

JAMES E. HOFFMAN

CURRICULUM VITAE

Department of Psychology
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EDUCATION

The University of Illinois, Champaign/Urbana Ph.D. 1974
The University of Illinois, Champaign/Urbana M.A. 1973
The University of Illinois, Champaign/Urbana B.S. 1970

PROFESSIONAL POSITIONS

Assistant Professor, University of Delaware, 1974-1980
Associate Professor, University of Delaware, 1980-1987
Professor, University of Delaware, 1987-Present

MEMBERSHIP IN PROFESSIONAL SOCIETIES

Fellow, Association for Psychological Science
Psychonomic Society
Member, Division 6, APA

RESEARCH

Publications

- Eriksen, C.W., Becker, B.B., & Hoffman, J.E. Safari to masking land: A hunt for the elusive U. Perception and Psychophysics, 1970, 8, 245-250.
- Eriksen, C.W., & Hoffman, J.E. Some characteristics of selective attention in visual perception determined by vocal reaction time. Perception and Psychophysics, 1972, 11, 169-171.
- Eriksen, C.W. & Hoffman, J.E. Temporal and spatial characteristics of selective encoding from visual displays. Perception and Psychophysics. 1972, 12, 201-204.
- Eriksen, C.W. & Hoffman, J.E. The extent of processing of noise elements during selecting encoding from visual displays. Perception and Psychophysics. 1973, 14, 155-160.
- Colegate, R.L., Hoffman, J.E., & Eriksen, C.W. Selective encoding from multielement displays. Perception and Psychophysics, 1973, 14, 217-224.
- Eriksen, C.W. & Hoffman, J.E. Selective attention: Noise suppression or signal enhancement? Bulletin of the Psychonomic Society, 1974, 4, 587-589.
- Colegate, R.L., & Hoffman, J.E. Monitoring small eye movements with averaged EOG. Bulletin of the Psychonomic Society, 1974, 4, 149-151.
- Hoffman, J.E. Hierarchical stages in the processing of visual information. Perception and Psychophysics, 1975, 18, 348-354.
- Hoffman, J.E. Search through a sequentially presented visual display. Perception and Psychophysics, 1978, 23, 1-11.
- Hoffman, J.E. A two-stage model of visual search. Perception and Psychophysics, 1979, 25, 319-327.
- Hoffman, J.E. Interaction between global and local levels of a form. Journal of Experimental Psychology: Human Perception and Performance, 1980, 6, 222-234.
- Hoffman, J.E. & Nelson, B. Spatial selectivity in visual search. Perception and Psychophysics, 1981, 30, 283-290.

- Hoffman, J.E., Nelson, B., & Houck, M.R. The role of attentional resources in automatic detection. Cognitive Psychology, 1983, 51, 379-410.
- Simons, R.F., Hoffman, J.E., and MacMillan, F.W. The component structure of event-related slow potential task, ISI, and warning stimulus effects on the "E" wave. Biological Psychology, 1983, 17, 193-219.
- Hoffman, J.E., Simons, R.F., and Houck, M.R. A comparison of P300 components elicited in automatic and controlled detection tasks. Psychophysiology, 1983, 20, 625-631.
- Kinchla, R.A., Solis-Marcias, V., and Hoffman, J.E. Attending to different levels of structure in a visual image. Perception and Psychophysics, 1983, 33, 1-10.
- Hoffman, J.E., and MacMillan, F.W. Is semantic priming automatic? In M. E. Posner & O. S. M. Marian (Eds) Mechanisms of Attention: Attention and Performance XI. Hillsdale, NJ: Erlbaum, 1985.
- Hoffman, J.E., Houck, M.R., MacMillan, F.W., Simons, R.F., and Oatman, J.C., Event-related potentials elicited by automatic targets: A dual-task analysis. Journal of Experimental Psychology: Human Perception and Performance, 1985, 11, 50-61.
- Hoffman, J.E. Cognitive approaches to perception. J.LeDoux and W. Hirst (Eds) Brain and mind: Dialogues between cognitive psychology and neuroscience. New York, NY: Cambridge University Press, 1986.
- Hoffman, J.E. A commentary on the Neurobiology of perception. J. LeDoux and W. Hirst (Eds) Brain and mind: Dialogues between cognitive psychology and neuroscience. New York, NY: Cambridge University Press, 1986.
- Hoffman, J.E. Concluding comments. J.LeDoux and W. Hirst (Eds). Brain and mind: dialogues between cognitive psychology and neuroscience. New York, NY: Cambridge University Press, 1986.
- Houck, M.R. & Hoffman, J.E. Conjunction of color and form without attention: Evidence from an orientation-contingent color aftereffect. Journal of Experimental Psychology: Human Perception and Performance, 1986, 12, 186-199.
- Hoffman, J.E. Review of Varieties of Attention, R. Parasuraman and D.R. Davies (Eds), Academic Press, 1984. Psychophysiology, 1986, 23, 365-366.
- Eriksen, C.W., Eriksen, B.A., & Hoffman, J.E. Recognition memory and attentional selection: Serial scanning is not enough. Journal of Experimental Psychology: Human Perception and Performance, 1986, 476-483.

