

Mark W. Becker

**Department of Psychology
Michigan State University
East Lansing, MI 48823
Phone: TBA Fax: TBA**

becker54@msu.edu; <http://www.msu.edu/~becker54>

Current Appointment:

Assistant Professor of Psychology, Michigan State University, East Lansing, MI. August 2007-present.

Previous Appointment:

Assistant Professor of Psychology, Lewis & Clark College, Portland, Oregon. August 2002-August 2007.

Education:

University of California, San Diego

Ph.D., Experimental Psychology (December 2000). Dissertation advisors: Harold Pashler, Ph.D. & Stuart Anstis, Ph.D. Title: Volatile visual representations: The information represented while viewing visual scenes

M.A., Experimental Psychology (July 1995). Thesis advisor: Stuart Anstis, Ph.D. Title: Metacontrast masking as a motion de-blurring device.

Union College, Schenectady, NY

B.S., Psychology. Graduated *Magna Cum Laude* and with Honors in Psychology.

Research Experience:

Post-Doctoral Researcher (2001-2002). Attention & Cognition Lab. University of California, San Diego. Graduate Research Assistant (1997-2001). University of California, San Diego. Advisor: Harold Pashler, Ph.D.

Graduate Research Assistant (1994-2000). University of California, San Diego. Advisor: Stuart Anstis, Ph.D.

Undergraduate Research Assistant (1989-1991). Union College, Schenectady, NY. Advisor: Seth Greenberg, Ph.D.

Cultural Anthropological Field Study, Barbados (1990). In association with Union College.

Publications: Undergraduates in bold

Becker, M.W., & **Vera, S.** (in press). Attentional filtering of transients allows for a recovery from change blindness. *Perception*.

Becker, M.W., & **Rasmussen, I.P.** (2007). The rhythm aftereffect: Support for time sensitive neurons with broad overlapping tuning curves. *Brain & Cognition*, 64 (3), 274-281.

Becker, M.W., Pashler, H., & Lubin, J. (2007) Object intrinsic oddities draw early saccades. *Journal of Experimental Psychology: Human Perception and Performance*, 33, 20-30.

Pashler, H., Ramachandran, V.S., & Becker, M.W. (2006). Attending to a misoriented word causes the eyeball to rotate in the head. *Psychonomic Bulletin & Review*, 13 (6), 954-957..

Becker, M.W., & Pashler, H. (2005). Awareness of the continuously visible: Information acquisition during preview. *Perception & Psychophysics*, 67, 1391-1403.

Becker, M.W., & Anstis, S. (2004). Metacontrast masking is specific to luminance polarity. *Vision Research*, 44, 2537-254.

Becker, M.W., & Pashler, H (2002). Volatile visual representations: Failing to detect changes in recently processed information. *Psychonomics Bulletin & Review*, 9, 744-750.

Becker, M.W., Pashler, H., & Anstis S.M (2000). The role of iconic memory in change detection tasks. *Perception*, 29, 273-286.

In Revision:

- Anstis, S.M., & Becker, M.W. (in revision) Illusory drifts of peripheral spatial gradients in the pinwheel illusion. *Vision Research*.
- Becker, M.W., & **Rasmussen, I.P.** (in revision). The guidance of attention by long term memory of natural scenes. *Visual Cognition*.

In Preparation:

- Becker, M.W., Detweiler-Bedell, B., **Armstrong, T.**, & **Rasmussen, I.** Peripheral detection of fear produces panicked scanning.
- Becker, M.W., & **Hickok, A.** The role of working memory in the allocation of attention.
- Becker, M.W., **Heveran, C.M.**, & Detweiler-Bedell, B. Facial expression of emotion mediates gaze cuing.

