

David Sutterer

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EDUCATION AND PROFESSIONAL EXPERIENCE

Postdoctoral Fellow Vanderbilt University Department of Psychology Advisors: Geoffrey Woodman and Sean Polyn	2018 – present
Ph.D., Psychology The University of Chicago Advisor: Edward Awh	2018
M.S., Psychology University of Oregon Advisor: Edward Awh	2015
Lab Manager University of Wisconsin – Madison Postle Laboratory	2010 – 2012
B.S., Biology and Psychology University of Wisconsin – Madison Advisor: Bradley Postle	2010

FELLOWSHIPS AND AWARDS

NEI T32 Postdoctoral Training Fellowship, Vanderbilt Vision Research Center	2018 – 2020
National Eye Institute Postdoctoral Travel Award, Vision Sciences Society	2019
Elsevier/Vision Research Travel Award, Vision Sciences Society	2017
Graduate Student Award, Cognitive Neuroscience Society	2015
Graduate Education Committee Conference Travel Grant, University of Oregon	2013, 2014

PUBLICATIONS

*Equal contributions

Sutterer, D. W., Polyn, S., & Woodman, G. F. (2021). Alpha-band activity tracks a 2-dimensional spotlight of attention during spatial working memory maintenance. *Journal of Neurophysiology*, 125(3), 957–971. [Publisher Website](#) | [Data and Code](#)

Sutterer, D. W., Coia, A. J., Sun, V., Shevell, S. K., & Awh, E. (2021). Decoding chromaticity and luminance from patterns of EEG activity. *Psychophysiology*, 58(4), e13779. [Publisher Website](#) | [Data and Code](#)

Munneke, J., Fahrenfort, J. J., **Sutterer, D.**, Theeuwes, J., & Awh, E. (2021). Multivariate analysis of EEG activity indexes contingent attentional capture. *NeuroImage*, 226, 117562. [Publisher Website](#) | [Data and Code](#)

Sutterer, D.W., Foster, J.J., Serences, J.T., Vogel, E.K., & Awh, E. (2019). Alpha-band oscillations track the retrieval of precise spatial representations from long-term memory. *Journal of Neurophysiology*, 122(2) 539-551. [PDF](#) | [Publisher Website](#) | [Data and Code](#)

Sutterer*, **D.W.**, Foster*, J.J., Adam, K.C.S., Vogel, E.K., Awh, E. (2019). Item-specific delay activity demonstrates concurrent storage of multiple active neural representations in working memory. *PLOS Biology*. [PDF](#) | [Publisher Website](#) | [Data and Code](#)

Sprague T.C., Adam, K.C.S., Foster, J.J., Rahmati, M., **Sutterer, D.W.**, Vo, V.A. (2018). Inverted Encoding Models Assay Population-Level Stimulus Representations, Not Single-Unit Neural Tuning. *Neuro*, 5(3), 1-5. [PDF](#) | [Publisher Website](#)

van Moorselaar, D., Foster, J.J., **Sutterer, D.W.**, Theeuwes, J., Olivers, C.N.L., Awh, E. (2018). Spatially selective alpha oscillations reveal moment-by-moment tradeoffs between working memory and attention. *Journal of Cognitive Neuroscience*, 30(2), 256-266. [PDF](#) | [Publisher Website](#) | [Data and Code](#)

Foster, J.J., **Sutterer, D.W.**, Serences, J.T., Vogel, E.K., & Awh, E. (2017). Alpha-band oscillations enable spatially and temporally resolved tracking of covert spatial attention. *Psychological Science*, 28(7), 929-941. [PDF](#) | [Publisher Website](#) | [Data and Code](#)

Oberauer, K., Awh, E., **Sutterer, D.W.** (2017). The role of long-term memory in a test of visual working memory: Proactive facilitation but no proactive interference. *Journal of Experimental Psychology: Learning Memory and Cognition*, 43(1), 1-22. [PDF](#) | [Publisher Website](#)

Emrich, S.M., Johnson, J.S., **Sutterer, D.W.**, Postle, B.R. (2017). Comparing the effects of 10-hz repetitive TMS on tasks of visual STM. *Journal of Cognitive Neuroscience*, 29(2), 286-297. [PDF](#) | [Publisher Website](#)

Sutterer, D.W., & Awh, E. (2016) Retrieval practice enhances the accessibility but not the quality of memory. *Psychonomic Bulletin & Review*, 23(3): 831-841. [PDF](#) | [Publisher Website](#) | [Data and Code](#)

Ester, E., **Sutterer, D. W.**, Serences, J., & Awh, E. (2016). Feature-selective attentional modulations in human frontoparietal cortex. *Journal of Neuroscience*, 36(31): 8188-8199. [PDF](#) | [Publisher Website](#)

Foster J.J., **Sutterer, D.W.**, Serences, J.T., Vogel, E.K., & Awh, E. (2016). The topography of alpha-band activity tracks the content of spatial working memory. *Journal of Neurophysiology*, 115(1) 168-177. [PDF](#) | [Publisher Website](#) | [Data and Code](#)

Postle, B.R., Awh, E., Serences, J.T., **Sutterer, D.W.**, & D'Esposito, M. (2013). The positional specificity effect reveals a passive trace contribution to visual short-term memory. *PLOS One*, 8(12): e83483. [PDF](#) | [Publisher Website](#)

