

Mark W. Becker

Department of Psychology

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Current Appointments

Associate Professor of Psychology, Michigan State University, East Lansing, MI. July 2013-present.

Associate Chair & Director of Undergraduate Education, Department of Psychology, Michigan State University, East Lansing, MI. July 2015-present.

Previous Appointments

Assistant Professor of Psychology, Michigan State University, East Lansing, MI. August 2007-2013.

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

University of California Faculty Fellow, University of California, San Diego. January 2001-August 2002.

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.

Grants & Fellowships

Current

AHRQ Health Services Research Projects- R01 (\$1,632,581 total costs) – “Optimizing OTC labels for older adults: Empirical evaluation of labels designed to provide older users the information they need to minimize adverse drug events.” Co-PI with Laura Bix. 7/18-5/22.

Previous

NIH- National Cancer Institute – R21 (\$365,351 total costs) – “Evaluating Human Processing of Front of Pack Nutritional Labels.” Co-PI with Laura Bix. 7/11-7/14.

Blue Cross Blue Shield of Michigan – (\$18,842, direct costs) – “Assessing the current strategy for labeling critical information on medical device packaging: - Co-PI with Laura Bix 2/14-2/15

- Consumer Healthcare Products Association (\$26,696, direct costs) – “Quantifying the Attentive Behaviors of Older Adults during Purchase Scenarios: Decision making and OTC Drugs” – Co-Pi with Laura Bix. 1/14-12/14.
- Internal Research Grant Program (\$37,919) – “Threat detection and efficiency.” Michigan State University, 1/09-6/10
- Summer Research Fellowship (\$5,000), Lewis & Clark College, Summer 2004 & 2006.
- University of California Faculty Fellowship (~\$50,000), UC, San Diego, 2001-2002.

Publications

*Notes: * indicates a graduate student co-author; ** indicates an undergraduate/post-bachelors co-author*

Peer Reviewed

- Peltier, C.*, **Becker, M. W.** (In press). Individual differences predict low prevalence visual search performance and sources of errors: An eye-tracking study. *Journal of Experimental Psychology: Applied*.
- Becker, M.W.**, Hemsteger, S.**, Chantland, E.*, & Liu, T.S. (in press). Value-Based Attention Capture: Differential Effects of Loss and Gain Contingencies. *Journal of Vision*.
- Brascamp, J., Qian, C.S.*, Hambrick, D.Z., & **Becker, M.W.** (2019). Individual differences point to two separate processes involved in the resolution of binocular rivalry. *Journal of Vision* 2019;19(12):15. doi: 10.1167/19.12.15.
- Fang, M. W. H.*, **Becker, M. W.**, & Liu, T. (2019). Attention to colors induces surround suppression at category boundaries. *Scientific Reports*, 9(1), 1443. <https://doi.org/10.1038/s41598-018-37610-7>.
- Becker, M.W.**, Brunk, E.**, Cwiakala, K.*, Bix, L. (2019). Munchy Monster: Using video gaming to objectively evaluate front of pack labeling strategies for school-aged children. *Packaging Technology and Science*, 32:395–404.
- Chen, R.*, Bello, N.M, **Becker, M.W.**, Bix, L. (2018). Chasing red herrings: Can visual distracters extend the time children take to open child resistant vials? *PLoS ONE*, 13(12), e0207738.
- Brascamp, J.W., **Becker, M.W.**, & Hambrick, D.Z. (2018). Revisiting individual differences in the time course of binocular rivalry. *Journal of Vision*, 18(7):3, 1-20.
- Hao, R*., **Becker, M. W.**, Ye, C.*, Liu, Q., & Liu, T. (2018). The bandwidth of VWM consolidation varies with the stimulus feature: Evidence from event-related potentials. *Journal of Experimental Psychology: Human Perception and Performance*, 44(5), 767-777.
- Peltier, C.*, & **Becker, M.W.** (2017). Eye movement feedback fails to improve visual search performance. *Cognitive Research: Principles and Implications*, 2(1), 47.
- Peltier, C.*, & **Becker M.W.** (2017). Target present guessing as a function of target prevalence and accumulated information in visual search. *Attention, Perception, & Psychophysics*, 79(4), 1064-1069.
- Alzahabi, R. *, **Becker, M.W.**, & Hambrick, D. Z. (2017). Investigating the relationship between media multitasking and processes involved in task-switching. *Journal of Experimental Psychology: Human Perception and Performance*, 43(11), 1872-1894.
- Peltier, C.*, & **Becker M.W.** (2017). Individual differences predict low prevalence visual search performance. *Cognitive Research: Principles and Implications*, 2(1), 5.
- Peltier, C.*, & **Becker M.W.** (2017). Working memory capacity predicts selection and identification errors in visual search. *Perception*, 46(1), 109-115.

