

Curriculum Vitae

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Education

- 1996-2002** University of California at San Diego, Department of Cognitive Science
San Diego, CA
Ph.D., Cognitive Science
- 1990-1994** Harvard University
Cambridge, MA
B.S., Electrical Engineering

Awards and Support

- 2003-2005 NIH Training Fellow in Cognitive Neuroscience, UCSD
Neuronal Mechanisms of Spatial Attention in the Macaque
- 1996-1999 NSF Graduate Student Fellowship, UCSD
Neuronal Models of Saccade Planning and Spatial Working Memory

Professional memberships

North American Society for Neuroscience; Vision Sciences Society

Publications

1. Sundberg KA, Mitchell JF, and Reynolds JH (2009). 'Spatial attention modulates center-surround interactions in macaque visual area V4'. *Neuron* 61:1-12..
2. Khoe W, Mitchell JF, Reynolds JH and Hillyard, SA (2008). 'ERP evidence that surface-based attention biases interocular competition during rivalry'. *Journal of Vision*, 8(3):18.1-11.
3. Mitchell JF, Sundberg KA, and Reynolds JH (2007) 'Differential attention-dependent response modulation across cell classes in macaque visual area V4'. *Neuron*, 55: 131-141.
4. Khoe W, Mitchell JF, Reynolds JH and Hillyard, SA (2005) 'Exogenous attentional selection of transparent superimposed surfaces modulates early event-related potentials'. *Vision Research*, 45(24):3004-14
5. Stoner GR, Mitchell JF, Fallah M and Reynolds JH (2005). 'Interacting competitive selection in attention and binocular rivalry'. *Progress in Brain Research*, 14:227-34.
6. Mitchell JF, Stoner GR and Reynolds JH (2004) 'Object-based attention in binocular rivalry'. *Nature*, 2004 May; Vol 429:410-413.
7. Mitchell JF, Stoner GR, Fallah M, and Reynolds JH (2003) 'Attentional selection of superimposed surfaces cannot be explained by modulation of the gain of color channels.' *Vision Research*. 2003

Jun;43(12):1323-8.

8. Mitchell JF, Zipser D (2003) 'Sequential memory-guided saccades and target selection: A neural model of the frontal eye fields.' *Vision Research*. 2003 43:2669-95.

9. Mitchell JF, Zipser D (2001) 'A model of visual-spatial memory across saccades.' *Vision Research*. 2001 41:1575-92.

10. Czeisler CA, Duffy JF, Shanahan TL, Brown EN, Mitchell JF, Rimmer DW, Ronda JM, Silva EJ, Allan JS, Emens JS, Dijk DJ, Kronauer RE (1999) 'Age-independent stability, precision, and near-24-hour period of the human circadian pacemaker.' *Science*. 1999 284:1-5.

11. Vassilev PM, Mitchell JF, Vassilev M, Kanazirska M, Brown EM (1997) 'Assessment of frequency-dependent alterations in the level of extracellular Ca^{2+} in the synaptic cleft.' *Biophysical Journal*. 1997 72:2103-6.

Recent Abstracts

A1. J.F. Mitchell, K.A. Sundberg, J.H. Reynolds (2009). 'Attention reduces low frequency correlated noise in macaque V4'. *Vision Sciences Society Abstracts*.

A2. J. Curtis, J.F. Mitchell, J.H. Reynolds (2009). 'Estimates of spike-LFP coherence based on finite spiking data vary with mean firing rate'. *COSYNE Abstracts*.

A3. J.F. Mitchell, K.A. Sundberg, J.H. Reynolds (2008). 'Attention modulation in macaque V4 differs depending on cell class and their detailed spiking statistics'. *Society for Neuroscience Abstracts 464*.

A4. J.F. Mitchell, K.A. Sundberg, J.H. Reynolds (2008). 'Attention-dependent reductions in response variability in area V4 associated with changes in spike power spectra and burstiness'. *COSYNE Abstracts III-99*.

A5. J.F. Mitchell, K.A. Sundberg, J.H. Reynolds (2007). 'Attention modulation differs between cells classes in macaque area V4'. *Society for Neuroscience Abstracts 338.6*.

A6. J.F. Mitchell, J.H. Reynolds (2006). 'Sparse reverse correlation sequences improve estimation of V4 neuronal tuning functions'. *Society for Neuroscience Abstracts 546*.

A7. J.F. Mitchell, J.H. Reynolds (2006). 'Sparse reverse correlation sequences result in improved tuning functions in V4'. *COSYNE Abstracts*.

A8. J.F. Mitchell, K.A. Sundberg, and J.H. Reynolds (2006). 'Attentive tracking of multiple objects modulates neuronal responses in area V4 of the macaque'. *Vision Sciences Society Abstracts 879*.

A9. J.F. Mitchell, K.A. Sundberg, and J.H. Reynolds (2005). 'Attentive tracking of multiple objects modulates neuronal responses in area V4 of the macaque'. *Society for Neuroscience Abstracts 821.2*.

A10. J.F. Mitchell, K.A. Sundberg, and J.H. Reynolds (2005). 'Attentive tracking of multiple objects by humans and monkeys'. *Vision Sciences Society Abstracts 30*.

A11. J.F. Mitchell, K.A. Sundberg, and J.H. Reynolds (2004). 'Comparison of human and macaque ability to attentively track multiple visual stimuli'. *Society for Neuroscience Abstracts 176.8*.