Kundu, B., **Sutterer, D.W.**, Emrich, S.M., & Postle, B.R. (2013). Strengthened effective connectivity underlies transfer of working memory training to tests of short-term memory and attention, *The Journal of Neuroscience*, 33(20): 8705-8715. [PDF](#) | [Publisher Website](#)

Johnson, J.S., **Sutterer, D.W.**, Acheson, D.J., Lewis-Peacock, J.A, & Postle, B.R. (2011). Increased alpha-band power during the retention of shapes and shape-location associations in visual short-term memory, *Frontiers in Psychology*, 2(128): 1-9. [PDF](#) | [Publisher Website](#)

MANUSCRIPTS UNDER REVIEW

Vo, V.A., **Sutterer, D.W.**, Foster, J.J., Sprague, T.C., Awh, E., Serences J.T. (under review). Shared long-term and short-term memory representational formats in occipital and parietal cortex. *BioRxiv*. [Preprint](#)

CONFERENCE TALKS

Sutterer, D.W., Woodman, G.F. Alpha-band activity selectively tracks targets but not distractors following spatial cues. *Annual meeting of the Vision Sciences Society*, June 2020

Vo V.A., **Sutterer, D.W.**, Foster, J.J., Sprague, T.C., Serences, J.T., Awh, E. Neural representations of spatial position recalled from long-term and short-term memory diverge across the cortical hierarchy. *Annual meeting of the Vision Sciences Society*, May 2017

Sutterer, D.W., Anderson, D.E., Serences, J.T., Vogel, E.K., Awh, E. Theta oscillations track the content of representations retrieved from long-term memory. *Annual meeting of the Vision Sciences Society*, May 2015

Sutterer, D.W., Awh, E. Testing Enhances the Probability but not the precision of memory recall. *Cognitive Science and Integrative Learning (CSAIL) annual meeting*, June 2014

CONFERENCE POSTERS (PRESENTING AUTHOR)

Sutterer, D.W., Woodman, G.F., Polyn, S.M. Electrophysiological evidence that the fidelity of the focus of attention does not underlie the primacy effect for spatial source memory. *Annual meeting of the Psychonomic Society*, November 2020

Sutterer, D.W., Woodman, G.F. Alpha-band activity finely tracks remembered locations within a visual hemifield. *Annual meeting of the Society for Neuroscience*, October 2019

Sutterer D.W., Coia A.J., Sun V., Shevell S.K., Awh E. Decoding chromaticity and luminance information with multivariate EEG. *Annual meeting of the Vision Sciences Society*, May 2019

Sutterer, D.W., Awh, E. Tracking spatial source memory reactivation with oscillatory alpha-band activity. *Annual meeting of the Society for Neuroscience*, November 2018

Sutterer, D.W., Awh, E. Evidence for concurrent activation of sequentially encoded spatial locations. *Annual meeting of the Vision Sciences Society*, May 2018

Sutterer, D.W., Foster J.J., Adam, K.C.S., Vogel, E.K., Awh, E. Spatial selectivity of alpha band activity declines with increasing visual working memory load. *Annual meeting of the Vision Sciences Society*, May 2017

Sutterer, D.W., Foster J.J., Serences, J.T., Vogel, E.K., Awh, E. Patterns of alpha-band oscillations track spatial long-term memory performance. *Annual meeting of the Cognitive Neuroscience Society*, April 2017

Sutterer, D.W., Foster J.J., Serences, J.T., Vogel, E.K., Awh, E. Alpha oscillations track the content of representations retrieved from long term memory. *Annual meeting of the Psychonomic Society*, November 2015.

Sutterer, D.W., Foster J.J., Serences, J.T., Vogel, E.K., Awh, E. Alpha oscillations track the content of representations retrieved from long term memory. *Annual meeting of the Society for Neuroscience*, October 2015

Sutterer, D.W., Anderson, D.E., Serences, J.T., Vogel, E.K., Awh, E. Theta oscillations track the content of representations retrieved from long term memory. *Annual meeting of the Cognitive Neuroscience Society*, March 2015

Sutterer, D.W., Awh, E. Testing enhances the probability but not the precision of memory recall. *Annual meeting of the Vision Sciences Society*, May 2014

Sutterer, D.W., Anderson D. E., Awh, E. Perceptual precision predicts working memory precision. *Annual meeting of the Vision Sciences Society*, May 2013

Sutterer, D.W., Johnson, J.S., Acheson D.J., and Postle, B.R. Probing the function of delay-period alpha-band oscillations in visual working memory. *Annual meeting of the Cognitive Neuroscience Society*, April 2010

TEACHING EXPERIENCE AND ACADEMIC ADVISING

Teaching Assistant: Biological Psychology, University of Chicago	Winter 2018
Teaching Assistant: Introduction to Learning and Memory, University of Chicago	Winter 2017
Teaching Assistant: Sensation and Perception, University of Chicago	Spring 2016
Teaching Assistant: Research Methods, University of Wisconsin – Madison	Spring 2012
House Fellow: Division of University Housing, University of Wisconsin – Madison	Spring 2012

AD-HOC REVIEWING

Brain Research

Biological Psychology

Cognition

eNeuro

eLife

Journal of Cognitive Neuroscience

Journal of Experimental Psychology: Learning

Memory and Cognition

Journal of Experimental Psychology: Human

Perception and Performance

Memory

NeuroImage

PLOS One

Psychonomic Bulletin and Review

Psychophysiology

Psychological Science

Quarterly Journal of Experimental Psychology

Scientific Reports