory.* M. J. Kahana, P.I. August 16, 2023 – June 30, 2027. $366,466 annual direct costs.
- MTEC-20-06-MOM-013 (U.S. Army Medical Research and Development Command). Restoring memory with task-independent semi- chronic closed-loop direct brain stimulation and non-invasive closed-loop stimulus timing optimization. M. J. Kahana, P.I. $3,409,954, Jan, 2020 - Sept 30, 2022
- NIH/NINDS Grant U01 NS1113198 *Using Direct Brain Stimulation to Study Cognitive Electrophysiology.* M. J. Kahana, P.I. September 15, 2019 – June 30, 2024. (total cost= $6,851,486).
- NIH/NINDS Grant R01 NS106611 *Targeted closed-loop intracranial brain-stimulation to improve episodic memory.* M. J. Kahana, P.I. June 01, 2019 – May 31, 2024. (total costs = $3,140,044)
- NIH Grant 4R01 MH55687 *Associative Processes in Episodic Memory.* M. J. Kahana, P.I. May 5, 2016 – January 31, 2021. $250,000 annual direct costs.
- NSF/CRCNS Grant NSF 1724243 *US-German Research Proposal: Role of place and grid cells and phase precession in human spatial and episodic memory.* J. Jacobs, P.I., M. J.

Kahana, Co-P.I. November 1, 2017 – October 31, 2020. $60,000 annual direct costs.

- NIH Grant 3R01 MH61975 *Electrophysiology of Human Spatial Cognition.* M. J. Kahana, P.I. March 1, 2014 – January 31, 2020. $263,131 annual direct costs.
- DARPA RAM Cooperative Agreement N66001-14-2-4-032 *Memory Enhancement with Modeling, Electrophysiology, and Stimulation.* M. J. Kahana, P.I. July 16, 2014 – January 31, 2020. $4,758,025 annual direct costs.
- NIH Grant R21 AG048233 *A model-based approach to understanding memory impairments.* M. J. Kahana, P.I. August 15, 2015 – May 31, 2017. $150,000 annual direct costs.
- Educational Testing Service Grant *EEG Correlates of Engagement.* M. J. Kahana, P.I. August 15, 2013 – December 31, 2014. $41,445 annual direct costs.
- NIH Grant 4R01 MH55687 *Associative Processes in Episodic Memory.* M. J. Kahana, P.I. May 1, 2011 – May 4, 2016. $300,386 annual direct costs.
- NSF grant 1058886 *Retrieved Context Models of Episodic Memory.* M. J. Kahana, P.I. June 1, 2011– May 31, 2014. $93,600 annual direct costs.
- NIH Grant 2R01 MH61975 *Electrophysiology of Spatial Cognition.* M. J. Kahana, P.I. Sept 26, 2007 – July 31, 2013. $252,687 annual direct costs.
- NIH Grant 1R21 NS067316 *Intracranial EEG for Neuronal Oscillatory Contingency during Cognitive Tasks.* M. J. Kahana, P.I. September 30, 2009 – August 31, 2012. $163,228 annual direct costs.
- NIH Grant R90 DA023424 *Integrated Interdisciplinary Training in Computational Neuroscience.* M. J. Kahana, P.I. September 30, 2006 – July 31, 2011. $296,519 annual direct costs.
- NIH Grant T90 DA022763 *Integrated Interdisciplinary Training in Computational Neuroscience.* M. J. Kahana, P.I. September 30, 2006 – July 31, 2011. $166,888 annual direct costs.
- NIH Grant 2R01 MH68404 *Short Term Visual Episodic Recognition Memory.* R. Sekuler, P.I., M. J. Kahana, Co-I. June 6 2009 – June 5, 2011.
- Dana Foundation Grant *Intracranial EEG for Theta Rhythm Contingency During Cognitive Tasks.* December, 2007 – February, 2011. $100,000 annual direct costs.
- NIH/NIMH Grant P50 MH062196. Subproject on Conte Center Grant *Retrieval Dynamics in Item and Source Memory.* October 1, 2005 – August 31, 2011
- NIH Grant 3R01 MH55687 *Associative Processes in Episodic Memory.* M. J. Kahana, P.I. February 1, 2007 – Jan 30, 2011.
- NSF grant SBE 0354378 Subproject 14 on Science of Learning Center Grant *CELEST: A Center for Learning in Education, Science, and Technology.* S. Grossberg P.I. October 1, 2004 – September 30, 2009.
- NIH Grant R01 MH68404 *Short Term Visual Episodic Recognition Memory*, R. Sekuler, P.I., M. J. Kahana, Co-P.I.. April 1, 2004 – March 31, 2009.
- Swartz Foundation Grant 2004/10-04 *Electrophysiology of Human Memory Formation.* M. J. Kahana P.I. November 28, 2003 – November 27, 2004.
- NIH Grant 2R01 MH55687 *Associative Processes in Episodic Memory.* M. J. Kahana, P.I. April 1, 2002 – January 30, 2007.
- NIH Grant R29 MH55687 *Mathematical Models of Human Memory.* M. J. Kahana, P.I.,