- Hoffman, J.E. (1986). Spatial attention in vision: Evidence for early selection. Psychological Research, 48, 221-230.
- Hoffman, J.E., Houck, M.R., MacMillan, F.W., Simons, R.F., and Oatman, L.C. (1986). Event-related potentials elicited by automatic targets: a dual-task, P300 analysis. In W. C. McCallum, R. Zappoli, and F. Denoth (Eds.), Cerebral Psychophysiology: Studies in event-related potentials. Amsterdam: Elsevier, pp. 121-123.
- Simons, R. F., Guluzzi, K. R., and Hoffman, J. E. (1986) A cross-modality ERP comparison of psychophysical judgement tasks. In W. C. McCallum, R. Zappoli, and F. Denoth (Eds.), Cerebral Psychophysiology: Studies in event-related potentials. Amsterdam: Elsevier, pp. 149-151.
- Simons, R.F, Russo, K.R. and Hoffman, J.E. (1988). Event-related potentials and eye-movement relationships in the context of psychophysical judgement tasks. Journal of Psychophysiology, 2, 27-37.
- Hoffman, J.E. (1990) Event-related potentials and automatic and controlled processes. In J. Rohrbaugh, R. Parasuraman, and R. Johnson. (Eds.), Event-related brain potentials: Basic issues and applications. Oxford University Press, pp. 145-157.
- Intraub, H. and Hoffman, J.E. (1992). Reading and visual memory: Remembering scenes that were never seen. American Journal of Psychology, 105, 101-114.
- Nigam, A., Hoffman, J.E., and Simons, R.F. (1992). N400 and Semantic Anomaly with Pictures and Words. Journal of Cognitive Neuroscience, 4, 15-22.
- Pashler, H, Carrier, M., and Hoffman, J. E. (1993). Saccadic Eye Movements and Dual-Task Interference. Quarterly Journal of Experimental Psychology, 46, 51-82.
- St. George, M., Mannes, S., & Hoffman, J.E. (1994). Global semantic expectancy and language comprehension. Journal of Cognitive Neuroscience, 6, 70-83.
- Hoffman, J.E. (1994). Review of Selective Attention in Vision by A.H.J. Vander Heijden. Science, 263, 1780-1781.
- Kramer, A., Coles, M., Garner, W., Hoffman, J., & Lappin, J. (1994). Charles Eriksen: Past, Present, and Future. Perception and Psychophysics, 55, 1-8.
- Hoffman, J. E. and Subramaniam, B. (1995). The role of visual attention in saccadic eye movements. Perception and Psychophysics, 57, 787-795.
- St. George, M. Mannes, S. Hoffman, J.E. (1997). Individual differences in inference generation: An ERP analysis. Journal of Cognitive Neuroscience, 9, 776-787.

- Hoffman, J.E. (1998), Visual attention and eye movements. In H. Pashler (Ed.), *Attention*. London: University College London Press, 119-154
- Hoffman, J. E. Stages of Processing in Visual Search and Attention. (1999). In Challis, B., & Velichovsky, B. (Eds.) *Stratification in cognition and consciousness*. Amsterdam/Philadelphia: John Benjamins
- O'Kane, B. L., Bonzo, D., & Hoffman, J.E. (2001) Perception studies. *Optical Engineering*, 40, 1768-1775
- Jordan, H., Reiss, J. E., Hoffman, J.E., and Landau, B. L. (2002). Intact Perception of Biological Motion in the Face of Profound Spatial Deficits: Williams Syndrome. *Psychological Science*, 13, 2, 162-167.
- Hoffman, J.E., Landau, B. & Pagani, B. (2003) Spatial Breakdown in Spatial Construction: Evidence from Eye Fixations in Children with Williams Syndrome. *Cognitive Psychology*, 45, 260-301.
- Landau, B., & Hoffman, J. E. (2005). Parallels between spatial cognition and spatial language: Evidence from Williams syndrome. *Journal of Memory and Language*, 53(2), 163-185.
- O'Hearn, K., Landau, B., & Hoffman, J. E. (2005). Multiple object tracking in people with Williams syndrome and in normally developing children. *Psychological Science*, 16(11), 905-912.
- Reiss, J. E., Hoffman, J. E., & Landau, B. (2005). Motion processing specialization in Williams syndrome. *Vision Research*, 45(27), 3379-3390.
- Landau, B., Hoffman, J.E., & Kurz, N. (2006). Object recognition with severe spatial deficits in Williams syndrome: sparing and breakdown. *Cognition*, 100 (3): 483-510.
- Landau, B., Hoffman, J. E., Reiss, J., Dilks, D.D., Lakusta, L., & Chunyo, G. (2006) Specialization and Breakdown in Spatial Cognition: Lessons from Williams syndrome. To appear in C. Morris, H. Lenhoff, & P. Wang (Eds.), *Williams-Beuren Syndrome: Research and Clinical Perspectives*. Baltimore: Johns Hopkins University Press.
- Intraub, H., Hoffman, J. E., Wetherhold, J., & Stoehs, S. (2006). More than Meets the Eye: The Effect of Planned Fixations on Scene Representation. *Perception and Psychophysics*. 68(5): 759-769