- Seo, D.C.*, Moslem, L.*, Brunk, E.**, **Becker, M.W.**, & Bix, L. (2017). Do healthcare professionals comprehend standardized symbols presented on medical device packaging? *Packaging Technology and Science*, *30*(3), 61-73.
- Peltier, C.*, **Becker, M. W.** (2016). Decision processes in visual search as a function of prevalence. *Journal of Experimental Psychology: Human Perception and Performance*, *42*(9), 1466-1476.
- Bix, L., Seo, D.C*., Ladoni, M., Brunk, E.**, & **Becker M.W.**, (2016). Evaluating varied label designs for use with medical devices: Optimized labels outperform existing labels in the correct selection of devices and time to select. *PLoS ONE*, *11*(11): e0165002.
- Becker, M.W.**, Sundar, R.P.*, Bello, N., Alzahabi, R.* , Weatherspoon, L., & Bix, L. (2016). Assessing attentional prioritization of front-of-pack nutrition labels using change detection. *Applied Ergonomics*, *54*, 90-99.
- Dehenau, C.*, **Becker, M.W.**, Bello, N.M., Liu, S*., & Bix, L. (2016) Tallman Lettering as a strategy for differentiating look-alike, sound-alike drug names: The role of familiarity in differentiating drug doppelgangers. *Applied Ergonomics*, *52*, 77-84.
- Becker, M.W.**, Hemsteger, S.**, & Peltier, C.* (2015). No templates for rejection: A failure to configure attention to ignore task-irrelevant features. *Visual Cognition*, *23*(9-10), 1150-1167.
- Becker, M.W.**, Ravizza, SM, & Peltier, C* (2015). An inability to set independent attentional control settings by hemifield. *Attention, Perception, & Psychophysics*, *77*(8), 2640-2652.
- Becker, M.W.**, Bello, N.M., Sundar, R.P.*, Peltier, C.*, & Bix, L. (2015). Front of pack labels enhance attention to nutrition information in novel & commercial brands. *Food Policy*, *56*, 76-86.
- Bix, L., Sundar, R.P*., Bello, N.M., Peltier, C*., Weatherspoon, L.J., & **Becker, M.W.** (2015). To see or not to see: Do front of pack nutrition labels affect attention to overall nutrition information? , *PLoS ONE* *10*(10), e1029732.
- Miller, J. R. **, **Becker, M. W.**, & Liu, T. (2014). The bandwidth of consolidation into visual short-term memory depends on the visual feature. *Visual Cognition*, *22*(7), 920-947.
- Cárdenas, R.A.* , Harris, L.J., & **Becker, M.W.** (2013). Sex differences in visual attention toward infant faces. *Evolution and Human Behavior*, *34* (4), 280-287.
- Alzahabi, R.* , & **Becker, M.W.** (2013). The association between media multitasking, task-switching, and dual-task performance. *Journal of Experimental Psychology: Human Perception and Performance*, *39*(5), 1485-1495.
- Liu, T., & **Becker, M.W.** (2013). Serial consolidation of orientation information into visual short-term memory. *Psychological Science*, *24*(6), 1044-1050.
- Becker, M.W.**, Miller, J.R.** , Liu, T. (2013). A severe capacity limit in the consolidation of orientation information into VSTM. *Attention, Perception, & Psychophysics*, *75*(3), 415-425.
- Becker, M.W.**, Alzahabi, R.* , & Hopwood, C.J. (2013). Media multitasking is associated with symptoms of depression and social anxiety. *Cyberpsychology, Behavior, and Social Networking*, *16*(2), 132-135.
- Liu, T., **Becker, M.W.**, & Jigo, M.**(2013). Limited featured-based attention to multiple features. *Vision Research*, *85*, 36-44.
- Becker, M.W.** (2012). Negative emotional photographs are identified more slowly than positive photographs. *Attention, Perception & Psychophysics*, *74*(6), 1241-1251.

