Jarrod **Lewis-Peacock**

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Publications

Journal Articles

1. Chiarello, M., Lee, J., Salinas, M. M., Hilsabeck, R. C., Lewis-Peacock, J., & Sulzer, J. (2023). The effect of biomechanical features on classification of dual-task gait. *IEEE Sensors Journal*, *23*(3), 3079–3089. https://doi.org/10.1109/jsen.2022.3227475
2. Bruning, A. L., Mallya, M. M., & Lewis-Peacock, J. A. (2023). Rumination burdens the updating of working memory. *Attention, Perception, & Psychophysics*. https://doi.org/10.3758/s13414-022-02649-2
3. Zhang, Z., & Lewis-Peacock, J. A. (2022). Prioritization sharpens working memories but does not protect them from distraction. *Journal of Experimental Psychology: General*. https://doi.org/10.1037/xge0001309
4. Bretton-Granatoor, Z., Stealey, H., Santacruz, S. R., & Lewis-Peacock, J. A. (2022, October). Estimating intrinsic manifold dimensionality to classify task-related information in human and non-human primate data. *2022 IEEE Biomedical Circuits and Systems Conference (BioCAS)*. https://doi.org/10.1109/biocas54905.2022.9948604
5. Hennings, A. C., Cooper, S. E., Lewis-Peacock, J. A., & Dunsmoor, J. E. (2022). Pattern analysis of neuroimaging data reveals novel insights on threat learning and extinction in humans. *Neuroscience & Biobehavioral Reviews*, *142*, 104918. https://doi.org/10.1016/j.neubiorev.2022.104918
6. Keller, N. E., Hennings, A. C., Leiker, E. K., Lewis-Peacock, J. A., & Dunsmoor, J. E. (2022). Rewarded extinction increases amygdalar connectivity and stabilizes long-term memory traces in the vmPFC. *The Journal of Neuroscience*, *42*(29), 5717–5729. https://doi.org/10.1523/jneurosci.0075-22.2022
7. Koslov, S. R., Bulls, L. S., & Lewis-Peacock, J. A. (2022). Distinct monitoring strategies underlie costs and performance in prospective memory. *Memory & Cognition*, *50*(8), 1772–1788. https://doi.org/10.3758/s13421-022-01275-5
8. Mallett, R., Lorenc, E. S., & Lewis-Peacock, J. A. (2022). Working memory swap errors have identifiable neural representations. *Journal of Cognitive Neuroscience*, *34*(5), 776–786. https://doi.org/10.1162/jocn_a_01831
9. Hennings, A. C., McClay, M., Drew, M. R., Lewis-Peacock, J. A., & Dunsmoor, J. E. (2021). Neural reinstatement reveals divided organization of fear and extinction memories in the human brain. *Current Biology*, *32*(2), 304–314.e5. https://doi.org/10.1016/j.cub.2021.11.004
10. Lu, H.-Y., Lorenc, E. S., Zhu, H., Kilmarx, J., Sulzer, J., Xie, C., Tobler, P. N., Watrous, A. J., Orsborn, A. L., Lewis-Peacock, J., & Santacruz, S. R. (2021). Multi-scale neural decoding and analysis. *Journal of Neural Engineering*, *18*(4), 045013. https://doi.org/10.1088/1741-2552/ac160f
11. Hennings, A. C., Lewis-Peacock, J. A., & Dunsmoor, J. E. (2021). Emotional learning retroactively enhances item memory but distorts source attribution. *Learning & Memory*, *28*(6), 178–186. https://doi.org/10.1101/lm.053371.120
12. Oblak, E., Lewis-Peacock, J., & Sulzer, J. (2021). Differential neural plasticity of individual fingers revealed by fMRI neurofeedback. *Journal of Neurophysiology*, *125*(5), 1720–1734. https://doi.org/10.1152/jn.00509.2020
13. Chiu, Y.-C., Wang, T. H., Beck, D. M., Lewis-Peacock, J. A., & Sahakyan, L. (2021). Separation of item and context in item-method directed forgetting. *NeuroImage*, *235*, 117983. https://doi.org/10.1016/j.neuroimage.2021.117983
14. Lorenc, E. S., Mallett, R., & Lewis-Peacock, J. A. (2021). Distraction in visual working memory: Resistance is not futile. *Trends in Cognitive Sciences*, *25*(3), 228–239. https://doi.org/10.1016/j.tics.2020.12.004
15. Kilmarx, J., Oblak, E., Sulzer, J., & Lewis-Peacock, J. (2021). Towards a common template for neural reinforcement of finger individuation. *Scientific Reports*, *11*(1). https://doi.org/10.1038/s41598-020-80166-8
16. Kim, H., Smolker, H. R., Smith, L. L., Banich, M. T., & Lewis-Peacock, J. A. (2020). Changes to information in working memory depend on distinct removal operations. *Nature Communications*, *11*(1). https://doi.org/10.1038/s41467-020-20085-4
17. Bruning, A. L., & Lewis-Peacock, J. A. (2020). Long-term memory guides resource allocation in working memory. *Scientific Reports*, *10*(1). https://doi.org/10.1038/s41598-020-79108-1
18. Momennejad, I., Lewis-Peacock, J., Norman, K. A., Cohen, J. D., Singh, S., & Lewis, R. L. (2020). Rational use of episodic and working memory: A normative account of prospective memory. *Neuropsychologia*, *158*, 107657. https://doi.org/10.1016/j.neuropsychologia.2020.107657