- Elzer, S., Green, N., Carberry, S., & Hoffman, J. E. (2006). A Model of Perceptual Task Effort for Bar Charts and its Role in Recognizing Intention. User Modeling and User-Adapted Interaction, 16 (1): 1-30
Winner of the 2006 James Chen Annual Award for Best User Modeling and User-Adapted Interaction Paper.
- Reiss, J. E. & Hoffman, J. E. (2006). Object Substitution Masking Interferes With Semantic Processing: Evidence From Event-Related Potentials. Psychological Science, 17, 1015-1020.
- Landau, B. L., & Hoffman, J. E. (2007) Explaining selective spatial breakdown in Williams Syndrome: Four principles of normal spatial development and why they matter. In J. Plumert and J. Spencer (Eds.), *Emerging landscapes of Mind: Mapping the nature of change in spatial cognitive development*. Pages 290-319. Oxford University Press.
- Reiss, J. E. & Hoffman, J. E. (2007). Disruption of Early Face Recognition Processes by Object Substitution Masking. Visual Cognition, 15 (7), 789-798
- Dilks, D. D., Hoffman, J. E., and Landau, B. L. (2008). Vision for perception and vision for action: normal and unusual development. Developmental Science, 11:4, 474 – 486
- Doran, M., Hoffman, J. E., & Scholl, B. (2009). The Role of Eye Fixations in Concentration and Amplification Effects During Multiple Object Tracking. Visual Cognition, 17, 574-579.
- Quinn, P. C., Doran, M. M., Reiss, J. E., & Hoffman, J. E. (2009). Time course of visual attention in infant categorization of cats versus dogs: Evidence for a head bias as revealed through eye tracking. Child Development, 80, 151-161.
- Quinn, P. C., Doran, M. M., Reiss, J. E., & Hoffman, J. E. (2010). Neural markers of subordinate-level categorization in 6- to 7-month-old infants. Developmental Science, 13, 499-507.
- O’Hearn, K., Hoffman, J. E., and Landau, B. (2010). Developmental profiles for multiple object tracking and spatial memory: normally developing preschoolers and people with Williams syndrome. Developmental Science, 13:3, 430-440.
- Doran, M. M., & Hoffman, J. E. (2010a). The role of visual attention in multiple object tracking: Evidence from ERPs. Attention, Perception, & Psychophysics, 71(1), 33-52.

Doran, M.M., & Hoffman, J.E. (2010b). Target enhancement and distractor suppression in multiple object tracking. In Brooks, J., Belopolsky, A., Matsukura, M., & Palomares, M. Object Perception, Attention, and Memory (OPAM) 2009 Conference Report 17th Annual Meeting, Boston, MA, USA, *Visual Cognition*, 18, 126-129.

Landau, B. L., O'Hearn, K., & Hoffman, J. E. (2010). Tethering to the World, Coming Undone. Chapter in L. B. Smith (Ed.), *Volume in Spatial Language Series*, Indiana University Press.

O'Hearn, K., Hoffman, J. E., and Landau, B. (2011). Small subitizing range in people with Williams syndrome. *Visual Cognition*, 19(3), 289-312.

Skoranski, A., Most, S.B., Lutz-Stehl, M., Hoffman, J.E., Hassink, S.G., & Simons, R.F (2013). Response monitoring and cognitive control in childhood obesity. *Biological Psychology*, 92, 199-204.

Kennedy, B.L., Rawding, J., Most, S. & Hoffman, J.E. (2014). Emotion-induced blindness reflects competition at early and late processing stages: An ERP study. *Cognitive, Affective, and Behavioral Neuroscience*, 14, 1485-1498.

Ferrara, K., Hoffman, J.E., O'Hearn, K., and Landau, B. (submitted, 2015) Constraints on multiple object tracking: How atypical development can inform theories of visual processing. *Journal of Cognition and Development* (accepted pending revisions)

Tran, A., & Hoffman, J.E. (submitted 2015) Visual attention is required for multiple object tracking. *Journal of Experimental Psychology: Human Perception and Performance*, (accepted pending revisions).

Book

Landau, B. L. & Hoffman, J. E. (2012). *Spatial Representation: From Gene to Mind*. Oxford University Press.

Conference Proceedings

Elzer, Stephanie, Nancy Green, Sandra Carberry and James Hoffman. Incorporating Perceptual Task Effort into the Recognition of Intention in Information Graphics. Proceedings of the Third International Conference on the Theory and Application of Diagrams (Diagrams '04) , Cambridge, UK, March 2004.

