

Vita of Jocelyn L. Sy

Education & Training:

- 2005-2011 Ph.D in Psychology doctorate program,
Cognitive, Perceptual, and Cognitive Neurosciences
University of California, Santa Barbara
- Dissertation title: *Top-down influences in selection and distraction: Load Theory revisited.*
Advisor: Dr. Barry Giesbrecht
- 2003 B.S. Psychology with Honors,
University of California, Davis

Appointments:

- 2014-present Post-doctoral research associate
Advisor: Dr. Randolph Blake
Vanderbilt University
- 2011-present Post-doctoral research associate
Advisor: Dr. Frank Tong
Vanderbilt University, Nashville, TN
- 2005 Junior Specialist II, Dr. Barry Giesbrecht, Department of
Psychology, University of California, Santa Barbara
- 2003-2005 Postgraduate Researcher I & II, Drs. G. Ron Mangun and
Tamara Swaab, Center for Mind and Brain, University of
California, Davis

Awards:

- 2012-2013 NIH Institutional Research Training Grant, Vanderbilt Vision
Research Center, 5T32EY007135-18
- 2011 Graduate Division Dissertation Fellowship, University of
California, Santa Barbara
- 2008 Summer Institute in Cognitive Neuroscience, Lake Tahoe,
California, fellowship
- 2007 Summer Institute in Cognitive Neuroscience, University of
California, Santa Barbara fellowship

Manuscripts in preparation

- Sy, J.L., Guerin, S.A., Stegman, A., Giesbrecht, B. (in review). Accurate expectancies diminish perceptual distraction during visual search. *Frontiers in Human Neuroscience*.
- Sy, J.L., Jehee, J., & Tong, F. (in prep). Attention to task-irrelevant features of an object is not mandatory, but resource-dependent.
- Sy, J.L., Ling, S., & Tong, F. (in prep). Decoding expectation of orientation in visual cortex.
- Pratte, M., Sy, J.L., Swisher, J.D., & Tong, F. (in prep). Orientation decoding in V1.

Published Articles:

- Giesbrecht, B., Sy, J.L., Elliott, J. (2007). Electrophysiological evidence for both perceptual and post-perceptual selection during the attentional blink. *Journal of Cognitive Neuroscience*, 19(12), 2005-2018.
- Giesbrecht, B., Sy, J.L., Lewis, M. (2009). Personal names do not always survive the attentional blink: Behavioral evidence for a flexible locus of selection. *Vision Research*, 49(10), 1378-1388.
- Sy, J.L., & Giesbrecht, B. (2009). Task-relevance modulates the influence of target similarity on the attentional blink. *Visual Cognition*, 17(3), 307-317.
- Peterson, M.P., Das, K., Sy, J.L., Li, S., Giesbrecht, B., Kourtzi, Z., & Eckstein, M.P. (2010). Ideal observer analysis for task normalization of pattern classifier performance applied to EEG and fMRI data. *Journal of the Optical Society of America A: Optics, image science, and vision*, 27(12), 2670-2683.
- Kyllingsbæk, S., Sy, J.L., & Giesbrecht, B. (2011). Understanding the allocation of attention when faced with varying perceptual load in partial report: A computational approach. *Neuropsychologia*, 46, 1487-1497.
- Cecotti, H., Sato-Reinhold, J., Sy, J.L., Elliott, J.C., Eckstein, M.P., Giesbrecht, B., (2011). Impact of target probability on single-trial EEG target detection in a difficult rapid serial visual presentation task. *Engineering in Medicine and Biology Society, EMBC, 2011 Annual International Conference of the IEEE*, 6381-6384,
- Eckstein, M.P., Das, K., Pham, B.T., Peterson, M.F., Abbey, C.K., Sy, J.L., & Giesbrecht, B. (2012). Neural decoding of collective wisdom with multi-brain computing. *Neuroimage*, 59, 94-108.
- Giesbrecht, B., Sy, J.L., Guerin, S.A. (2012). Both memory and attention systems contribute to visual search for targets cued by implicitly learned context. *Vision Research*, available online, doi: 10.1016/j.visres.2012.10.006.
- Sy, J.L., Elliott, J.C., & Giesbrecht, B. (2014). Post-perceptual processing during the attentional blink is modulated by inter-trial expectancies. *Frontiers in Human Neuroscience*, 7(627), doi: 10.3389/fnhum.2013.00627.
- Giesbrecht, B., Sy, J. L., Bundesen, C., & Kyllingsbæk, S. (in press). A new

perspective on the perceptual selectivity of attention under load. *The Year in Cognitive Neuroscience*.

