

Melissa Saenz, *Curriculum Vitae*

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EDUCATION

- 2002 Ph.D. in Neuroscience, University of California San Diego
Advisor: Geoffrey Boynton
- 1998 B.S. in Biology, California Institute of Technology
- 2000 Course participant: Computational Neuroscience of Vision,
Cold Spring Harbor Laboratory, New York

ACADEMIC POSITIONS

- 2008-present Lecturer in Computation and Neural Systems, Caltech
- 2003-present Postdoctoral Fellow in Biology, Caltech, Koch lab
Advisor: Christof Koch
(Three Maternity Leaves of Absence: May 2004-Mar 2005;
Aug 2006-Dec 2006; August 2008-Feb 2009)

TEACHING EXPERIENCE

- 2008 Developed and taught Caltech course on Brain Plasticity (Bi/CNS 286)
for undergraduate and graduate students
- 2002 Teaching Assistant for graduate Neuroanatomy at UCSD

PUBLICATIONS

Saenz M, Koch C (2008) The Sound of Change: Visually-induced auditory synesthesia. *Current Biology*. 18:R650-1.

Saenz M, Lewis LB, Huth A, Fine I, Koch C (2008) Visual motion area MT+/V5 responds to auditory motion in human sight-recovery subjects. *Journal of Neuroscience* 28(20), 5141-5148.

Saenz M, Buracas GT, Boynton GM, (2003) Global feature-based attention for motion and color. *Vision Research* 43, 629-37.

Kornylo K, Dill N, Saenz M, Krauzlis RJ (2003) Canceling of pursuit and saccadic eye movements in humans and monkeys. *Journal of Neurophysiology* 89(6), 2984-99.

Saenz M, Buracas GT, Boynton GM (2002). Global effects of feature-based attention in human visual cortex. *Nature Neuroscience* 5(7), 631-2.

Lewis TB, Saenz M, O'Connell P, Leach RJ (1994) Localization of glucose-dependent insulin-tropic polypeptide (GIP) to a gene cluster on chromosome 17q. *Genomics* 19(3), 589-91.

BOOK CHAPTER

Buracas G.T, Saenz M., and Boynton G.M. Dual Nature of Visual Attention Modulation of Neuronal Responses: Implications for Active Vision. G.T. Buracas et al. (Eds.) IOS Press, 2003.

CONFERENCE ABSTRACTS

Saenz M, Koch C (2008) Hearing motion in the "mind's ear": evidence for visually-induced auditory synesthesia. Vision Sciences Society, 8th annual meeting. **Invited Talk.**

Saenz M, Lewis LB, Huth A, Fine I, Koch C. (2007) Visual area MT+ responds to sound motion in early-blind human subjects. Vision Sciences Society, 7th annual meeting. **Invited Talk.**

Saenz M, Boynton G.M., Koch C. (2006) Combined Effects of Spatial and Feature-based Attention. Vision Sciences Society, 6th annual meeting.

Saenz M, Boynton G.M., Koch C. (2005) Cortical Sources of Spatial and Feature-based Attentional Control. Optical Society of America, Fall Vision Meeting. **Invited Talk.**

Saenz M., Koch C. (2004) Biasing the Percept of Ambiguous Visual Stimuli. Vision Sciences Society, 4th annual meeting.

Saenz M., Boynton G.M (2003) The role of competing stimuli in feature-based attention. Vision Sciences Society, 3rd annual meeting.

Saenz M., Boynton G.M. (2002) Feature-based attention modulates lateral interactions in contrast detection. Society for Neuroscience, 32nd annual meeting.

Saenz M., Buracas G.T., Boynton G.M. (2002) Global effects of feature-based visual attention to direction of motion and color. Human Brain Mapping Conference, Sendai, Japan. **Invited Talk.**

Saenz M., Buracas G.T., Boynton G.M. (2002) Global effects of feature-based attention to direction of motion and color. Vision Sciences Society, 2nd annual meeting. **Invited Talk.**

Saenz M., Buracas G.T., Boynton G.M. (2001) Feature-based attentional effects in early human visual cortex. Society for Neuroscience, 31st annual meeting. **Invited Talk.**

Saenz M., Buracas G.T., Boynton G.M. (2001) Feature-based attentional effects in early human visual cortex. Vision Sciences Society, 1st annual meeting. **Invited Talk.**

Buracas G.T, Saenz M., and Boynton G.M. (2000) Comparing fMRI responses to discrimination thresholds using population-based models. Society for Neuroscience, 30th annual meeting.

Saenz M., Krauzlis R.J. Countermanding Pursuit and Saccades. (1999) Society for Neuroscience, 29th annual meeting.

GRANTS

2006 Moore Foundation Discovery Grant
"Cross-modal Responses in the Visual Cortex of the Blind and the Sighted"
Author and Co-Investigator with PI, Christof Koch of Caltech

2006 DANA Foundation
"Neural Deterioration and Cross-modal Plasticity in the Blind"
Co-author and Co-Investigator with PI, Ione Fine of USC

2004 Mind Science Foundation
"Tracking the Footsteps of Consciousness Using Functional Brain Imaging of a Bistable Illusion" Author and Co-Investigator with PI, Christof Koch of Caltech

HONORS AND AWARDS

2006 Post-doctoral fellowship, Gordon and Betty Moore Foundation Diversity Award

2003-05 Baxter Fellowship for Postdoctoral Study in Biology
California Institute of Technology

2002 Travel Award: Organization for Human Brain Mapping Conference
Sendai, Japan

2000 Travel Award: NATO Advanced Study Institute: Modulation of neuronal signaling - Implications for visual perception. Nida, Lithuania.

1998-01 National Science Foundation Graduate Study Fellowship

1994 National Merit Scholar, National Science Scholar, & National Hispanic Scholar