Conference Presentations

Eriksen, C.W. & Hoffman, J.E. Temporal and spatial characteristics of selective encoding. Paper read at Psychonomic Meeting, St. Louis, MO, 1971.

Eriksen, C.W. & Hoffman, J.E. Degree of processing of non-attended visual stimuli. Paper read at Psychonomic Meeting, St. Louis, MO, 1972.

Hoffman, J.E. Sequential search. Paper presented at the Annual Convention of the Eastern Psychological Association, Boston, MA, 1977.

Hoffman, J.E. Search through a sequentially presented visual display. Paper read at the 10th Annual Meeting of the Society for Mathematical Psychology, Los Angeles, CA, 1977.

Hoffman, J.E. A two-stage model of visual search. Paper read at 18th Annual Meeting of the Psychonomic Society, Washington, D.C., 1977.

Johnson, C.J., & Hoffman, J.E. Cerebral lateralization in controlled and automatic processing. Paper read at the 19th Annual Meeting of the Psychonomic Society, San Antonio, TX, 1978.

Johnson, C. & Hoffman, J.E. Selective attention: A degree of precision. Paper read at the Annual Convention of the Eastern Psychological Association, Washington, D.C., 1978.

Hoffman, J.E. Interaction between local and global levels of a form. Paper read at the 19th Annual Meeting of the Psychonomic Society, San Antonio, TX, 1978.

Hoffman, J.E. Spatial allocation of visual attention on the basis of early processing. Presented to the IEEE Computer Society on pattern recognition and artificial intelligence, Princeton University, April, 1978.

Hoffman, J.E. Nelson, B., & Laubach, M. How automatic is automatic detection? Paper presented at the 20th Annual Meeting of the Psychonomic Society, Phoenix, AZ, 1979.

Hoffman, J.E. & Nelson, B. The role of spatial attention in visual search. Paper presented at the 21st Annual Meeting of the Psychonomic Society, St. Louis, MO, 1980.

Hoffman, J.E., Simons, R.F., & Houck, M.R. A comparison on P300's elicited in automatic and controlled target detection tasks. Paper presented at the 21st Annual Meeting of the Society for Psychophysiological Research, Washington, D.C., 1981.

- Hoffman, J.E., & Nelson, B. The role of attentional resources in automatic detection. Paper presented at the 22nd Annual meeting of the Psychonomic Society, Philadelphia, PA, 1981.
- Simons, R.F., Hoffman, J.E., and MacMillan, F. W. The component structure of event-related potentials: task, ISI, and warning stimulus effects on the "E" wave. Paper presented at the 22nd Annual Meeting of the Society for Psychophysiological Research, MN, 1982.
- Hoffman, J.E., Houck, M.R., MacMillan, F.W., Simons, R.F., and Oatman, L.C. Event-related potentials elicited by automatic targets: a dual-task, P300 analysis. VIIIth International Conference on event-related potentials of the brain, Florence, Italy, September, 1983.
- Simons, R.F., Guluzzi, K. R., and Hoffman, J.E. Psychophysical judgment and event-related potentials: a size estimation paradigm. VIIIth International Conference on event-related potentials of the brain, Florence, Italy, September, 1983.
- Hoffman, J.E. and MacMillan, F.W. Is semantic priming automatic? Paper presented at the 24th Annual Meeting of the Psychonomic Society, San Diego, CA, 1983.
- Hoffman, J.E. and MacMillan, F.W. The effect of attention on semantic priming. Paper presented to the XIth Annual Meeting of Attention and Performance, Eugene, OR, 1984.
- Hoffman, J.E., Simons, R.F., & Taylor, S. E. The site of coactivation by redundant signals: A P300 analysis. Paper presented at the 25th annual meeting of the Society for Psychophysiological Research, Milwaukee, WI, October, 1984.
- Houck, M.R. & Hoffman, J.E. Conjunction of color and form without attention. Paper presented at the 25th Annual Meeting of the Psychonomic Society, San Antonio, TX, November, 1984.
- Hoffman, J. E. Spatial attention in vision. Paper presented to the Conference on Attention and Action, Bielefeld, Germany, July, 1985.
- Hoffman, J.E. The cognitive science revolution and its implications for intelligent computer-assisted instruction. Tutorial Lecture presented at the University of Delaware, Office of Computer-Based Instruction Research Retreat, February 10, 1986.
- Hoffman, J. E. ERP measures of automatic and controlled processing. Tutorial lecture presented to the VIIIth International Conference on event-related potentials of the brain, Stanford, CA, June, 1986.

Hoffman, J.E. Discussant on Symposium on Event-related brain potentials and cognition. Twenty-ninth annual meeting of the Psychonomic Society, Chicago, Ill., November, 1988

Nigam, A., Hoffman, J.E., & Simons, R.F. N400 and semantic anomaly with words and pictures. 30th Annual meeting of the Society for Psychophysiological Research, Boston, MA, October, 1990.

