

# Jeffrey M. Zacks

Psychology Dept., Washington University  
St. Louis MO 63130-4899  
314-935-8454 (phone) 314-935-7588 (fax)  
jzacks@wustl.edu  
dcl.wustl.edu

## Academic History

B.A. in Cognitive Science, Yale University, May 1992 (awarded *magna cum laude*, with the Intensive Major in Psychology).  
M.A. in Cognitive Psychology, Stanford University, December 1996.  
Ph.D. in Cognitive Psychology, Stanford University, September 1999. Dissertation: "Event structure perception: studies in perceiving, remembering, and communicating." Committee: Barbara Tversky (chair), Gordon H. Bower, Herbert H. Clark, and John D. E. Gabrieli.

## Honors, Fellowships, and Awards

National Science Foundation: Graduate Fellowship, Sept. 1994-June 1997.  
American Psychological Foundation/Council of Graduate Depts. of Psychology: Graduate Research Scholarship in Psychology, Sept. 1998.  
Stanford University: Humanities & Sciences Dissertation Fellowship, Sept. 1998-June 1999.  
Washington University: Recognition for excellence in graduate mentoring, March 2002, April 2003, April 2004, April 2005, April 2006.  
American Psychological Association: Division of Experimental Psychology Young Investigator Award in Experimental Psychology: Applied, May 2004.  
American Psychological Foundation: F.C. McGuigan Young Investigator Prize, September 2008.  
Fellow of the Association for Psychological Science, the Psychonomic Society, and the Midwest Psychological Association

## Professional History

Los Alamos National Laboratory: visiting fellow with the Los Alamos Speech Recognition Project, Jan.-May 1991.  
Bell Communications Research (Bellcore): staff scientist in the Cognitive Science Research Group, Aug. 1992-Aug. 1994.  
Santa Fe Institute: Complex Systems summer school, June-July 1995.  
Interval Research, Inc.: research associate, Aug. 1995-Sept. 1996.  
Washington University: Assistant Professor, Department of Psychology, Aug. 1999-April 2006.

Washington University: Assistant Professor, Department of Radiology, Jan. 2004-present.  
Washington University: Associate Professor, Departments of Psychology and Radiology, April 2006-2012.  
Washington University: Professor, Departments of Psychology and Radiology, 2012-present.  
Northumbria University: Visiting Professor, April 2007-April 2013.

## **Administrative Experience**

### **National**

GOVERNING BOARD CHAIR, Psychonomic Society, 2012.  
GOVERNING BOARD MEMBER, Psychonomic Society, 2008-present.  
ELECTED MEMBER, US National Committee for the International Union for Psychological Science, 2013-present.

### **University**

ASSOCIATE CHAIR, Psychology Department, 2014-present  
STEERING COMMITTEE CHAIR, Cognitive, Computational, & Systems Neuroscience Pathway, Washington University, 2006-present  
DIRECTOR, Image Analysis Center, Washington University Psychology Department, 2005-2008.  
Course Enhancement Proposal for outfitting teaching laboratory, Washington University College of Arts & Sciences, 2000.  
Search committees in Music, Philosophy and Psychology, Washington University.

### **Editorial and Reviewing**

ASSOCIATE EDITOR, *Cognition*, 2008-2011.

EDITORIAL BOARD, *Journal of Experimental Psychology: Applied*, 2002-2006.  
EDITORIAL BOARD, *Memory & Cognition*, 2005-2009.  
EDITORIAL BOARD, *Projections: The Journal for Movies and Mind*, 2006-present.  
EDITORIAL BOARD, *Journal of Experimental Psychology: General*, 2007-2009.

PANELIST, National Science Foundation Graduate Research Fellowship Program, 2004, 2008.

PANELIST, National Institutes of Health Cognition & Perception Panel, 2012-2016.  
PANELIST, National Institutes of Health ZRG1-F02B, 2005.  
PANELIST, National Institutes of Health Sensorimotor Integration Panel, 2005.  
PANELIST, National Institutes of Health ZRG1 BBBP-D & ZRG1 BBBP-E, 2009, 2010.  
MEMBER, National Institutes of Health Cognition & Perception Panel, 2012-2016.