- Sundar, R.P*., **Becker, M.W.**, Bello, N.M., & Bix, L. (2012). Quantifying age-related differences in information processing when viewing prescription drug labels. *PLoS ONE* 7(6), e38819. doi:10.1371/journal.pone.0038819.
- Moser, J.S., **Becker, M.W.**, & Moran, T.P.* (2012). Enhanced attentional capture in trait anxiety. *Emotion*, 12(2), 213-216.
- Mance, I.**, **Becker, M.W.**, & Liu, T. (2012). Parallel consolidation of simple features into visual short-term memory. *Journal of Experimental Psychology: Human Perception and Performance*, 38(2), 429-438.
- Becker, M.W.**, & Leininger, M.** (2011). Attentional selection is biased toward mood-congruent stimuli. *Emotion*, 11(5), 1248-1254.
- Ingersoll, B., Meyer, K.*, & **Becker, M.W.** (2011). Increased rates of depressed mood in mothers of children with ASD associated with the presence of the broader autism phenotype. *Autism Research*, 4 (2), 143-148.
- Becker, M.W.** (2010). The effectiveness of a gaze cue depends on the facial expression of emotion: Evidence from simultaneous competing cues. *Attention, Perception, & Psychophysics*, 72(7), 1814-1824.
- Bix, L., Kosugi, W*., Bello, N., Sundar, R.*, & **Becker, M.W.** (2010). The use of change detection as a method of objectively evaluating labels. *Packaging Technology and Science*, 23(7), 393-401.
- Becker, M.W.**, & Detweiler-Bedell, B. (2009). Early detection and avoidance of threatening faces during passive viewing. *Quarterly Journal of Experimental Psychology*, 62, 7, 1257-1264.
- Becker, M.W.** (2009). Panic search: Fear produces efficient visual search for non-threatening objects. *Psychological Science*, 20, 4, 435-437.
- Becker, M.W.**, & Rasmussen, I.P. ** (2008). The guidance of attention to objects and locations by long term memory of natural scenes. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 34(6), 1325-1338.
- Becker, M.W.**, & Vera, S.** (2007). Attentional filtering of transients allows for a recovery from change blindness. *Perception*, 36, 1179-1190.
- 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.

Invited:

- Becker, M.W.** (2013). Change blindness. In H. Pashler (Eds.), *The Encyclopedia of the Mind*. Sage Publications Incorporated.

In Submission:

- Conn, K.M., **Becker, M.W.**, & S.M., Ravizza (In revision). Implicit and explicit guidance of attention in visual statistical learning. *Journal of Experimental Psychology: Human Perception and Performance*.
- Becker, M.W.**, Anderson, K.**, Brascamp, J. (in revision). A Novel Approach to Evaluating Subsequent Search Misses in Dual Target Visual Search: Existing Approaches Can Produce Spurious Second Target Deficits. *Attention, Perception, & Psychophysics*.

Peer Reviewed Conference Presentations:

- Becker, M.W.**, Rodriguez, A. (May 2020). Search guidance for orientation is categorically based. Annual Meeting of the Vision Sciences Society, St. Pete Beach, FL.
- Rodriguez, A., **Becker, M.W.**, Peltier, C. (May 2020). Interventions to improve low prevalence target detection. Annual Meeting of the Vision Sciences Society, St. Pete Beach, FL.
- Harben, A.L. , Liu, L., Kashy, D., Bix, L., & **Becker, M.W.** (September, 2019). Optimization of over the counter labeling for older adults: A change detection study. Aging and Social Change : Ninth Interdisciplinary Conference, Vienna AT.
- Becker, M.W.**, Anderson, K., Brascamp, J. (May 2019). Eye Tracking During Search for Two Unique Targets to Investigate Categorical Effects in Subsequent Search Misses. Annual Meeting of the Vision Sciences Society, St. Pete Beach, FL.
- Weaver, J., **Becker, M.W.**, Clementz, K., & LeBlanc, C. (February, 2019). You Can Lead A Horse to Water, but You Cannot Make It Think: A Failed Empirical Intervention to Increase At-Risk Student Course Performance. Annual Meeting of the Society for Personality and Social Psychology, Portland, OR.
- Becker, M.W.**, Chantland, E., Liu, T.S. (May 2018). Equating Selection History in a Value-driven Capture Paradigm: The Effects of Gains and Losses. Annual Meeting of the Vision Sciences Society, St. Pete Beach, FL.
- Chantland, E. & **Becker, M.W.** (May 2018). The Impact of Performance-Based Pay and Competition on Rare Target Search Performance. Annual Meeting of the Vision Sciences Society, St. Pete Beach, FL.
- Bix, L., Martin, B., Breslow, R., Liu, L., Harben, A., Esfahanian, S. & **Becker, M.W.** (November, 2018). Optimizing OTC Labeling for Use by Older Adults. Annual Meeting of the Gerontological Society of America. Boston, MA.
- Peltier, C. & **Becker, M. W.** (Nov., 2017). Individual Differences Predict Low Prevalence Search Performance. Annual Meeting of the Psychonomic Society, Vancouver, CA.
- Becker, M. W.**, Wujcik, R., & Peltier, C. (May, 2017). The Influence of Color and Form Information on Visual Search Guidance and Verification Times. Annual Meeting of the Vision Sciences Society, St. Pete Beach, FL.
- Gagnon, G., Peltier, C., Johnson, D., **Becker, M. W.** (May, 2017). Dangerous Ambiguity: Capturing Shooter Bias with an Eye Tracker. Annual Meeting of the Vision Sciences Society, St. Pete Beach, FL.

- Brascamp, J., **Becker, M. W.**, Hambrick, D.Z. (May, 2017). Bolstering inter-observer differences to study the mechanisms behind perceptual bistability. Annual Meeting of the Vision Sciences Society, St. Pete Beach, FL.
- Wanghaoming, F., **Becker, M. W.**, Liu, T.S. (May, 2017). Surround Suppression in Feature-based Attention to Color. Annual Meeting of the Vision Sciences Society, St. Pete Beach, FL.
- Peltier, C., **Becker, M. W.** (May., 2017). Motor Biases Do Not Account for the Low Prevalence Effect. Annual Meeting of the Vision Sciences Society, St. Pete Beach, FL.
- Becker, M. W.**, Gagnon, G, & Peltier, C. (Nov., 2016) The effect of target detection times on target absent quitting thresholds. Annual Meeting of the Psychonomic Society, Boston, MA.
- Peltier, C., **Becker, M. W.** (Nov., 2016). Target Present Guessing as a function of target prevalence and accumulated information. Annual Meeting of the Psychonomic Society, Boston, MA.
- Becker, M. W.**, Hemsteger, S., & Liu, T. (May, 2016) What Constitutes “Value” in Value-driven Attentional Capture. Annual Meeting of the Vision Sciences Society, St. Pete Beach, FL.
- Peltier, C., **Becker, M. W.** (May 2016). Working Memory Capacity Predicts Two Causes of Increased Accuracy in Visual Search. Annual Meeting of the Vision Sciences Society, St. Pete Beach, FL.
- Peltier, C. & **Becker M.W.** (Nov., 2015). The Influence of Target Prevalence on Miss Errors in Visual Search. Annual Meeting of the Psychonomic Society, Chicago, IL.
- Becker, M. W.**, Peltier, C., Hemsteger, S. (Nov., 2015). Improving Rare Target Detection Via Process-Based Feedback. Annual Meeting of the Psychonomic Society, Chicago, IL.
- Daignault, M., **Becker, M.W.**, McAuley, D. (May, 2015). Previewing distractors improves change detection in a change blindness paradigm. Annual Meeting of the Vision Sciences Society, St. Pete Beach, FL.
- Peltier, C., **Becker, M. W.** (May, 2015) Memory is Necessary in Visual Search with Limited Guidance. Annual Meeting of the Vision Sciences Society, St. Pete Beach, FL.
- Peltier, C. & **Becker M.W.** (Nov., 2014). The effects of feedback and target prevalence on visual search. Annual Meeting of the Psychonomic Society, Toronto, CA.
- Becker, M.W.**, Ravizza, S.M., & Peltier, C. (May 2014). An inability to set independent attentional control by hemisphere. Annual Meeting of the Vision Sciences Society, St. Pete Beach, FL.
- Peltier, C., Hemsteger, S., & **Becker, M.W.** (May 2014). Improving search through rapid serial visual presentation. Annual Meeting of the Vision Sciences Society, St. Pete Beach, FL.
- Becker, M.W.**, Peltier, C., Liu, T.S. (Nov., 2013). Suppressing the capture of attention via training. Annual Meeting of the Psychonomic Society, Toronto, CA.
- Miller, J., **Becker, M.W.**, & Liu, T.S. (Nov., 2013). Parallel consolidation of color information into visual short-term memory (VSTM). Annual Meeting of the Psychonomic Society, Toronto, CA.
- Becker, M.W.**, Peltier, C., Liu, T.S. (Nov., 2013). Suppressing the Capture of Attention Via Training. Annual Meeting of the Psychonomic Society, Toronto, CA.
- Becker, M.W.**, Peltier, C., & Alzahabi, R. (May, 2013). Guidance of visual search by working and long-term memory representations of orientation. Annual Meeting of the Vision Sciences Society, Naples, FL.