Hoffman, J. E. A cognitive psychologist's view of the "The neural basis of high-level vision". Invited commentary at The 24th Carnegie Symposium on Cognition. May 29-31, 1991, Carnegie-Mellon University, Pittsburgh, PA.

Subramaniam, B. and Hoffman, J. E. Saccadic eye movements and visual selective attention. 32nd Annual meeting of the Psychonomics Society, San Francisco, Ca., November, 1991.

St. George, M., Mannes, S., & Hoffman, J.E. Local vs. global incoherence: Some evidence from ERP data. Poster presented at the 32nd Annual meeting of the Psychonomics Society, San Francisco, Ca., November, 1991.

Hoffman, J. E. Invited session chair, Cognitive ERP workshop, Washington, D.C., July 23-24, 1992.

Hoffman, J. E. ERPs and Visual Spatial Attention. Symposium on attention, Eastern Psychological Assoc., Washington D.C. April 17, 1993

Zerlin, S. and Hoffman, J.E. Integration of information across saccadic eye-movements. Eastern Psychological Assoc., Washington D.C. April 17, 1993

Hoffman, J. E. An in-depth look at attention. Converging operations in the study of selective attention. University of Illinois, Champaign, Il. May 19, 1994

Hoffman, J. E. & Mueller, S. An in-depth look at attention. Paper presented at the 35th Annual meeting of the Psychonomics Society, St. Louis. Mo., November, 1994.

St. George, M., Hoffman, J.E., & Mannes, S. M. Individual differences in inference making: An ERP analysis. Paper presented at the 36th annual meeting of the Psychonomic Society, Los Angeles Ca., November 1995.

Nigam, A. Hoffman, J.E. & Simons, R.F. (1996). N400 elicited by words and pictures. Society for Psychophysiological Research. Vancouver, October, 1996.

- Nigam, A., Hoffman, J.E., Simons, R., & Gebhart, A. (1997) A comparison of N400s to objects and words in scenes. Paper presented at the 38th Annual meeting of the Psychonomics Society, Philadelphia, PA.. November, 1997.
- Hoffman, J.E., O’Kane, B., Tomkinson, M. (1998). Eye Movements during search of a large thermal field of regard: Effects of panning speed and step-stare. 1998 Meetings of the IRIS Specialty Groups on Passive Sensors, Sandia National Laboratories, Albuquerque, NM, March, 1998.
- Hoffman, J. E., Landau, B., & Pagani, J. (1998). Eye Fixations During Block Construction in Children With Williams Syndrome. Paper presented at the 39th Annual meeting of the Psychonomics Society, Dallas, TX.. November, 1998
- Hoffman, J.E. and Landau, B. (2000) Sparing object recognition despite profound spatial deficits: evidence from children with Williams Syndrome. Paper presented at the Annual Meeting of the Cognitive Neuroscience Meeting, San Francisco, CA April, 2000.
- Snorrason, M., Hoffman, J. E., and Ruda, H. (2000) Analysis and modeling of fixation point selection for visual search in cluttered backgrounds. 14th Annual AeroSense, Proceedings of SPIE, Orlando, FL, 2000.
- Ruda, H., Hoffman, J. E., and Snorrason, M. (2000) Calibration of a time to detection model using data from visual search experiments. 14th Annual AeroSense, Proceedings of SPIE, Orlando, FL, 2000
- Hoffman, James E. & Landau, B. (2000) Sparing object recognition despite profound spatial deficits: Evidence from Williams Syndrome. Paper presented at the Annual Meeting of the Cognitive Neuroscience Society, San Francisco, CA, April, 2000.
- Dilks, D., Landau, B., Hoffman, J.E., Siegfried, J. D. (2001). Selective impairment of dorsal stream functions in children with Williams syndrome. Paper presented at the Annual Meeting of the Cognitive neuroscience Society, Washington, DC, April, 2001.
- Hoffman, J. E., Reiss, J. E., and Snorrason, M. (2001) Visual search doesn't remember where it's been but does know where it is going. Paper presented at Eastern Psychological Assoc. mini-symposium on Attention, Washington, DC, April, 2001.
- Hoffman, J.E. (2001). Eye movements in children with Williams Syndrome during block construction. Invited presentation at Williams syndrome workshop, University of Massachusetts, August 23, 2001.
- Hoffman, J.E. & Reiss, J. E. (2001) When is visual search “amnesic”? Paper presented at the 42nd Annual meeting of the Psychonomics Society, Orlando, FL. November, 2001

