

# **JARED STOKES, PH.D. CANDIDATE**

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Psychology Department  
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<http://humanspatialcognitionlab.org/>

## **EDUCATION & PROFESSIONAL EMPLOYMENT**

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- Graduate Student, Psychology Department, University of California-Davis  
(9.25.11 - present)
- Lab manager, Cabeza Lab, Center for Cognitive Neuroscience, Duke University  
(11.01.2007 – 9.01.2011)
- Associate in Research, Cabeza Lab, Center for Cognitive Neuroscience, Duke University  
(11.01.2006 – 10.31.2007)
- B.Sc. (Biology, Chemistry m.) University of North Carolina, Chapel Hill  
(8.01.2000 – 12.01.2004)

## **RESEARCH EXPERIENCE**

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- Research specialist, Neural mechanisms of episodic memory; Cabeza Lab, Center for Cognitive Neuroscience, Duke University (11.01.2006 – 09.01.2011)
- Volunteer Research Assistant, Neural Indices of Discourse Coherence; Kuperberg Lab, Department of Psychology, Tufts University (06.01.2006 – 08.01.2006)
- Rehabilitation Unit Volunteer, Long-term rehab clinic; John Umstead Hospital,  
(08.25.2004 – 12.10.2004)
- Field Research Assistant, Accompanying Dr. K.A.I. Nekaris; Oxford University, Sri Lanka  
(06.05.2004 – 08.12.2004)
- Primate Field Research Student Project, La Suerte Biological Field Station, Costa Rica  
(12.26.2003 – 01.22.2004)
- Research Assistant, Clemmons Lab, UNC Department of Medicine  
(01.10.2001 – 05.01.2003)

## **MENTORING/TEACHING/AWARDS**

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### **Mentorship/Student supervision**

- Project Virtual Davis  
Charlotte Mehaffey, Undergraduate research assistant, University of California-Davis  
(01.01.2016 - present)
- Undergraduate senior research project mentor  
Nichole Bouffard, Undergraduate thesis project, University of California-Davis  
(01.04.2015 – 05.09.2015)  
Heather Wood, Undergraduate thesis project, University of California-Davis  
(01.04.2015 – 05.09.2015)  
Mingli Liang, Senior research project, University of California-Davis visiting student  
(01.04.2015 – 07.01.2015)

## Teaching Assistant

- Introduction to Cognitive Neuroscience, Department of Psychology, University of California-Davis
- Introduction to Cognitive Psychology, Department of Psychology, University of California-Davis
- Development of memory, Department of Psychology, University of California-Davis
- Neurobiology of learning and memory, Department of Psychology, University of California-Davis
- Research Methods in Psychology, Department of Psychology, University of California-Davis
- Introduction to Cognitive Neuroscience, Department of Psychology, University of California-Davis
- Human Perception, Department of Psychology, University of California-Davis
- Human Learning and memory, Department of Psychology, University of California-Davis
- General Psychology, Department of Psychology, University of California-Davis

## Awards

- Dissertation Fellowship (2017)
- Dukes travel award (2016)

## PUBLICATIONS

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**Stokes, J.**, Kyle, C., Huffman, D., Ekstrom, A.D. (in prep) Hippocampal pattern completion and separation mechanisms underlie spatial processing of novel, non-Euclidean environments.

Starrett, M.J., **Stokes, J.D.**, Ekstrom, A.D. (in prep). Dynamic Evolution of Spatial Representations during Free Ambulation of Large-Scale Virtual Environments.

Monge, Z.A., Wing, E. A., **Stokes, J.**, Cabeza, R. (2017). Search and Recovery of Autobiographical and Laboratory Memories: Shared and Distinct Neural Components. *Neuropsychologia*.

Bouffard, N., **Stokes, J.**, Kramer, H., Ekstrom, A. (2017). Temporal encoding strategies result in boosts to final free recall performance comparable to spatial ones. *Memory & Cognition*.

Kyle, C.T., **Stokes, J.**, Bennett, J., Meltzer, J., Permenter, M.R., Vogt, J.A., Ekstrom, A., Barnes, C.A. (under review) Cytoarchitectonically-driven MRI atlas of nonhuman primate hippocampus: preservation of subfield volumes in aging.

Lieberman, J.S., Kyle, C. T., Schedlbauer, A., **Stokes, J.**, Ekstrom, A. D. (2017). A tale of two temporal coding strategies: Common and dissociable brain regions involved in recency vs. associative temporal order retrieval strategies. *Journal of Cognitive Neuroscience*.

Kyle, C. T., **Stokes, J. D.**, Lieberman, J. S., Hassan, A. S., & Ekstrom, A. D. (2015). Successful retrieval of competing spatial environments in humans involves hippocampal pattern separation mechanisms. *eLife*, 4.

**Stokes, J.**, Kyle, C., & Ekstrom, A. D. (2015). Complementary Roles of Human Hippocampal Subfields in Differentiation and Integration of Spatial Context. *Journal of Cognitive Neuroscience*, 27(3), 546–559.