SITE VISITOR, National Science Center Science of Learning Centers, 2010.

GRANT REVIEWS: National Science Foundation Cognitive Neuroscience Program,  
National Science Foundation Human Cognition and Perception Program.

JOURNAL REVIEWS: Applied Cognitive Psychology, Behavioral and Brain Sciences,  
Behavioral Neuroscience, Cerebral Cortex, Child Development, Clinical  
Psychological Science, Cognitive, Affective and Behavioral Neuroscience, Cognitive  
Psychology, Cognition, Current Biology, Current Directions in Psychological  
Science, European Journal of Cognitive Psychology, Human Brain Mapping, Journal  
of the American Medical Association, Journal of Experimental Psychology: General,  
Journal of Experimental Psychology: Human Perception & Performance, Journal of  
Experimental Psychology: Learning, Memory & Cognition, Journal of Memory and  
Language, Journal of Neurophysiology, Journal of Neuroscience, Memory, Memory  
and Cognition, NeuroImage, Neuropsychologia, Perception, Perception &  
Psychophysics, Personality and Social Psychology Bulletin, Perspectives on  
Psychological Science, Proceedings of the National Academy of Sciences,  
Psychological Research, Psychological Review, Psychological Science, Psychonomic  
Bulletin and Review, Quarterly Journal of Experimental Psychology, Science.

MEETING REVIEWS: AAAI Symposium on Space and Language, Cognitive Science  
Society, Western Psychological Association.

## Events Organized

PUTTING PERSPECTIVE IN THINGS: THE ROLE OF POINT OF VIEW IN SPATIAL REASONING.

Symposium at the Annual Meeting of the Psychonomic Society, Nov. 2004.

THE COGNITIVE NEUROSCIENCE OF FILM. Workshop held at Washington University, April  
2005.

NEW FINDINGS IN THE NEUROSCIENCE OF DISCOURSE. Symposium at the Annual Meeting  
of the Society for Text and Discourse, July 2009.

BUILDING INFRASTRUCTURE FOR INTERNATIONAL COLLABORATIONS IN SOCIAL AND  
BEHAVIORAL SCIENCE. Symposium at the National Academies of Science, September  
2013.

## Memberships

American Psychological Society  
Cognitive Neuroscience Society  
Cognitive Science Society  
Memory Disorders Research Society  
Midwest Psychological Association  
Psychonomic Society

## Research and Scholarship

### Funding

- NIH 1R03MH062318-01: "Mental representations of goal-directed procedures" (PI). 2000-2002.
- James S. McDonnell Foundation: "Converging constraints on event perception" (PI). 2001-2002.
- McDonnell Center for Higher Brain Function: "Cortical correlates of mental animation" (PI). 2000-2003.
- NIH (Washington University ADRC): "Event perception in healthy aging and mild dementia of the Alzheimer's type" (PI). 2003-2004.
- NSF: "Event models in cognition and perception: From text to real-time" (PI). 2003-2004.
- NIH 1R01MH070674-01: "Neural architecture of event comprehension" (PI). 2004-2008.
- NSF: "IGERT: Cognitive, Computational, and Systems Neuroscience" (co-PI; graduate training grant). 2006-2012.
- NIH R01AG031150-01: "Encoding and remembering events across the lifespan" (PI) 2008-2013.
- NIH 1T32NS073547-01: "Interdisciplinary Training in Cognitive, Computational and Systems Neuroscience" (PI with S. Petersen & K. Thoroughman). 2011-2015.
- NIH 5PO1-AG0262760: "Antecedent biomarkers for AD: The adult child study" (Investigator, Morris PI). 2011-2016.
- NIH 1R21AG041419-01: "Event encoding in navigation and spatial memory" (PI). 2012-2014.
- DARPA: "Everyday event perception and memory in PTSD" (PI). 2013-2014.
- McDonnell Center for Systems Neuroscience: "New Resource Proposal—Transcranial Direct Current Stimulation" (PI). 2013-2014.

### Publications

#### BOOKS AUTHORED

- Radvansky, G.A., & Zacks, J.M. (forthcoming). *Event Cognition*. New York: Oxford University Press.
- Zacks, J.M (forthcoming). *Flicker: Your Brain on Movies*. New York: Oxford University Press.