April 1, 1997 – March 30, 2002.

- NIH Grant R01 MH61975 *Using intracranial recordings to study task-dependent theta.*. M. J. Kahana, P.I. December 12, 2001 – December 11, 2006.
- AFOSR Grant F49620-03-1-0376 *Model driven study of visual memory.* R. Sekuler, P.I., M. J. Kahana, Co-P.I.. July 1, 2003 – December 31, 2003.
- NIH Grant R01 AG15852 *Aging and the temporal dynamics of self-initiated recall* A. Wingfield, P.I., M. J. Kahana, Co-P.I. August 1, 1998 – July 30, 2003.

Postdoctoral Supervision

- Dan Kimball, J.D., Ph.D. (Postdoc, 2002 – 2003). Morris Associate Professor, Department of Psychology, *University of Oklahoma.*
- Sean Polyn, Ph.D. (Postdoc, 2005 – 2008). Associate Professor, Department of Psychology, *Vanderbilt University.*
- Christoph Weidemann, Ph.D. (Postdoc, 2006 – 2010). Assistant Professor, Department of Psychology, *Swansea University*
- Kareem A. Zaghloul, M.D. Ph.D. (Postdoc, 2007 – 2008). Senior Investigator, *National Institutes of Health and George Washington University.*
- Mijail Serruya, M.D., Ph.D. (Postdoc, 2009 – 2011). Assistant Professor, Department of Neurology, *Jefferson Hospital.*
- Brad Lega, M.D. (Postdoc, 2009 – 2011). William Kemp Clark Chair of Neurological Surgery, Department of Neurosurgery, *University of Texas Southwestern, Dallas.*
- Karl Healey, Ph.D. (Postdoc, 2011 – 2016). Associate Professor, Department of Psychology, *Michigan State University*
- Max Merkow, M.D. (Postdoc, 2013 – 2016). Neurosurgeon, Bayarea Neurosciences, *John Muir Hospital*
- James Kragel, Ph.D. (Postdoc, 2015 – 2018). Research Assistant Professor, *University of Chicago.*
- Youssef Ezzyat, Ph.D. (Postdoc, 2014 – 2018). Assistant Professor, Department of Psychology, *Swarthmore College.*
- Nora Herweg, Ph.D. (Postdoc, 2017 – 2020). Postdoctoral Fellow. Universitat Bochum.
- Nicholas Diamond, Ph.D. (Postdoc, 2019 – 2021).
- John Sakon, Ph.D. (Postdoc, 2019 –).Research Assistant Professor, *University of California, Los Angeles.*
- Noa Herz, Ph.D. (Postdoc, 2020 –). Research Assistant Professor, *Thomas Jefferson University.*
- David Halpern, Ph.D. (Postdoc, 2020–2024). Postdoctoral Fellow, Columbia University.
- Nathaniel Greene, Ph.D. (Postdoc, 2023–2025). Assistant Professor, *Villanova University*
- Adam Broitman, Ph.D. (Postdoc, 2023–2026). Assistant Professor, *California State University, Longbeach*