Recent Conference Presentations:

- Sy, J., Ristic, J., & Giesbrecht, B. (2009). Top-down modulation of reflexive social orienting. Poster presented at the Annual meeting of the Vision Science Society.
- Sy, J., & Giesbrecht, B. (2010). fMRI evidence for top-down influences on perceptual distraction. Poster presented at the Annual meeting of the Vision Science Society.
- Sy, J., & Giesbrecht, B. (2010). Intraparietal sulcus involvement in top-down modulations of visual cortex and behavioral distraction. Poster presented at the Annual meeting for the Society for Neuroscience.
- Cecotti, H., Sato-Reinhold, J., Sy, J.L., Eckstein, M.P., & Giesbrecht, B. (2011). Using single-trial EEG to detect targets with unknown stimulus onsets. Poster presented at the annual meeting for the Society for Neuroscience.
- Sy, J.L., Jehee, J., & Tong, F. (2013). Attention to task-irrelevant features of an object is not mandatory, but rather resource-dependent. Poster presented at the annual meeting for the Society for Neuroscience.
- Sy, J.L., & Tong, F. (2014). Evidence of a feature-based attentional template in early visual areas during the absence of visual stimulation. Poster to be presented at the annual meeting for the Vision Science Society.

Invited Talks:

- Sy, J., & Giesbrecht, B. (2009). fMRI evidence for expectation-based modulations of perceptual distraction. Talk presented at the annual meeting for the Society for Neuroscience.
- Sy, J.L., Guerin, S.A., Stegman, A.C., & Giesbrecht, B. (2011). fMRI and ERP evidence that predictive load cues modulate the susceptibility to perceptual distraction. Talk presented at the annual meeting for the Society for Neuroscience.
- Sy, J.L., Jehee, J., Tong, F. (January, 2013). Object-based vs. Feature-based Selection: Perceptual load and irrelevant features. Invited speaker for a PhD workshop on "Perceptual Load and Attention" at the Department of Psychology, at the University of Copenhagen, Copenhagen, Denmark.
- Sy, J.L., Jehee, J., Tong, F. (2013). Object-based attention is not mandatory: Perceptual load reduces the attentional boost of task irrelevant features in the human visual cortex. Talk to be presented at the Vision Science Society Annual meeting.

Related Professional Experience:

2002-2003 Undergraduate Research Assistant, Dr. Richard Robins,

Department of Psychology, University of California, Davis
2001-2002 Undergraduate Research Assistant, Dr. Stanley Sue,
National Research Center for Asian American Mental Health, University
of California, Davis

Teaching Experience:

Courses

2009 Summer	Teaching Assistant, Lab in Advanced Research
2009 (Winter), 2010 (Spring)	Teaching Assistant, <i>Laboratory in Attention</i>
2008 (Winter)	Teaching Assistant, <i>Auditory Perception</i>
2007, 2008, 2009	Teaching Assistant, <i>Laboratory in Perception</i>
2007 (Winter, Fall)	Teaching Assistant, <i>Visual Perception</i>
2006 (Fall), 2008 (Fall), 2009 (Winter)	Teaching Assistant, <i>Introduction to Statistics</i>
2006 (Winter)	Teaching Assistant, <i>Contemporary Issues in Biopsychology: Attention and the Brain</i>
2006 (Winter)	Teaching Assistant, <i>Graduate Seminar: Human Electrophysiology</i>
2005 (Fall), 2006 (Spring), 2010 (Fall)	Teaching Assistant, <i>Introduction to Psychology</i>

Society Memberships:

2009-present	<i>Society for Neuroscience</i>
2005-present	<i>Vision Sciences Society</i>
2002-present	<i>Psi Chi National Honors Society</i>