- Intraub, H., Hoffman, J. E., Wetherhold, C. J., & Stoehs, S. (2001). Does the Direction of a Planned Eye Movement Affect Boundary Extension? Paper presented at the 42nd Annual meeting of the Psychonomics Society, Orlando, FL. November, 2001
- Landau, B. & Hoffman, J.E. (2001). Selective Spatial Breakdown in Williams Syndrome. Paper presented at Symposium on Development of Cognition, 42nd Annual meeting of the Psychonomics Society, Orlando, FL. November, 2001.
- Hoffman, J. E. (2002). Spatial deficits in Williams Syndrome revealed by eye fixations. Invited talk, Williams Syndrome Annual Meeting, Long Beach CA, July, 2002.
- Dilks, D., Landau, B., Hoffman, J.E., & Oberg, P. (2003) Vision for action vs. Perception in Williams Syndrome: Evidence for developmental delay in the dorsal stream. Paper presented at the 10th Annual Meeting of the Cognitive Neuroscience Society, New York, NY, April, 2003.
- Reiss, J. Hoffman, J. E., & Landau, B. (2003) Motion processing in Williams syndrome: Evidence against a general dorsal stream deficit. Paper presented at the 3rd Annual Meeting of the Vision Sciences Society. Sarasota, FL, May, 2003.
- Hoffman, J. E. Burton, P. (2003). Do different systems mediate attention to space vs. objects? Paper presented at the 3rd Annual Meeting of the Vision Sciences Society. Sarasota, FL, May, 2003.
- O'Hearn, K., Landau, B.L. & Hoffman, J. E. (2003) Development and breakdown in a multiple-object tracking task. Poster presented at the 43rd Annual Conference of the Psychonomics Society, Vancouver, BC
- Doran, M., Reiss, J., & Hoffman, J. E. (2003). When is it good to share the spotlight? Poster presented at the 43rd Annual Conference of the Psychonomics Society, Vancouver, BC.
- Intraub, H., Hoffman, J.E., & Stoehs, S. Visual/Spatial Representation Shifts in Anticipation of a Planned Eye Movement. 43rd Annual Meeting of the Psychonomic Society, Vancouver, BC, Canada, November, 2003
- Palomares, M., Landau, B., Hoffman, J.E., Egeth, H. Collinear inhibition in Williams Syndrome? Paper presented at the 3rd Annual Meeting of the Vision Sciences Society. Sarasota, FL, May, 2003.
- Hoffman, J.E. & Todd, C. (2004) Distinct and shared mechanisms in space- and object-based attention. Paper presented at the 45th Annual meeting of the Psychonomics Society, Minneapolis, Minnesota, Nov., 2004
- Elzer, S., Green, N., Carberry, S., & Hoffman, J. (2004). Incorporating Perceptual Task Effort into the Recognition of Intention in Information Graphics. In the Proceedings of the Third International Conference on the Theory and Application of Diagrams (Diagrams '04) , Cambridge, UK, March 2004.

- Ogbonna, C., Palomares, M., Landau, B., Hoffman, J.E. and Egeth, H. (2004). The Perception of Visual Illusions in Williams Syndrome. Poster presented at 4th Annual Meeting of the Vision Sciences Society. Sarasota, FL, May, 2004.
- O'Hearn Donny, K., Landau, B., Courtney, S., and Hoffman, J. E. (2004). Working Memory for Location and Identity in Williams Syndrome. Poster presented at 4th Annual Meeting of the Vision Sciences Society. Sarasota, FL, May, 2004.
- O'Hearn Donny, K., Landau, B., & Hoffman, J. E. Multiple Object Tracking in Preschool Children. (2004). Poster to be presented at The XIVth Biennial International Conference on Infant Studies, Chicago, Ill., May 5-8, 2004.
- Chichi Ogbonna¹, Melanie Palomares¹, Barbara Landau¹, James Hoffman², and Howard Egeth. The Perception of Visual Illusions in Williams Syndrome. Poster presented at 4th Annual Meeting of the Vision Sciences Society. Sarasota, FL, May, 2004.
- Intraub, H, James E. Hoffman, C. Jeffrey Wetherhold, & Stacy-Ann Stoehs. Poster presented at 4th Annual Meeting of the Vision Sciences Society. Sarasota, FL, May, 2004.
- Reiss, J. E. & Hoffman, J. E. Object substitution masking interferes with semantic processing: Evidence from ERPs. 46th Annual Meeting of the Psychonomic Society, Toronto, Canada, November, 2005.
- Hoffman, J.E. Can People with Williams Syndrome Perceive the Spatial Arrangement of Visual Parts? Talk at the 3rd annual Williams syndrome workshop, Reading England, July 6, 2006
- Hoffman, J. E. Specialization and Breakdown in Spatial Representations. Featured talk at the 11th International professional conference on Williams Syndrome: Genetics, Neuroimaging, Cognition, and Clinical Issues, Richmond, VA, July 23-24, 2006.
- Reiss, J.E & Hoffman, J.E. Object substitution masking and face processing: ERP evidence for early interference. Paper presented at the 47th Annual Meeting of the Psychonomic Society, Houston TX, November, 2006.
- Hoffman, J. E., Doran, M. M., & Reiss, J. E. (2007, May). Can spatial attention be “shrink-wrapped” to attended objects? Poster presented at the annual meeting of the Vision Sciences Society, Sarasota, FL.
- Quinn, P. C., Doran, M. M., Reiss, J. E., & Hoffman, J. E. Why do Infants Rely on Head Information to Categorize Cats versus Dogs? Evidence from Eye-Tracking. Poster presented at the XVth Biennial International Conference on Infant Studies, 2007.
- Reiss, J. E., Hoffman, J. E., Heyward, F. D., Doran, M. M., Most, S. B. (2008, May). ERP evidence for temporary loss of control during the attentional blink. Poster presented at the annual meeting of the Vision Sciences Society, Naples, FL.