#### BOOKS EDITED

- Shipley, T. F., & Zacks, J. M. (Eds.). (2008). *Understanding events: From Perception to Action*. New York: Oxford University Press.

#### JOURNAL ARTICLES

- Papcun, G., Hochberg, J., Thomas, T., Laroche, F., & Zacks, J. (1992). Inferring articulation and recognizing gestures from acoustics with a neural network trained on X-ray microbeam data. *Journal of the Acoustical Society of America*, 92, 688-700.
- Zacks, J., & Thomas, T. R. (1994). A new neural network for articulatory speech recognition and its application to vowel identification. *Computer Speech & Language*, 8, 189-209.

- Servos, P., Zacks, J. M., Rumelhart, D. E., & Glover, G. H. (1998). Somatotopy of the human arm using fMRI. *NeuroReport*, *9*, 605-609.
- Zacks, J. M., Levy, E., Tversky, B., & Schiano, D. J. (1998). Reading bar graphs: Effects of extraneous depth cues and graphical context. *Journal of Experimental Psychology: Applied*, *4*, 119-138.
- Zacks, J. M., Rypma, B., Gabrieli, J., Tversky, B., & Glover, G. (1999). Imagined transformations of bodies: an fMRI investigation. *Neuropsychologia*, *37*, 1029-1040.
- Zacks, J. M., & Tversky, B. (1999). Bars and lines: a study of graphic communication. *Memory and Cognition*, *27*, 1073-1079.
- Zacks, J. M., Tversky, B., & Iyer, G. (2001). Perceiving, remembering, and communicating structure in events. *Journal of Experimental Psychology: General*, *130*, 29-58.
- Zacks, J. M., & Tversky, B. (2001). Event structure in perception and conception. *Psychological Bulletin*, *127*, 3-21.
- Zacks, J. M., Braver, T. S., Sheridan, M. A., Donaldson, D. I., Snyder, A. Z., Ollinger, J. M., Buckner, R. L., & Raichle, M. E. (2001). Human brain activity time-locked to perceptual event boundaries. *Nature Neuroscience*, *4*, 651-655.
- Maccotta, L., Zacks, J. M., & Buckner, R. L. (2001). Rapid self-paced event-related functional MRI: Feasibility and implications of stimulus- versus response-locked timing. *NeuroImage*, *14*, 1105-1121.
- Zacks, J. M., Mires, J., Tversky, B., & Hazeltine, E. (2002). Mental spatial transformations of objects and perspective. *Spatial Cognition & Computation*, *2*, 315-322.
- Zacks, J. M., Ollinger, J. M., Sheridan, M. A., & Tversky, B. (2002). A parametric study of mental spatial transformations of bodies. *NeuroImage*, *16*, 857-872.
- Michelon, P. & Zacks, J. M. (2003). What is primed in priming from imagery? *Psychological Research*, *67*, 71-79.
- Michelon, P., Snyder, A. Z., Buckner, R. L., McAvoy, M. & Zacks, J. M. (2003). Neural correlates of incongruous visual information: An event-related fMRI study. *NeuroImage*, *19*, 1612-1626.
- Zacks, J. M., & Tversky, B. (2003). Structuring information interfaces for procedural learning. *Journal of Experimental Psychology: Applied*, *9*, 88-100.
- Zacks, J. M., Gilliam, F., & Ojemann, J. G. (2003). Selective disturbance of mental rotation by cortical stimulation. *Neuropsychologia*, *41*, 1659-1667.
- Zacks, J. M., Vettel, J. M., & Michelon, P. (2003). Imagined viewer and object rotations dissociated with event-related fMRI. *Journal of Cognitive Neuroscience*, *15*, 1002-1017.
- Swallow, K. M., Braver, T. S., Snyder, A. Z., Speer, N. K., & Zacks, J. M. (2003). Reliability of functional localization using fMRI. *NeuroImage*, *20*, 1561-1577.
- Speer, N. K., Swallow, K. M., & Zacks, J. M. (2003). Activation of human motion processing areas during event perception. *Cognitive, Affective, and Behavioral Neuroscience*, *3*, 335-345.
- Olson, K. R., Lambert, A. J., & Zacks, J. M. (2004). Graded structure and the speed of category verification: On the moderating effects of anticipatory control for social vs. nonsocial categories. *Journal of Experimental Social Psychology* *40*, 239-246.
- Tversky, B., Zacks, J. M., & Lee, P. (2004). Events by hand and feet. *Spatial Cognition & Computation*, *4*, 5-15.
- Zacks, J. M., Michelon, P., Vettel, J. M., & Ojemann, J. G. (2004). Functional reorganization of spatial transformations after a parietal lesion. *Neurology*, *63*, 287-292.