- Becker, M.W.** (November, 2012). The application of attention research to the design of more effective product labels. Annual Meeting of the Psychonomic Society, Minneapolis, MN.
- Alzahabi, R., & **Becker, M.W.** (November, 2012). The effects of media multitasking on cognitive control. Annual Meeting of the Psychonomic Society, Minneapolis, MN.
- Liu, T.S., & **Becker, M.W.** (November, 2012). Serial consolidation of orientation information into visual short-term memory. Annual Meeting of the Psychonomic Society, Minneapolis, MN.
- Moser, J., Moran, T.P., & **Becker, M.W.** (August, 2012). Attention capture by salient, but neutral, stimuli in anxiety. Annual Meeting of the European Association for Behavior and Cognitive Therapies, Geneva, Switzerland.
- Moran, T.P., Moser, J.S., & **Becker, M.W.** (2012, September). Differential effects of state-anxiety on attentional capture in trait-anxiety and worry: Behavioral and neural evidence. Annual Meeting of the Society for Psychophysiological Research, New Orleans, LA.
- Becker, M.W.**, Alzahabi, R., & Peltier, C. (May, 2012). Constraining attentional selection by two orientation cues: An eye tracking study. Annual Meeting of the Vision Sciences Society, Naples, FL.
- Liu, T.S., Jigo, M., & **Becker, M.W.** (May, 2012). The capacity limit of feature-based attention: A cueing study. Annual Meeting of the Vision Sciences Society, Naples, FL.
- Becker, M.W.** & Ravizza, S.M. (Nov, 2011). An inability to set independent, feature-based attention sets by hemisphere. Annual Meeting of the Psychonomic Society, Seattle, WA.
- Becker, M.W.**, Alzahabi, R.*, & Jelinek, S.** (May, 2011). Effective attentional filtering by the union of two distinct colors: eye tracking evidence. Annual Meeting of the Vision Sciences Society, Naples, FL.
- Alzahabi, R.*, & **Becker, M.W.** (May, 2011). In defence of media multitasking: no increase in task-switching or dual-task costs. Annual Meeting of the Vision Sciences Society, Naples, FL.
- Mance, I**., **Becker, M.W.** , & Liu, T.S. (May, 2011). The capacity of encoding into visual short-term memory. Annual Meeting of the Vision Sciences Society, Naples, FL.
- Becker, M.W.** (Nov, 2010). A fearful gaze is a potent gaze: evidence from a novel attentional cueing method. Annual Meeting of the Psychonomic Society, St. Louis, MO.
- Becker, M.W.** (Nov, 2009). Mood's influence on inattention blindness for emotional stimuli. Annual Meeting of the Psychonomic Society, Boston, MA.
- Becker, M.W.**, & Roytman, M.** (2009). Negative emotional images slow down initial encoding time [Abstract]. *Journal of Vision*, 9 (8), 943a.
- Becker, M.W.** (2008). Attentional bias toward items in working memory: Early but not reflexive. [Abstract]. *Journal of Vision*, 8 (6), 863a.
- Becker, M. W.**, & Vera, S. ** (2007). Attentional filtering of repetitive transients reduces change blindness [Abstract]. *Journal of Vision*, 7(9), 649a.
- 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 cueing [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.P.** (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.P.**, & 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.** (July, 2016). Predictors of visual search performance. Invited speaker: Workshop on Personnel Selection in Forensic Science. National Academies of Sciences, Engineering, & Medicine, Washington D.C.
- Peltier, C., **Becker, M. W.** (2015) Visual search has memory. Graduate Academic Conference, Michigan State University.
- Peltier, C., **Becker, M. W.** (May, 2015). The Effects of Target Prevalence on Visual Search. Midwestern Cognitive Science Conference.
- Peltier, C., **Becker, M. W.** (2014) Process based feedback improves visual search. Graduate Academic Conference, Michigan State University.
- Peltier, C., **Becker, M. W.** Process based feedback improves rare target detection (May 2014). Midwestern Cognitive Science Conference, Wright State University. .