Doctoral Supervision

- Marc W. Howard, Ph.D. (1995 – 2000). Professor, Department of Psychology, *Boston University.*
- Jeremy B. Caplan, Ph.D. (1997 – 2002). Professor, Department of Psychology, *University of Alberta.*
- Daniel S. Rizzuto, Ph.D. (1997 – 2002). President and CTO, *Nia Therapeutics.*
- Arne D. Ekstrom, Ph.D. (2001 – 2004). Professor, Departments of Psychology and Neuroscience, *University of Arizona.*
- Kelly Addis, Ph.D. (2000 – 2004). Thesis Title: *Constraining models of serial learning.*
- Per Sederberg (2001 – 2006). Professor, Department of Psychology and Director of Cognitive Science Program, *University of Virginia.*
- Grace Hwang, Ph.D. (2002 – 2005). Program Officer, *National Institutes of Health.*
- Marieke van Vugt, Ph.D. (2003 – 2008). Associate Professor, Cognitive Science, *University of Groningen.*
- Joshua Jacobs, Ph.D. (2004 – 2008). Professor, Department of Bioengineering, *University of Chicago.*
- Jeremy R. Manning, Ph.D. (2006 – 2011). Associate Professor, Psychological and Brain Sciences, *Dartmouth University.*
- Lynn Lohnas, Ph.D. (2007 – 2012). Associate Professor, Department of Psychology, *Syracuse University.*
- John Burke, M.D./Ph.D. (2010 – 2013). Assistant Professor of Neurosurgery, *University of Oklahoma*
- Ashwin Ramayya M.D./Ph.D. (2011 – 2014). Assistant Professor of Neurosurgery, *Stanford University.*
- Nicole Long, Ph.D. (2010 – 2015). Associate Professor, Department of Psychology, *University of Virginia.*
- Ethan Solomon (2015 – 2019). Assistant Professor, Department of Psychiatry, *Stanford University.*
- Daniel Schonhaut (2018 – 2023). Research Scientist, U.C.S.F.
- Zhontian Chen (2019-2024). Assistant Professor of Finance. University of Wisconsin, Madison.
- Riley DeHaan (2021 –2026). Senior Data Scientist, *Nia Therapeutics.*

Other Trainees

- Etan Cohen, Director/Screenwriter.
- Emily Dolan, Ph.D., Evaluation Coordinator, *VA Puget Sound.*
- Gennady Erlikhman, Ph.D., Data Science Manager, *Apple.*
- Lynne Gauthier, Ph.D., Associate Professor, *University of Massechusetts.*
- Aaron S. Geller, M.D., Assistant Professor of Neurology, *University of Colorado.*
- Roger Khazan, Ph.D., Leader of secure resilient systems and technology, *MIT Lincoln Laboratory.*
- Matt P. Kirschen, M.D., Ph.D., Associate Professor of Anesthesiology and Critical Care

Medicine, *Children's Hospital of Pennsylvania*.

- Rajan Lukose, Ph.D. Chief Technology Office, *Cambridge Technology*.
- Igor Korolev, D.O., Ph.D. Resident Physician (Psychiatry), *University of Miami Hospital*.
- Richard Lawrence, Ph.D., *Universitat Wien*.
- Eben Lazarus, Assistant Professor of Finance, *U. C. Berkeley*.
- Ningcheng Li, M.D., *U. Mass. Chan Medical School*.
- Jonathan Miller, Ph.D. Postdoctoral Fellow,*Columbia University*
- Matt Mollison, Ph.D. Data Scientist, *Silicon Valley Data Science*.
- Neal Morton, Ph.D. Assistant Professor of Psychology, *Universityof Wisconsin – Milwakee*.
- Ehren Newman, Ph.D. Associate Professor of psychology, *Indiana University*.
- Peter Pantelis, Ph.D. Postdoctoral Researcher, *Indiana University-Bloomington*.
- Eric Pressman, Principal User Experience Researcher, *UpToDate*.
- Colin Sauder, Ph.D. Scientific Director, *Adams Clinical*.
- Greg Schwartz, Ph.D. Derrick T. Vail Professor, *Northwestern University*.
- Yevgeniy Sirotin, Ph.D. Human Factors Scientist, *Scitor Corporation*.
- Alec Solway, Ph.D. Assistant Professor, *University of Maryland*.
- Jessica Spencer, M.D., Professor and Vice Chair of Education, *Emory School of Medicine*.
- Michelle Tully Tine, Ph.D. Associate Professor, Sociology. *Dartmouth College*.
- Daniil Utin, Chief Software Architect, *Nia Therapeutics*.
- Brad Wyble, Ph.D. Professor of Psychology. *Penn State University*.
- Robert Yaffe, Ph.D. Research Scientist, *Google*.
- Franklin Zaromb, Ph.D. Data Science Consultant, *Code Cygnus*.