- Doran, M. M. & Hoffman, J. E. (2008, May). Spatial Attention in Multiple Object Tracking: Evidence from ERPs. Poster session presented at the annual meeting of the Vision Sciences Society, Naples, FL.
- Doran, M. M. & Hoffman, J. E. (2009, May). Distractors in Multiple Object Tracking can be suppressed early or late in processing: Evidence from ERPs. Talk presented at the annual meeting of the Vision Sciences Society, Naples, FL.
- Doran, M. M. & Hoffman, J. E. (2009, May). "Intelligent Suppression" during Multiple Object Tracking. Talk presented at the annual meeting of the Vision Sciences Society, Naples, FL.
- Hong, C., Skoransky, A., Katona, A., Zimko, Z. Most, S.B., Hoffman, J.E. & Simons, R.F. (September, 2011). Electrophysiological measures of inhibitory control in obesity. Poster presented at the 51st Annual Meeting of the Society of Psychophysiological Research, Boston, Massachusetts.
- Northmore, D. & Hoffman, J.E. (December, 2011). A Neural Network that Attends and Tracks Selected Moving Objects. Poster presented to the 2011 Delaware Society for Neuroscience meeting
- Kennedy, B.L., Rawding, J., Most, S.B., & Hoffman, J.E. (May 2012). Electrophysiological evidence for early perceptual disruption by emotional distractors. Poster presented at the 12th annual meeting of the Vision Sciences Society, Naples, FL.
- McLean, S., Wells, S. Postell, E, Doran, M. and Hoffman, J.E. (May 2012). Do the two cerebral hemispheres act as independent tracking mechanisms? Poster presented at the 12th annual meeting of the Vision Sciences Society, Naples, FL.
- Tran, A., Skoranski, M., Wells, S., and Hoffman, J.E. (May 2012). Spacing and set size effects in MOT may reflect different underlying mechanisms. Poster presented at the 12th annual meeting of the Vision Sciences Society, Naples, FL.
- Hoffman, J.E., Kennedy, B., Rawding, J., Most, S. (Nov. 2012). The Neural locus of Emotion-Induced Blindness. Paper presented at the 53rd Annual Meeting of the Psychonomic Society, November, 2012, Minneapolis, MN.
- Tran, A. & Hoffman, J. E. Visual Indexes Facilitate Attentional Processing. Poster presented at the Object Perception and Memory (OPAM) conference, Nov. 2012
- McLean, S., & Hoffman, J.E. (May 2013). Attention restores awareness of changing colors in moving objects. Poster presented at the 13th annual meeting of the Vision Sciences Society, Naples, FL.

- Tran, A., & Hoffman, J.E. (May 2013). Visual Attention is Required for Multiple Object Tracking. Poster presented at the 13th annual meeting of the Vision Sciences Society, Naples, FL.
- Hoffman, J.E., Holiday, K. & McKenna, E. (May 2013). Do Negative Emotional Pictures Automatically Capture Attention? Poster presented at the 13th annual meeting of the Vision Sciences Society, Naples, FL.
- Most, S., Boettcher, S., & Hoffman, J.E. (May 2013). The Role of Feature Saliency in Emotion-induced Blindness. Poster presented at the 13th annual meeting of the Vision Sciences Society, Naples, FL.
- Hoffman, J.E. & McLean, S. (2013). Visual attention reveals changing color in moving objects. Paper presented at the 54th Annual Meeting of the Psychonomic Society, November, 2013, Toronto, Canada.
- Tran, A., & Hoffman, J.E. (Nov., 2014). Allocation of Visual Attention to Tracked Objects is Mandatory. Paper presented at the 55th Annual Meeting of the Psychonomic Society, November, 2014, Long Beach, Ca.
- Tran, A., & Hoffman, J. E. (2015, November). Visual attention is required for multiple object tracking. Poster presented at the meeting of Object Perception, Attention, and Memory, Chicago, IL.
- Kahn D.E., Taylor, B., Lyons, P., Tran, A., Herman, A., Getchell, J., Dechant, V., Cho, R., and Hoffman, J.E. (2016). Combining Resting EEG and Event Related Potentials to Predict Outcome after Coma. The Delaware IDEAs 2016 meeting: The ACCEL 2014 Pilot Project and ACE Award Presentations.