19. Weng, H. Y., Ikeda, M. P., Lewis-Peacock, J. A., Chao, M. T., Fullwiley, D., Goldman, V., Skinner, S., Duncan, L. G., Gazzaley, A., & Hecht, F. M. (2020). Toward a compassionate intersectional neuroscience: Increasing diversity and equity in contemplative neuroscience. *Frontiers in Psychology*, *11*. https://doi.org/10.3389/fpsyg.2020.573134

20. Hennings, A. C., Bibb, S. A., Lewis-Peacock, J. A., & Dunsmoor, J. E. (2020). Thought suppression inhibits the generalization of fear extinction. *Behavioural Brain Research*, *398*, 112931. https://doi.org/10.1016/j.bbr.2020.112931

21. Weng, H. Y., Lewis-Peacock, J. A., Hecht, F. M., Uncapher, M. R., Ziegler, D. A., Farb, N. A. S., Goldman, V., Skinner, S., Duncan, L. G., Chao, M. T., & Gazzaley, A. (2020). Focus on the breath: Brain decoding reveals internal states of attention during meditation. *Frontiers in Human Neuroscience*, *14*. https://doi.org/10.3389/fnhum.2020.00336

22. Hennings, A. C., McClay, M., Lewis-Peacock, J. A., & Dunsmoor, J. E. (2020). Contextual reinstatement promotes extinction generalization in healthy adults but not PTSD. *Neuropsychologia*, *147*, 107573. https://doi.org/10.1016/j.neuropsychologia.2020.107573

23. Ros, T., Enriquez-Geppert, S., Zotev, V., Young, K. D., Wood, G., Whitfield-Gabrieli, S., Wan, F., Vuilleumier, P., Vialatte, F., Ville, D. V. D., Todder, D., Surmeli, T., Sulzer, J. S., Strehl, U., Sterman, M. B., Steiner, N. J., Sorger, B., Soekadar, S. R., Sitaram, R., … Thibault, R. T. (2020). Consensus on the reporting and experimental design of clinical and cognitive-behavioural neurofeedback studies (CRED-nf checklist). *Brain*, *143*(6), 1674–1685. https://doi.org/10.1093/brain/awaa009

24. Mallett, R., Mummaneni, A., & Lewis-Peacock, J. A. (2020). Distraction biases working memory for faces. *Psychonomic Bulletin & Review*, *27*(2), 350–356. https://doi.org/10.3758/s13423-019-01707-5

25. Weng, H. Y., Ikeda, M. P., Lewis-Peacock, J. A., Chao, M. T., Fullwiley, D., Goldman, V., Skinner, S., Duncan, L. G., Gazzaley, A., & Hecht, F. M. (2020). Corrigendum: Toward a compassionate intersectional neuroscience: Increasing diversity and equity in contemplative neuroscience. *Frontiers in Psychology*, *11*. https://doi.org/10.3389/fpsyg.2020.631816

Preprints

1. DeRosa, J., Kim, H., Lewis-Peacock, J., & Banich, M. T. (2023). *Neural systems underlying the implementation of working memory removal operations*. https://doi.org/10.1101/2023.02.14.519204