- Zacks, J. M. (2004). Using movement and intentions to understand simple events. *Cognitive Science*, 28, 979-1008.
- Speer, N. K., & Zacks, J. M. (2005). Temporal changes as event boundaries: Processing and memory consequences of narrative time shifts, *Journal of Memory and Language*, 53, 125-140.
- Zacks, J. M., & Michelon, P. (2005). Transformations of visuospatial images. *Behavioral and Cognitive Neuroscience Reviews*, 4, 96-118.
- Fox, M. D., Snyder, A. Z., Zacks, J. M., & Raichle, M. E. (2005). Coherent spontaneous fluctuations in neuronal activity account for response variability in the human brain. *Nature Neuroscience*, 9, 23-25.
- Zacks, J. M. & Tversky, B. (2005). Multiple systems for spatial imagery: Transformations of objects and bodies, *Spatial Cognition & Computation*, 5, 271-306
- Michelon, P., Vettel, J. M., & Zacks, J. M. (2006). Lateral somatotopic organization during imagined and prepared movements. *Journal of Neurophysiology*, 95, 811-822.
- Michelon, P., & Zacks, J. M. (2006). Two kinds of visual perspective-taking, *Perception & Psychophysics*, 68, 327-337.
- Zacks, J. M., Swallow, K. M., Vettel, J. M., & McAvoy, M. P. (2006). Visual motion and the neural correlates of event perception, *Brain Research*, 1076, 150-162.
- Zacks, J. M., Speer, N. K., Vettel, J. M., & Jacoby, L. L. (2006). Event understanding and memory in healthy aging and dementia of the Alzheimer type. *Psychology & Aging*, 21, 466-482.
- Zacks, J. M., Speer, N. K., Swallow, K. M., Braver, T. S., & Reynolds, J. R. (2007). Event perception: A mind/brain perspective. *Psychological Bulletin*, 133, 273-293
- Speer, N. K., Reynolds, J. R., & Zacks, J. M. (2007). Human brain activity time-locked to narrative event boundaries. *Psychological Science*, 18, 449-455.
- Zacks, J. M. & Swallow, K. M. (2007). Event segmentation. *Current Directions in Psychological Science*, 16, 80-84.
- Reynolds, J. R., Zacks, J. M., & Braver, T. S. (2007). A computational model of event segmentation from perceptual prediction, *Cognitive Science*, 31, 613-643.
- Zacks, J. M. (2008). Neuroimaging studies of mental rotation: A meta-analysis and review. *Journal of Cognitive Neuroscience*, 20, 1-19.
- Swallow, K. M. & Zacks, J. M. (2008). Sequences learned without awareness can orient attention during the perception of human activity. *Psychonomic Bulletin & Review*, 15, 116-122.
- Kurby, C. A. & Zacks, J. M. (2008). Segmentation in the perception and memory of events. *Trends in Cognitive Sciences*, 12, 72-79.
- Yarkoni, T., Speer, N. K., Balota, D. A., McAvoy, M. P., & Zacks, J. M. (2008). Pictures of a thousand words: Investigating the neural mechanisms of reading with extremely rapid event-related fMRI. *Neuroimage*, 42, 973-987.
- Yarkoni, T., Speer, N. K., & Zacks, J. M. (2008). Neural substrates of narrative comprehension and memory. *Neuroimage*, 41, 1408-1425.
- Zacks, J. M., Speer, N. K., & Reynolds, J. R. (2009). Segmentation in reading and film comprehension. *Journal of Experimental Psychology: General*, 138, 307-327.
- Swallow, K. M., Zacks, J. M., & Abrams, R. A. (2009). Event boundaries in perception affect memory encoding and updating. *Journal of Experimental Psychology: General*, 138, 236-257.