- Jigo, M.** , Liu, T.S., & **Becker, M.W.** (September, 2012). The capacity limit of feature-based attention: a cueing study. Michigan AGEP Alliance Conference, Michigan State University.
- Jigo, M.** , Liu, T.S., & **Becker, M.W.** (July, 2012). The capacity limit of feature-based attention: a cueing study. Summer Undergraduate Research Forum, Michigan State University.
- Miller, J.** , Liu, T.S., & **Becker, M.W.** (May, 2012). Consolidation of orientation information into human visual short-term memory. Midwest Cognitive Science Conference, Indiana University.
- Alzahabi, R.* , & **Becker, M.W.** (May, 2012). Constraining attentional selection by two orientation cues: An eye tracking study. Midwest Cognitive Science Conference, Indiana University.
- Markey, A.** , Altmann, E.M., & **Becker, M.W.** (April 2012). The Impact of education on eyewitness testimony. University Undergraduate Research & Arts Forum, Michigan State University.
- Miller, J.** , **Becker, M.W.**, & Liu, T.S. (April 2012). Consolidation of orientation information into human visual short-term memory. University Undergraduate Research & Arts Forum, Michigan State University.
- Becker, M.W.** (Dec, 2011). The Flexibility and Limits of Feature-Based Attentional Control. Cognitive Forum, Michigan State University.
- Becker, M.W.** (October, 2011). Emotion and Attention. Clinical Interest Group Brown Bag, Michigan State University.
- Alzahabi, R.* , & **Becker, M.W.** (April, 2011). In Defence of Media Multitasking: No increase in Task-switching or Dual-task Costs. Midwest Cognitive Science Conference, Michigan State University.
- Harrison, K.** , Ravizza, S.M., & **Becker, M.W.** (April, 2011). Lateralized Distractor Effects on Contingent Attentional Capture. Midwest Cognitive Science Conference, Michigan State University.
- Harrison, K.** , Ravizza, S.M., & **Becker, M.W.** (April, 2011). Lateralized Distractor Effects on Contingent Attentional Capture. University Undergraduate Research & Arts Forum, Michigan State University.
- Becker, M.W.** (January, 2011). Changeing Fear- The Work of Dr. Elizabeth Phelps. Discussion for the Distinguished Speakers Series in Cognitive Science Series. Michigan State University.
- Becker, M.W.** (January, 2011). The Guidance of Visual Attention. Guest Lecture for Dr. Altmann's Cognitive Psychology Course. Michigan State University.
- Becker, M.W.** (Sept, 2010). The Cognition and Cognitive Neurosciences Programs Expectations of Graduate Students. Cognitive Forum, Michigan State University.
- Mance, I.** , **Becker, M.W.**, & Liu, T.S. (April, 2010). Momentary percepts. University Undergraduate Research & Arts Forum, Michigan State University.
- Becker, M.W.** (Feb, 2010). Change & Inattentional Blindness – The Work of Dr. Daniel Simmons. Discussion for the Distinguished Speaker in Cognitive Science Series, Michigan State University.
- Becker, M.W.** (Jan, 2010). Perception. Guest Lecture for Dr. Altmann's Cognitive Psychology Course. Michigan State University.
- Becker, M.W.** (Dec, 2009). Mood's influence on inattentional blindness for emotional stimuli. Cognitive Science Poster Session, Michigan State University.
- Becker, M.W.** (Dec, 2009). Emotion and Attention. Cognitive Forum, Michigan State University.