Peer Reviewed Conference Presentations: Undergraduates in bold

- Becker, M.W., & **Vera, S.** (2007). Attentional Filtering of Repetitive Transients Reduces Change Blindness. Vision Science Society Annual Meeting, Sarasota, FL.
- Becker, M. W., Detweiler-Bedell, B., **Rasmussen, I. P.**, & **Koch, L.** (2006). Negatively valenced facial expressions elicit panicked scanning [Abstract]. *Journal of Vision*, 6(6), 1058a.
- Rasmussen, I. P.**, Becker, M. W., **Scharff, A.**, & **Hickok, A.** (2006). Incidental memory for relevant locations in real world scenes [Abstract]. *Journal of Vision*, 6(6), 841a.
- Heveran, C. M.**, Becker, M. W., **Rasmussen, I. P.**, & Detweiler-Bedell, B. (2006). Facial expression of emotion mediates gaze cuing [Abstract]. *Journal of Vision*, 6(6), 1057a.
- Rasmussen, I. P.**, **Scharff, A.**, Becker, M. W. (2006). Scene-Specific Memory Guides the Allocation of Attention in Natural Scenes. 18th Annual Convention of the Association for Psychological Science, NY, NY.
- Becker, M.W. & **Rasmussen, I.** (2006). Scene specific visual memory guides the allocation of attention. The Oregon Academy of Science Annual Meeting, Eugene, OR.
- Becker, M.W., Detweiler-Bedell, B. (2005). Fearful faces elicit panicked search. Eleventh Annual Cognitive Science Association for Interdisciplinary Learning Conference, Hood River, OR.
- Becker, M.W., **Rasmussen, I.**, & **Sims, A.** (2005). Scene specific memory guides the allocation of attention in natural scenes [Abstract]. *Journal of Vision*, 5(8), 411.
- Detweiler-Bedell, B., Becker, M.W., **Armstrong, T.** & **Sims, A.** (2004). Direct evidence that preattentive processing of emotional facial expressions guides visual attention. Paper presented at the annual meeting of the Society for Personality and Social Psychology, New Orleans, LA.
- Becker, M.W. & **Vera, S.** (2004). The benefit of previewing a search array is capacity limited [Abstract]. *Journal of Vision*, 4(8), 682a.
- Becker, M. W. & Pashler, H. (2003). Searching a noisy visual display with preview [Abstract]. *Journal of Vision*, 3(9), 631a.
- Becker, M.W. & Pashler, H. (2002). Semantic oddities draw early saccades. Psychonomic Society annual meeting. Orlando, FL.
- Becker, M. W., & Pashler, H. (2002). Volatile visual representations [Abstract]. *Journal of Vision*, 2(7), 269a.
- Beer, D., Becker, M., Anstis, S., & MacLeod, D. (2002). Polarity-specific masking of isoluminant colors [Abstract]. *Journal of Vision*, 2(7), 546a.
- Anstis, S & Becker, M. (2001). Metacontrast masking is polarity specific. Optical Society of America. Irvine, CA.
- Becker, M.W., Pashler, H., & Anstis S.M. (2000). How quickly we forget: Change-blindness in a highest digit task shows the volatility of visual representations [Abstract]. *Investigative Ophthalmology & Visual Science*, 41, S421.
- Becker, M.W., Pashler, H., & Anstis S.M. (1999). Do people see more than change blindness suggests? [Abstract]. *Investigative Ophthalmology & Visual Science*, 40, S49.
- Becker, M.W. & Anstis, S.M. (1997). Different mechanisms for ISI versus No-ISI change detection [Abstract]. *Investigative Ophthalmology & Visual Science*, 38, S371.

- Becker, M.W. & Anstis, S.M. (1996). Metacontrast as a motion de-blurring device [Abstract]. *Investigative Ophthalmology & Visual Science*, 37, S749.
- Becker, M.W., & Greenberg, S.N. (1991). The role of function words in the missing letter effect. 5th National Conference on Undergraduate Research. Pasadena, California.

Other Presentations:

- Becker, M.W. (2006). Higher order factors that influence the allocation of attention: Meaning, emotion, and memory. Invited Colloquia, North Dakota State University, Fargo, ND.
- Becker, M.W. & **Hickok, A.** (2006). The role of working memory in the allocation of attention. Summer Research Colloquia, Lewis & Clark College.
- Becker, M.W. (2006). Higher order factors that influence the allocation of attention: Meaning, emotion, and memory. Invited address, Skidmore College, Saratoga Springs, NY.
- Becker, M.W. & **Rasmussen, I.** (2005). Fearful faces elicit panicked search. Summer Research Colloquia, Lewis & Clark College.
- Becker, M.W. (2004). The importance and allocation of attention in visual scenes. Invited address, Vanderbilt University, Nashville, TN.
- Becker, M.W. (2004). Change Blindness. Guest lecturer in PHIL 453: Philosophical studies: Is the visual world a grand illusion?, Lewis & Clark College.
- Becker, M.W., **Sims, A. & Vera, S.** (2004). The allocation of attention in visual scenes. Summer Research Colloquia, Lewis & Clark College.
- Becker, M.W. (2003). Visual representations are sparse and fleeting: Evidence and implications. Natural Sciences Colloquia, Lewis & Clark College.
- Becker, M.W. (1999; 2000). Introductory computer training seminar for graduate students.