Monographs and Edited Books

- Kahana, M. J. (2012).*Foundations of Human Memory*. Oxford University Press. 2nd Edition under contract with OUP.
- Kahana, M. J. and Wagner, A. D. (2024).*Oxford Handbook of Human Memory*, Vol 1 and 2. Oxford University Press.

Working Papers

1. Riley D. DeHaan, Youssef Ezzyat, Michael J. Randazzo, Aditya M. Rao, Alexander M. Papanastassiou, Aaron S. Geller, Bradley C. Lega, Joshua P. Aronson, Robert E. Gross, Barbara C. Jobst, Kareem A. Zaghloul, Gregory A. Worrell, Sameer A. Sheth, Michael R. Sperling, Michael J. Kahana. Neural components underlying successful free recall are specific to episodic memory. bioRxiv 2025.07.25.666835; doi: https://doi.org/10.1101/2025.07.25.666835
2. Jin, B.J., Halpern, D.J., and Kahana, M.J. (Under Invited Resubmission). A theory of memory for items and associations

3. Herrema, H.G., and Kahana, M.J. (Under Invited Resubmission). First Recall Costs and Benefits.
4. Herrema, H.G., and Kahana, M.J. (Under Invited Resubmission). Phonological clustering in free recall.

Publications

1. Broitman, A.W., & Kahana, M.J. (2025) Dissociable Spectral Components of Episodic Memory. *Trends in Cognitive Sciences*, in press.
2. Rizzuto, D., S., Hu, Z. Utin D. Kahn, J. Ho, C., Smiles, A., Gross, R.E., Das, S.R., Kahana, M.J. (2025). A wireless, 64-channel, AI-enabled neuromodulation platform, submitted. *Brain Stimulation*, 19 (1) 103013.
3. Paron, M. D., Paron, J. D., Kahana, M.J. (2025). A dynamic model of context-based retrieval. *Journal of Mathematical Psychology*, 127, 102957.
4. Paron, M.D., Healy, A. F. and Kahana, M.J. (2025). Reconstruction of Temporal and Spatial Order Information. *Journal of Experimental Psychology: Learning, Memory & Cognition*, in press.
5. Broitman, A.W., & Kahana, M.J. (2025) Neural Context Reinstatement of Recurring Events. *Psychological Science*, in press.
6. Rafla, D. Katerman, B.S., Halpern, D.J. and Kahana, M.J. Organizational Dynamics of Memory Across Days. *Journal of Experimental Psychology: Learning, Memory & Cognition*, in press.
7. Colyer, R. A. and Kahana, M. J. (2025). Phase Consistency Dynamics of Memory Encoding. *J. Neuroscience,* 45 (35)
8. Lohnas, L.J., Polyn, S. M., Kahana, M.J. (2026). Specialized Recall Procedures. *Psychonomic Bulletin and Review*, 33:96.
9. Greene, N.R., Goldman, S.T., Kahana, M.J. Inter-Response Times in Free Recall. *Journal of Experimental Psychology: Learning, Memory and Cognition*, in press.
10. Broitman, A. W., Healey, M. Karl, and Kahana, M.J. EEG Biomarkers of Age-Related Memory Change. *Psychology and Aging*, in press.
11. Rao, A.M., DeHaan, R., and Kahana, M.J. (2025). Synchronous theta networks characterize successful memory retrieval. *Journal of Neuroscience*, 45 (16).
12. David J. Halpern, Bradley C. Lega, Robert E. Gross, Chengyuan Wu, Michael R. Sperling, Joshua P. Aronson, Barbara C. Jobst, Michael J. Kahana. Study-Phase Reinstatement: Encoding Spontaneous Thoughts as Memories. *Nature Neuroscience*, 28 (4), 883-890.
13. Zhou, Z., Kahana, M.J., and Schapiro, A. C. A unifying account of replay as context-driven memory reactivation. eLife. https://doi.org/10.7554/eLife.99931
14. Rudoler, J.H., Bruska, J.P., Chang, W., Dougherty, M.R., Katerman, B.S., Halpern, D.J., Diamond, N.B., and Kahana, M.J. (2024). Optimizing learning via real-time neural decoding. *J. Neuroscience Methods*, 410, 110220.
15. Dougherty, M.R., Chang, W., Rudoler, J.H., Katerman, B.S., Halpern, D.J., Bruska, J.P., Diamond, N.B., and Kahana, M.J. (2024). Neural correlates of memory in an naturalistic spatiotemporal context. *Journal of Experimental Psychology: Learning, Memory and Cognition*, 50(9), 1404–1420. https://doi.org/10.1037/xlm0001341