Dolcos, F., Iordan, A. D., Kragel, **J.**, **Stokes, J.**, Campbell, R., McCarthy, G., & Cabeza, R. (2013). Neural correlates of opposing effects of emotional distraction on working memory and episodic memory: an event-related fMRI investigation. *Frontiers in Psychology*, 4, 293.

Shafer, A. T., Matveychuk, D., Penney, T., O'Hare, A. J., **Stokes, J.**, & Dolcos, F. (2012). Processing of emotional distraction is both automatic and modulated by attention: evidence from an event-related fMRI investigation. *Journal of Cognitive Neuroscience*, 24(5), 1233–1252.

Hayes, S.M., Buchler, N., **Stokes, J.**, Kragel, J., Cabeza, R. (2011). Neural correlates of confidence during item recognition and source memory retrieval: Evidence for both dual-process and strength memory theories. *Journal of Cognitive Neuroscience*.

Cabeza, R., Mazuz, M., **Stokes, J.**, Kragel, J., Woldorff, W, Ciaramelli, E., Olson, I., & Moscovitch, M. (2011). Overlapping Parietal Activity in Memory and Perception: Evidence for the Attention to Memory (AtoM) Model. *Journal of Cognitive Neuroscience*, 23, 3209-3217.

Dennis, N., Browndyke, J., **Stokes, J.**, Need, A., Burke, J., Welsh-Bohmer, K. & Cabeza, R. (2010) Temporal lobe functional activity and connectivity in young adult APOE e4 carriers. *Alzheimer's & Dementia*.

## CONFERENCE PROCEEDINGS

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Starrett, M.J., **Stokes, J. D.**, Kreylos, O., Ekstrom, A. D., (2016) Navigation in virtual reality with vestibular and proprioceptive input diminishes orientation-dependent spatial representations. Society for Neuroscience Society Abstracts.

Kyle, C., Bennett, J. L., **Stokes, J. D.**, Permenter, M. R., Vogt, J. A., Ekstrom, A. D., Barnes, C. A. (2016) Histology informed probabilistic hippocampal atlases of young and old rhesus macaques. Society for Neuroscience Society Abstracts.

Borders, A., **Stokes, J.**, Kyle, C., Ekstrom, A., Yonelinas, A. (2015) High-resolution hippocampal activation patterns predict memory precision. Society for Neuroscience Society Abstracts.

**Stokes, J.**, Kyle, C., Ekstrom, A. (2015) Integration of familiar and novel spatial templates in episodic memory. Society for Neuroscience Society Abstracts.

Bouffard, N., **Stokes, J.**, Kyle, C., Lieberman, J., Ekstrom, A. (2015) Temporal encoding strategies produce comparable boosts in free recall performance to spatial encoding strategies. Society for Neuroscience Abstracts.

Lieberman, J., **Stokes, J.**, Kyle, C., Ekstrom, A. (2015) A tale of two temporal retrieval strategies: Dynamic expression of temporal sequence retrieval. Society for Neuroscience Abstracts.

Kyle, C., **Stokes, J.**, Ekstrom, A. (2014) Properties of spatial contextual representation within the human hippocampus during episodic memory retrieval. Society for Neuroscience Abstracts.

**Stokes, J.**, Kyle, C., Ekstrom, A. (2014) Dissociable roles of human hippocampal subfields CA3/DG and CA1 during processing of spatial context. Society for Neuroscience Abstracts.

**Stokes, J.**, Kyle, C., Ekstrom, A. (2014) Dissociable codes within the human hippocampal subfields during spatial context processing. Bay Area Memory Meeting Abstracts.

**Stokes, J.**, Ekstrom, A. (2012) Representational similarity in CA3/DG tracks changes in spatial context. Cognitive Neuroscience Society Abstracts.

Smuda, D., Kyle, C., **Stokes, J.**, Ekstrom, A. (2012) Role of hippocampal subregions in disambiguating elements of temporal vs. spatial context in episodic memory. Cognitive Neuroscience Society Abstracts.

**Stokes, J.**, Mazuz, Y., Daselaar, S., Moscovitch, M., Cabeza, R. (2011) Similarities and differences between the neural mechanisms of episodic and autobiographical memory recall. Cognitive Neuroscience Society Abstracts.

Hayes, S., Buchler, N., **Stokes, J.**, J, Kragel J., & Cabeza, R. (2010) Recollection orientation, retrieval success, and task difficulty: The role of prefrontal cortex and posterior parietal cortex during source and item memory. Cognitive Neuroscience Society Abstract.

Tomlinson, S., Kragel, J., **Stokes, J.**, Dolcos, F., McCarthy, G., & Cabeza, R. (2008). Role of individual differences in the response to emotional distraction: An event-related fMRI investigation. Supplement of Journal of Cognitive Neuroscience Abstracts.

Dolcos, F., **Stokes, J.**, Kragel, J., Ritchey, M. Tsukiura, T. McCarthy, G. & Cabeza, R. (2007). Neural correlates of opposing modulation of emotion on short- vs. long-term memory processes: An event-related fMRI investigation. Society for Neuroscience Abstracts.