- Speer, N. K., Reynolds, J. R., Swallow, K. M., & Zacks, J. M. (2009). Reading stories activates neural representations of perceptual and motor experiences. *Psychological Science, 20*, 989-999.
- Zacks, J. M., Kumar, S., & Abrams, R. A. (2009). Using movement and intentions to understand human activity. *Cognition, 201*, 201-216.
- Zacks, J. M., Speer, N. K., Swallow, K. M., & Maley, C. J. (2010). The brain's cutting-room floor: Segmentation of narrative cinema. *Frontiers in Human Neuroscience, 4*(168), 1-15.
- Yu, A. B. & Zacks, J. M. (2010). The role of animacy in spatial transformations. *Memory & Cognition, 38*, 982-993.
- Radvansky, G. A., & Zacks, J. M. (2010). Event perception. *Wiley Interdisciplinary Reviews: Cognitive Science*.
- Swallow, K. M., Barch, D. M., Head, D., Maley, C. J., Holder, D. & Zacks, J. M. (2011). Changes in events alter how people remember recent information. *Journal of Cognitive Neuroscience, 23*, 1052-1064.
- Kurby, C. & Zacks, J. M. (2011). Age differences in the perception of hierarchical structure in events. *Memory & Cognition, 39*, 75-91.
- Bailey, H. R. & Zacks, J. M. (2011). Literature and event understanding. *Scientific Study of Literature, 1*, 72-78.
- Zacks, J. M., Kurby, C. A., Eisenberg, M. L. & Haroutunian, N. (2011). Prediction error associated with the perceptual segmentation of naturalistic events. *Journal of Cognitive Neuroscience, 23*, 4057-4066.
- Magliano, J.P. & Zacks, J.M. (2011). The impact of continuity editing in narrative film on event segmentation. *Cognitive Science, 8*, 1489-1517.
- Cole M.W., Etzel J.A., Zacks J.M., Schneider W., Braver T.S. (2011). Rapid transfer of abstract rules to novel contexts in human lateral prefrontal cortex. *Frontiers in Human Neuroscience, 5*, 142.
- Magliano, J.P., Kopp, K., McNerney, W., Radvansky, G.A., & Zacks, J.M. (2012). Aging and perceived event structure as a function of modality. *Aging, Neuropsychology and Cognition, 19*, 264-282.
- Webb, A.B., Fetsch, C.R., Israel, E., Roman, C., Encarnación, C.H., Zacks, J.M., Thoroughman, K.A., and Herzog, E.D. (2012). Training scientists in a science center improves science communication to the public. *Advances in Physiology Education, 36*, 72-76.
- Kurby, C.A., & Zacks, J.M. (2012). Starting from scratch and building brick by brick in comprehension. *Memory & Cognition, 40*, 812-826.
- Huff, M., Papenmeier, F., & Zacks, J. M. (2012). Visual target detection is impaired at event boundaries. *Visual Cognition, 20*, 848-864.
- Bailey, H. R., Zacks, J. M., Hambrick, D. Z., Zacks, R. T., Head, D., Kurby, C. A., & Sargent, J. Q. (2013). Medial temporal lobe volume predicts elders' everyday memory. *Psychological Science, 24*, 1113-1122.
- Sargent, J. Q., Zacks, J. M., Philbeck, J. W., & Flores, S. (2013). Distraction shrinks space. *Memory & Cognition, 41*, 769-780.
- Etzel, J. A., Zacks, J. M., & Braver, T. S. (2013). Searchlight analysis: Promise, pitfalls, and potential. *NeuroImage, 78*, 261-269.
- Kurby, C. A., & Zacks, J. M. (2013). The activation of modality-specific representations during discourse processing. *Brain and Language, 126*, 338-349.