Books

Book Chapters

1. Lewis-Peacock, J. (2023). Forgetting. In *Encyclopedia of the human brain, 2nd edition*.

2. Lewis-Peacock, J. (2022). Curating the contents of working memory. In *Visual memory*.

3. Lewis-Peacock, J. (2020). Prospective memory forgetting. In *Memory failure*.

Professional Presentations

Lingering distractor representations bias memory reports
Vision Sciences Society, St. Pete Beach, FL *2023*

Protection and Removal of Information in Working Memory
University of Oxford, Oxford, England *2023*

Protection and Removal of Information in Working Memory
University of York, York, England *2023*

Protection and Removal of Information in Working Memory
University College London, London, England *2023*

Disruption of Information in Working Memory
University of Cambridge, Cambridge, England *2022*

Protection of Information in Working Memory
University of Cambridge, Cambridge, England *2022*

Remembering to Forget
University of Cambridge, Cambridge, England *2022*

Protection of Information in Working Memory

University of Geneva, Geneva, Switzerland *2022*

Protection of Information in Working Memory

University of Zurich, Zurich, Switzerland *2022*

Tidying up Working Memory

University of Cambridge, Cambridge, England *2022*

Tidying up working memory

University of Toronto, Ebbinghaus Empire speaker series *2022*

Neural impacts of working memory removal operations on the long-term retention of information

Working Memory Symposium, virtual *2022*

Prioritization allows working memory to bend but not break in the face of distraction

Working Memory Symposium, virtual *2022*

Removing information from working memory

Distributed Working Memory Series *2021*

Cognitive and affective influences on working memory updating

Virtual Working Memory Symposium *2021*

Functional connectivity during the removal of information from working memory

Virtual Working Memory Symposium, virtual *2021*

Removing information from working memory

Department of Psychology, Rice University. Houston, TX *2020*

How does removing a working memory alter its neural representation?

Virtual Working Memory Symposium, virtual *2020*

Long-term memory guides resource allocation in working memory

Virtual Working Memory Symposium, virtual *2020*

Conference Abstracts

Determining the neural representational similarity of multiple object categories during visual imagery

Real-time Functional Imaging and Neurofeedback Meeting (rtFIN), New Haven, CT *2022*

Estimating intrinsic manifold dimensionality to classify task-related information in human and non-human primate data

Biomedical Circuits and Systems Conference (BioCAS), virtual *2022*

Intrusive emotional thinking in working memory

UT Austin Longhorn Research Poster Session, Austin, TX *2022*

Neural impacts of working memory removal operations on the long-term retention of information

Society for Neuroscience, San Diego, CA *2022*

Signal intrusion explains divergent effects of visual distraction on working memory

Society for Neuroscience, San Diego, CA *2022*

A common template for neural reinforcement of finger individuation

Society for neuroscience *2021*

Emotional learning retroactively enhances item memory but distorts source attribution

Context and episodic memory symposium *2021*

The neural correlates of rewarded extinction

EUROPEAN MEETING OF HUMAN FEAR CONDITIONING *2021*

Valence and repetitive negative thoughts influence efficiency of replacing information in working memory
UNDERGRADUATE RESEARCH SYMPOSIUM *2021*

Interworm - Earworm Research
TEXAS STUDENT RESEARCH SHOWDOWN *2021*

A common template for neural reinforcement of finger individuation
Society for Neuroscience, virtual *2021*

Do earworms cause internal distraction and interfere with auditory working memory representations
UT Austin Psychology Honors Poster Session, virtual *2021*

Emotional learning retroactively enhances item memory but distorts source attribution
Context and Episodic Memory Symposium, Philadelphia, PA *2021*

Neural reinstatement reveals divided organization of fear and extinction memories in the human brain
Society for Neuroscience, virtual *2021*

The neural correlates of rewarded extinction
European Meeting of Human Fear Conditioning, virtual *2021*

Valence and repetitive negative thoughts influence efficiency of replacing information in working memory
UT Austin Undergraduate Research Symposium, virtual *2021*

How does removing a working memory alter its neural representation?
VIRTUAL WORKING MEMORY SYMPOSIUM *2020*

Long-term memory guides resource allocation in working memory
VIRTUAL WORKING MEMORY SYMPOSIUM *2020*

Dissociable neural reinstatement of emotional memories in the human PFC
COGNITIVE NEUROSCIENCE SOCIETY *2020*

Eye tracking of attention allocation during prospective remembering
COGNITIVE NEUROSCIENCE SOCIETY *2020*

Long-term memory guides resource allocation in working memory
COGNITIVE NEUROSCIENCE SOCIETY *2020*