Computer Based Tutorials:

- Becker, M.W. (2004). SPSS Tutorial. Designed an interactive tutorial for inferential statistical analysis using SPSS software (<http://www.lclark.edu/~mbecker/sppsprimer.htm>).
- Becker, M.W. & Pashler, H. (2003). Visual Sensory Memory Demonstrations. Designed an interactive on-line demonstration of iconic memory and masking (<http://dualtask.org>).
- Becker, M.W. (1998). Designed and programmed an interactive museum exhibit on apparent motion. Technorama Museum, Winterthur, Switzerland.

Honors and Awards:

- Summer Research Fellowship (\$5,000), Lewis & Clark College, Summer 2006.
- Summer Research Fellowship (\$5,000), Lewis & Clark College, Summer 2004.
- Faculty Fellowship (~\$50,000), UCSD, 2001-2002.
- Psychology Department Travel Award, (1997, 1999, 2000).
- Phi Beta Kappa, Union College, Schenectady, New York.
- Psi Chi, Union College, Schenectady, New York.
- Magna Cum Laude*, Psychology Honors, Union College, Schenectady, NY (1991).

Ad Hoc Reviewer:

Applied Cognitive Psychology
Developmental Psychology
The Journal Vision
Memory and Cognition
Perception
Psychological Science
Psychonomic Bulletin & Review

Teaching Experience:

Lewis & Clark College, Portland, OR: Assistant Professor of Psychology

Introduction to Statistics. Spring '03, Spring '04, Spring '05, Fall '05, and Fall '06.

Perception. Fall '02, Fall '03, Fall '04, Fall '05, Fall '06.

Introduction to Psychology. Spring '03, Spring '04, Fall '04.

Thinking, Memory, & Problem Solving. Spring '04.

Attention. Spring '03, Spring '05

Freshman Core Course - Inventing America. Fall '03.

University of California, San Diego, CA

As a Faculty Fellow in Psychology:

Introduction to Statistics. 2002.

Human Sexuality. 2002, 2001

Sensation & Perception. 2002, 2001

As a Graduate Student:

Introduction to Statistics. Summer 2000.

Teaching Assistant -17 courses. 1994-2000.

Palomar College, San Marcos, CA: Adjunct Professor of Psychology

Introduction to Psychology, 1999.

Introduction to Statistics, 1998.

Service & Committee Work:

Member, Human Subjects Committee, Fall 2006- Fall 2007.

Member, Chemistry Search Committee, Fall 2006

Organizer, Summer Neuroscience Workshop, Summer 2006.

Presenter, Summer Technology Institute, Summer 2006.

Member, Project Kaleidoscope Leadership Working Group, Fall 2005 – Summer 2007.

Campus Liaison for NITLE, Fall 2005 – Spring 2006.

Participant, West Coast Technology Project, Showcase and planning workshop, Summer 2005.

Participant, Technology Showcase, Spring 2005; Spring 2006.

Member, Committee on Educational Technology, Fall 2004- Fall 2005.

Member, First Year Advising Pilot Program, Fall 2004- present.

Member, Fringe Benefits Committee, Fall 2003- Spring 2007.

Member, Scholarship Committee, Fall 2002- Spring 2003.

Member, Lewis & Clark College chapter of Phi Beta Kappa, Fall 2002- Spring 2007.

Member, Committee evaluating quantitative reasoning courses in the Social Sciences, 2003.

Professional Organizations:

Vision Sciences Society

Association for Research in Vision and Ophthalmology

Sigma Xi

Council on Undergraduate Research