- Sargent, J. Q., Zacks, J. M., Hambrick, D. Z., Zacks, R. T., Kurby, C. A., Bailey, H. R., Eisenberg, M. L. & Beck, T. M. (2013). Event segmentation ability uniquely predicts event memory. *Cognition*, 129, 241–255.
- Bailey, H. R., Kurby, C. A., Giovannetti, T., & Zacks, J. M. (in press). Action perception predicts action performance. *Neuropsychologia*.
- McAleer, P., Pollick, F. E., Crabbe, F., Love, S. A. & Zacks, J. M. (in press). The neural correlates of biological motion perception in naturalistic events. *Cognitive, Affective & Behavioral Neuroscience*.
- Mereu, S., Zacks, J. M., Kurby, C. A., & Lleras, A. (in press). The role of prediction in perception: evidence from interrupted visual search. *Journal of Experimental Psychology: Human Perception and Performance*.
- Yu, A. B., Abrams, R. A., & Zacks, J. M. (in press). Limits on action priming by pictures of objects. *Journal of Experimental Psychology: Human Perception and Performance*.

#### MANUSCRIPTS SUBMITTED FOR PUBLICATION

- Zacks, J. M., & Tversky, B. (under review). Granularity in taxonomy, time and space.
- Bailey, H. R., Sargent, J. Q., Flores, S., Nowotny, P., Goate, A. & Zacks, J. M. (under review). APOE  $\epsilon$ 4 genotype predicts memory for everyday activities.
- Bailey, H. R., & Zacks, J. M. (under review). Situation model updating in young and older adults: Global versus incremental mechanisms.
- Bailey, H. R., Kurby, C. A., Sargent, J. Q., & Zacks, J. M. (under review). Attentional focus affects how events are segmented and updated in narrative text.

#### COMMENTARIES REVIEWS, AND ENCYCLOPEDIA ARTICLES

- Zacks, J. M. (2001). Scaling up from atomic to complex events. *Behavioral and Brain Sciences*, 24, 909-910.
- Zacks, J. M. (2002). Review of "Parts and places," by Roberto Casati and Achille Varzi. *Philosophical Psychology*, 15, 95-97.
- Robbins, P. & Zacks, J. M. (2007). Attachment theory and cognitive science: commentary on Fonagy & Target. *Journal of the American Psychoanalytic Association*, 55 (2), 457-467.
- Zacks, J. M. (2007). Review of "In the Mind's eye: Julian Hochberg on the perception of pictures, films, and the world". *Projections: The Journal for Movies and Mind*, 1, 114-117.
- Zacks, J. M. & Maley, C. J. (2007). What's hot in psychology. *APS Observer*, 20, 23-26.
- Zacks, J. M. (2008). Event perception. *Scholarpedia*, 3, 3837.
- Zacks, J. M. (2010). How we organize our experience into events. *Psychological Science Agenda*, 24.
- Brenner, C. B. & Zacks, J.M. Commentary on "Why walking through a doorway makes you forget." *Scientific American Mind Matters*.

#### BOOK CHAPTERS

- Tversky, B., Zacks, J. M., Lee, P. U., & Heiser, J. (2000). Lines, blobs, crosses and arrows. In M. Anderson, P. Cheng, & V. Haarslev (Eds.), *Theory and application of diagrams* (pp. 221-230). Edinburgh: Springer.
- Zacks, J. M., Levy, E., Tversky, B., & Schiano, D. (2002). Graphs in print. In M. Anderson & B. Meyer & P. Olivier (Eds.), *Diagrammatic representation and reasoning*. London: Springer-Verlag.