- Becker M.W.** (Sept. 2009). Expectations of graduate students. Cognition and Cognitive Neurosciences New Student Orientation, Michigan State University.
- Becker, M.W.** (April, 2009). Emotion and the allocation of attention. Perception and Cognition Colloquium, University of Michigan.
- Becker, M.W.** (2008). Emotion and the allocation of attention. Cognitive Forum, Michigan State University.
- Becker, M.W.** (2007). Emotion and memory in the allocation of attention. Cognitive Science Round-Table, Michigan State University.
- 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.P.**** (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.

Honors and Awards:

Psychology Department Travel Award, (1997, 1999, 2000), UCSD.

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).

Reviewing:

Consulting Editorships:

Attention, Perception, & Psychophysics –2011- present.

Journal of Experimental Psychology: Human Perception and Performance – 2013- 17.

Ad Hoc Reviewer: *Applied Cognitive Psychology; Attention, Perception, & Psychophysics; Brain & Cognition; Cyberpsychology, Behavior, and Social Networking; Developmental Psychology; International Journal of Psychology; Journal of Experimental Psychology: Human Perception & Performance; Journal of Experimental Psychology: Learning, Memory, & Cognition; Journal of Human-Computer Studies; Memory & Cognition; Perception; Psychological Science; Psychonomic Bulletin & Review; The Journal Vision; Vision Research; Visual Cognition.*

Grant Reviews: Ad Hoc reviewer for NSF, Research Grants Council of Hong Kong, invited to review for NIH.

Teaching Experience:

Michigan State University, East Lansing, MI: Assistant Professor of Psychology

Psy 200- Cognitive Psychology. Fall '07, '08, '09, '10, '11, '12, '13, '14; Spring '12, '14, '16, '17

Psy 402- Sensation & Perception. Fall '09; Spring '08, '13, '14, '16, '17

Psy 493- Attention & Perception. Spring '09, '12, '13, '14

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, Spring '07.

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

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

Attention. Spring '03, Spring '05, Spring '07.

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:

Psychology Department Leadership Team, Fall 2017 – Spring 2018. This team is functioning as the Interim Department Chair.

Associate Chair and Director of Undergraduate Education, Psychology Department, Fall 2015-present.

Michigan State University, College of Social Science Curriculum Committee, Fall 2015- present.

Michigan State University Faculty Council, College of Social Sciences Representative, Fall 2011- Fall 2014.

Michigan State University Faculty Senate, College of Social Sciences Representative, Fall 2011- Fall 2014.

Member, Department of Psychology External Review Committee, Department of Psychology, 2014.

Chair, CCN Program Comprehensive Exam Revision Committee, Fall 10 – present.

Member, Undergraduate Student Grievance Committee, Department of Psychology, Fall 10 – present.

Member, Cognitive Science Distinguished Speaker Series Committee, Fall 2010- Spring 2011.

Chair, Cognitive Science Distinguished Speakers Series Committee, Fall 2009- Spring 2010.

Member, Cognitive Search Committee, Michigan State University, Fall 2008.

Member, Human Subjects Committee, Lewis & Clark College, Fall 2006- Fall 2007.

Member, Chemistry Search Committee, Lewis & Clark College, Fall 2006

Organizer, Summer Neuroscience Workshop, Lewis & Clark College, Summer 2006.

Presenter, Summer Technology Institute, Lewis & Clark College, Summer 2006.

Member, Project Kaleidoscope Leadership Working Group, Lewis & Clark College, 2005 – 2007.

Campus Liaison for NITEL, Lewis & Clark College, Fall 2005 – Spring 2007.

Participant, West Coast Technology Project, Lewis & Clark College, Summer 2005.

Participant, Technology Showcase, Lewis & Clark College, Spring 2005; Spring 2006.

Member, Committee on Educational Technology, Lewis & Clark College, Fall 2004- Fall 2005.

Member, First Year Advising Pilot Program, Lewis & Clark College, Fall 2004- Spring 2007.

Member, Fringe Benefits Committee, Lewis & Clark College, Fall 2003- Spring 2007.

Member, Scholarship Committee, Lewis & Clark College, Fall 2002- Spring 2003.

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

Member, Committee on quantitative reasoning in the Social Sciences, Lewis & Clark College, 2003.

Professional Organizations:

Association for Psychological Science

Association for Research in Vision and Ophthalmology

Psychonomic Society

Vision Sciences Society

Sigma Xi