The neural correlates of aversive to appetitive counterconditioning
COGNITIVE NEUROSCIENCE SOCIETY *2020*

Dissociable neural reinstatement of emotional memories in the human PFC
Cognitive Neuroscience Society, virtual *2020*

Eye tracking of attention allocation during prospective remembering
Vision Sciences Society, virtual *2020*

Eye tracking of attention allocation during prospective remembering
Cognitive Neuroscience Society, virtual *2020*

Long-term memory guides resource allocation in working memory
Vision Sciences Society, virtual *2020*

Long-term memory guides resource allocation in working memory
Cognitive Neuroscience Society, virtual *2020*

The neural correlates of aversive to appetitive counterconditioning
Cognitive Neuroscience Society, virtual *2020*

Honors

Faculty Research Award *Austin, US*

The University of Texas at Austin *2020*

Funding

Neural and Cognitive Mechanisms for Removing Emotional Information from Working Memory *NIMH, R01MH129042*

Funding: $782,097 *2022 - 2026*

Localizing and modulating competing memories of fear and safety in the human brain *NIMH, R01MH122387*

Funding: $1,623,500 *2021 - 2025*

Biasing the Forgetting of Visual Memories *National Eye Institute, R01EY028746*

Funding: $1,488,148 *2018 - 2023*

Removing and Manipulating Emotional Information in Working Memory: Cognitive and Neural Representations *NIMH, R56MH125642*

Funding: $770,369 *2021 - 2022*

Service

The University of Texas at Austin *Austin, US*

Steering Committee Member *2022 - present*

The University of Texas at Austin *Austin, US*

Reviewer, Johnson & Johnson WiSTEM2D internal competition *2021 - present*

The University of Texas at Austin *Austin, US*

Graduate Advisor *2021 - present*

The University of Texas at Austin *Austin, US*

Reviewer, Outstanding Dissertation Committee, College of Liberal Arts, *2021 - present*

National Institutes of Health *Bethesda, US*

F01B Fellowship Panel *2021 - present*

The University of Texas at Austin *Austin, US*

Reviewer, Research Reboot Committee, College of Liberal Arts *2021 - present*

The University of Texas at Austin *Austin, US*

DEI Faculty Liaisons *2021 - present*

The University of Texas at Austin *Austin, US*

Area Head - Cognition, Brain, & Behavior *2020 - present*

The University of Texas at Austin *Austin, US*

Area Head: Cognition, Brain, & Behavior *2020 - present*

Working Memory Symposium *virtual, global, US*

Co-founder and organizer *2020 - present*

National Science Foundation *Alexandria, US*

Cognitive Neuroscience Panel *2020 - present*

Journal of Cognitive Neuroscience *NA, US*

Consulting Editor *2020 - present*

Memory Disorders Research Society *virtual, US*

Co-organizer of 2021 annual meeting *2021 - 2021*

Mentoring and Teaching

Mentoring

Caleb Jerinic-Brodeur

Dissertation Supervisor — *2022 - present*

Diane Whitmer

Postdoctoral Supervisor — *2022 - present*

Laura Werner

Postdoctoral Supervisor — *2022 - present*

Ziyao Zhang

Dissertation Supervisor — *2021 - present*

Zachary Bretton-Granatoor

Dissertation Supervisor — *2020 - present*

Justin Kilmarx

Dissertation co-Supervisor — *2018 - present*

Elizabeth Lorenc

Postdoctoral Supervisor — *2018 - 2022*

Augustin Hennings

Dissertation co-Supervisor — *2017 - 2022*

Remington Mallett

Dissertation Supervisor — *2016 - 2021*

Seth Koslov

Dissertation Supervisor — *2016 - 2020*

Hyojeong Kim

Dissertation Supervisor — *2014 - 2020*

Teaching

PSY 420M Research Design & Statistics (2 sections)

Instructor — *2022 - 2022*

PSY 387S Principles of Cognitive Neuroscience

Instructor — *2021 - 2021*

PSY 394P Digital Neuroanatomy

Instructor (with Franco Pestilli) — *2021 - 2021*

PSY 420M Research Design & Statistics

Instructor — *2020 - 2020*

PSY 383E Cognitive Neuroscience Area Seminar

Instructor — *2020 - 2020*

PSY 386D Multivariate Pattern Analysis of Neuroimaging Data

Instructor — *2020 - 2020*