16. Schonhaut, D.R., Rao, A.M., Ramayya, A.G., Solomon, E.A., Herweg, N.A., Fried, I., and Kahana, M.J. (2024). MTL neurons phase-lock to human hippocampal theta. *eLife*, https://doi.org/10.7554/eLife.85753

17. Li, Y., Pazdera, J. K., and Kahana, M. J. (2023). EEG Decoders Track Memory Dynamics. *Nature Communications. 15(1), 2981*

18. Sakon, J.J., Halpern, D.J., Schonhaut, D.R., Kahana, M.J. (2023). Human hippocampal ripples signal encoding of episodic memories. *Journal of Neuroscience*, 44 (8) e0111232023; https://doi.org/10.1523/JNEUROSCI.0111-23.2023

19. Kahana, M.J.*, Lohnas, L.J.*, Healey, M.K., Aka, A., Broitman, A.W., Crutchley, P., Crutchley, E., Alm, K.H., Katerman, B.S., Miller, N.E., Kuhn, J.R., Li, Y., Long, N.M., Miller, J., Paron, M.D., Pazdera, J.K., Pedisich, I., Rudoler, J.H., Weidemann, C.T., (2023). The Penn Electrophysiology of Encoding and Retrieval Study. *Journal of Experimental Psychology: Learning, Memory and Cognition*, in press.

20. Rahimzadeh, V., Jones, K.M., Majumder M.A., Kahana M.J., Rutishauser U., Williams Z.M., Cash S.S., Paulk A.C., Zheng J., Beauchamp M.S., Collinger J.L., Pouratian N., McGuire A.L., Sheth S.A., and NIH Research Opportunities in Humans (ROH) Consortium (2023). Benefits of sharing neurophysiology data from the BRAIN Initiative Research Opportunities in Humans Consortium. *Neuron*, 111 (23), 3710-3715.

21. Ezzyat, Y., Kragel, J.E., Solomon, E.A., Lega, B.C., ... Kahana, M.J. (2023). Functional and anatomical connectivity predict brain stimulation's mnemonic effects. *Cerebral Cortex*, 34(1), bhad427,

22. Schonhaut, D.R., Aghajan, Z.M., Kahana, M.J., Fried, I. (2023). A neural code for time and space in the human brain. *Cell Reports*,42 (11).

23. Kahana, M. J., Wanda, P. A., Ezzyat, Y., Adamovich-Zeitlin, R., Lega, B., Jobst, B. C., et al. (2023). Biomarker-guided neuromodulation aids memory in traumatic brain injury, *Brain Stimulation*, 16, 1086-1093.

24. Wachter, J.A. and Kahana, M.J. (2023). A retrieved-context theory of financial decision making. *Quarterly Journal of Economics*, in press.