Allocation of Visual Attention to Tracked Objects is Mandatory

Published Abstracts

- McLean, S., Wells, S. Postell, E, Doran, M. and Hoffman, J.E. (2012). Do the two cerebral hemispheres act as independent tracking mechanisms? *Journal of Vision* August 13, 2012 vol. 12 no. 9 article 554.
- Tran, A., Skoranski, A., Wells, S., & Hoffman, J. E. (2012). Spacing and set size effects in MOT may reflect different underlying mechanisms. *Journal of Vision* August 13, 2012, vol. 12 no. 9 article 555.
- McLean, S., & Hoffman, J.E. (2013). Attention restores awareness of changing colors in moving objects. *Journal of Vision* July 24, 2013 vol. 13 no. 9 article 1281.

Tran, A., & Hoffman, J.E. (2013). Visual Attention is Required for Multiple Object Tracking. *Journal of Vision* July 24, 2013 vol. 13 no. 9 article 1282.

Hoffman, J.E., Holiday, K. & McKenna, E. (May 2013). Do Negative Emotional Pictures Automatically Capture Attention? *Journal of Vision* July 24, 2013 vol. 13 no. 9 article 83.

Most, S., Boettcher, S., & Hoffman, J.E. (May 2013). The Role of Feature Saliency in Emotion-induced Blindness. *Journal of Vision* July 24, 2013 vol. 13 no. 9 article 904

Hoffman, J.E., Holiday, K. & McKenna, E. (May 2013). Do Negative Emotional Pictures Automatically Capture Attention? *Journal of Vision* July 24, 2013 vol. 13 no. 9 article 83.

Colloquia

Rutgers University, May 1976.

Princeton University, May 1977.

University of Rhode Island, 1979.

University of Nebraska, 1980.

Vanderbilt University, 1980.

Princeton University, 1982.

Rutgers University, 1982.

Bell Laboratories, 1982.

Bell Laboratories, January, 1984.

Johns Hopkins University, May, 1985.

IBM Watson Research Center, September, 1989

University of Delaware, College of Education, Dec.1992

Bryn Mawr, 1994

Rutgers, 2004

Johns Hopkins, 2015

GRANTS

1974-75 Faculty Research Grant (\$1,455)

1975-76 NIMH Small Grant (\$4,900)

1975 NFS Instructional Equipment Grant (\$14,700)

1976 Center for Teaching Effectiveness Fellowship (\$1,500)

1978 Office of Naval Research (\$31,432)

1979 NSF LOCI Grant (\$38,559)
 1979 Office of Naval Research (\$26,315)
 1980 Office of Naval Research (\$33,745)
 1982 Biomedical Research Grant (\$2500)
 1982 Office of Computer Based Instruction (\$10,000)
 1983 Army Research Office (\$63,538)
 1983 Office of Computer Based Instruction (\$20,000) (with Sylvia Farnham-Diggory)
 1984 Army Research Office (\$65,000)
 1985 Army Research Office (\$65,000)
 1985-89 Army Research Office (3 years: \$195,956)
 1987 DOD University Equipment Program (\$64,977)
 1992 ERP's and attention in Depth (Biomed, \$2,500)
 1992 Extended Discourse and the N400 Component (McDonnell-Pew Foundation, \$60,000 for 2 years (with S. Mannes and M. St. George)
 1998 University of Delaware General Research Grant (\$5,800)
 1998 March of Dimes (coPI with Barbara Landau),
 1998-2000 NSF (coPI with Barbara Landau), \$220, 523
 1998-2000 NIH CoPI with Barbara Landau) ?
 1999 NSF Major Research Equipment Grant (3 years) \$104, 475
 2001-2004 NSF (Collaborative research on Williams Syndrome, \$255,000) (3 years)
 2005-2010 Subcontract on NIH Grant 5R01NS050876-02 (7/05/05 to 4/30/10)
 \$562,000, Spatial Representation in Williams syndrome, PI. Barbara Landau
 2011-2014 NSF The role of visual attention in multiple object tracking ,April 1, 2011 –
 March 31, 2014, \$370, 603 (PI: Hoffman)

EDITORIAL ACTIVITY

Associate Editor, Psychonomic Bulletin and Review 1998-2002

Associate Editor, Perception and Psychophysics 2002 -2006

Guest Referee: Acta Psychologica, Attention and Performance, American Journal of Psychology, Cognitive Psychology, Cognition, Journal of Experimental Psychology: General, National Science Foundation, Psychophysiology, Quarterly Journal of Experimental Psychology, Vision Research. Perception and Psychophysics, Journal of Vision.

Professional Service Member of NRC Panel on Human Factors in the design of visual displays for the infantry soldier(1993-1996). Member of the NRC Soldier Systems Panel, 1996-1999.

Courses Taught

Undergraduate

Sensation and Perception, Cognitive Psychology, Statistics, Mind and Brain (neural networks), Cognitive Neuropsychology, Introduction to Cognitive Science

Graduate

Visual Information Processing, Cognition, Cognitive Neuropsychology, Cognitive Neuroscience, Seminar in Perception and Memory, Seminar in Spatial Cognition, Vision Science, Tools for Cognitive Scientists, Introduction to Event-related Potentials.