25. Herz, N. Bukala, B.R., Kragel, J. E., and Kahana, M.J. (2023). Hippocampal activity predicts contextual misattribution in false memories. *Proceedings of the National Academy of Sciences*, 120 (40), e2305292120

26. Adrogue, R.T. , Herz,N., Halpern, D.J., Tracy, J., and Kahana, M.J.. (2023). Multi-trial Free Recall for Evaluating Memory. *Neuropsychology*, 38, 58–68.

27. Dougherty, M. R., Halpern, D. J., and Kahana, M. J. (2023). Forward and backward recall Dynamics. *Journal of Experimental Psychology: Learning, Memory & Cognition*, 49, 1752–1772..

28. Rubinstein, D.Y. Weidemann, C.T., Sperling, M. R., and Kahana, M.J. (2023). Direct brain recordings suggest a causal subsequent-memory effect. *Cerebral Cortex*, 11, 6891–6901.

29. Herweg, N. A., Kunz, L., Schonhaut, D. R., Brandt, A., Wanda, P. A., Sharan, A. D., Sperling, M. Schulze-Bonhage, A., and Kahana, M.J. (2023). A learned map for places and concepts in the human MTL. *Journal of Neuroscience*, 43, 3538-3547.

30. Rudoler, J. H., Herweg, N. A., and Kahana, M. J. (2022). Hippocampal theta and episodic memory. *Journal of Neuroscience*, 43, 613-620.

31. Liu, A. A., Henin, S., Abbaspoor, S., Bragin, A., ... Kahana, M. J., ... Buzsáki, G.

(2022). A consensus statement on detection of hippocampal sharp wave ripples and differentiation from other fast oscillations. *Nature Communcations*, *13*(6000)

32. Camarillo-Rodriguez, L., ..., Kahana, M.J., ..., Sperling, M.R. (2022). Temporal lobe interictal spikes disrupt encoding and retrieval of verbal memory: A subregion analysis. *Epilepsia*, *63*(9) 2325-2337.
33. Mercier, M.R., Dubarry, A. S., Tadel, F., ..., Kahana, M.J., ..., Lachaux, J.P., Oostenveld, R. (2022). Advances in human intracranial electroencephalography research, guidelines and good practices. *NeuroImage*.
34. Sakon, J.J. and Kahana, M. J. (2022). Hippocampal ripples signal contextually-mediated episodic recall. *Proceedings of the National Academy of Sciences* (119), e2201657119
35. Kahana, M. J., Diamond, N. B., and Aka, A. (2024). Laws of Human Memory. In M. J. Kahana and A. D. Wagner (Eds.), Oxford handbook of human memory. Oxford University Press.
36. Cohen, R. and Kahana, M.J. (2022). A memory-based theory of emotional disorders, *Psychological Review*, 129, 742-776.
37. Pazdera, J.K. & Kahana, M.J. (in press). Modality effects in free recall: A retrieved-context account. *Journal of Experimental Psychology: Learning, Memory, and Cognition.*
38. Camarillo-Rodriguez, L., Leenen, I., Waldman, Z., Serruya, M., Wanda, P. A., Herweg, N. A., Kahana, M. J., Rubinstein, D., Orosz, I., Lega, B., Podkorytova, I., Gross, R. E., Worrell, G., Davis, K. A., Jobst, B. C., Sheth, S. A., Weiss, S. A., Sperling, M. R. (2022). Temporal lobe interictal spikes disrupt encoding and retrieval of verbal memory: A subregion analysis. *Epilepsia,* 1–13.
39. Katerman, B.S., Li, Y., Pazdera, J.K., Keane, C., and Kahana, M.J. (2022). EEG biomarkers of free recall. *NeuroImage, 246.*
40. Aka, A., Phan, T., & Kahana, M.J. (2021). Predicting recall of words and lists. *Journal of Experimental Psychology: Learning, Memory and Cognition*, *47*(5), 765-784.
41. Halderman, L.K., Finn, B., Lockwood, J., Long, N.M., and Kahana, M.J. (2021). EEG correlates of engagement during assessment. *ETS Research Report Series.*
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