- Tversky, B., Morrison, J., & Zacks, J. M. (2002). On bodies and events. In A. Meltzoff & W. Prinz (Eds.), *The imitative mind* (p. 221-232). Cambridge: Cambridge University Press.
- Zacks, J. M., & Roediger, H. L., III. (2004). Setting up a lab and starting your program of research. In J. Darley & M. Zanna & H. L. Roediger, III (Eds.), *The Compleat Academic* (pp. 135-152). Washington, DC: American Psychological Association.
- Tversky, B., Zacks, J. M., & Martin, B. (2008). The structure of experience. In T. F. Shipley & J. M. Zacks (Eds.), *Understanding events: From perception to action*. (pp. 436-464).
- Zacks, J. M., & Sargent, J. Q. (2010). Event perception: A theory and its application to clinical neuroscience. In B. H. Ross (Ed.), *Psychology of learning and motivation, v. 53* (pp. 253-299).
- Tversky, B., Zacks, J. M., Morrison, J. B. & Hard, B. M. (2010). Talking about events. In J. Bohnemeyer & E. Pederson (Eds.), *Event Representation in Language and Cognition* (pp. 216-227). New York: Cambridge University Press.
- Zacks, J. M., & Magliano, J. P. (2011). Film understanding and cognitive neuroscience. In F. Bacci & D. P. Melcher (Eds.), *Art and the Senses*. New York: Oxford University Press (p. 435-454)
- Zacks, J. M. (2013). Constructing event representations during film viewing. In A. P. Shimamura (Ed.), *Psychocinematics: exploring cognition at the movies* (pp. 227-243). Oxford: Oxford Univ. Press.
- Sargent, J. Q., Bailey, H. R. & Zacks, J. M. (forthcoming) Perceptual segmentation of naturalistic events: Methods and applications. In J. L. Szalma, M. Scerbo, R. Parasuraman, P. A. Hancock, R. R. Hoffman & Alan Kingstone (Eds.), *Handbook of Applied Perception*. Cambridge, UK: Cambridge University Press.
- Shelton, A. L. & Zacks, J. M. (in press) Spatial transformations of scene stimuli: It's an upright world. In J. S. Gero (Ed.), *Studying visual and spatial reasoning for design creativity*. Berlin: Springer.

#### TECHNICAL REPORTS

- Hochberg, J., Laroche, F., Papcun, G., Thomas, T., & Zacks, J. M. (1991). From phonemes to gestures: Non-linear speech recognition at CNLS. *CNLS Newsletter*(67), 1-14.
- Zacks, J. M. (1994). *A taxonomy of electronic information services* (Technical Memorandum TM-24219): Bell Communications Research.

## Professional Presentations

#### INVITED TALKS AND COLLOQUIA

- Zacks, J. M. (1998). *Imaging Imagining the Body in Space*. Invited talk, Interval Research Corp., January 27, 1998.
- Zacks, J. M. (1998). *Structure and substance in event perception*. Invited talk, UCSD Cognitive Science Department, February 23, 1998.
- Zacks, J. M. (1998). *Structure and substance in event perception*. Invited talk, NASA-Ames Research Center, April 2, 1998.
- Zacks, J. M. (1998-9). *Imaging imagined spatial transformations*. Invited talk given at University of Wisconsin, Washington University in Saint Louis, Georgia Institute of Technology, Columbia University, Dartmouth College, Carnegie Mellon University.

- Zacks, J. M. (1998-2000). *Structure and substance in event perception*. Invited talk given at Williams College, University of Wisconsin, Washington University in Saint Louis, Georgia Institute of Technology, Columbia University, Dartmouth College, Carnegie Mellon University, Microsoft Research, University of Missouri.
- Zacks, J. M. (2001). *Perceiving event parts*. Invited address given at Southern Illinois University.
- Zacks, J. M. (2001). *Is it over? Watching the mind and brain perceive event parts*. Invited address given at the Pew Midstates Science and Mathematics Symposium.
- Zacks, J. M. (2001). *The perceptual structure and neural correlates of event perception*. Invited address given at The University of California, Berkeley.
- Zacks, J. M. (2001). *Behavioral and neuroimaging studies of event perception*. Invited address given at Stanford University.
- Zacks, J.M. & Tversky, B. (2002). *Granularity in space and time*. Invited address at the Workshop on Language and Space, Bielefeld, Germany, July 8-11.
- Zacks, J.M. (2003). *The perceptual structure and neural correlates of event understanding*. Invited address given at the University of Illinois, Urbana-Champaign.
- Zacks, J.M. (2003). *The perceptual structure and neural correlates of event understanding*. Invited address given at Rutgers University, Newark, NJ.
- Zacks, J.M. (2004). *Components of mental spatial transformations*. Brown bag given at Johns Hopkins University.
- Zacks, J.M. (2004): *The cognitive structure of everyday events*. Invited address given to the Sandia Laboratories / University of New Mexico Cognitive Systems Workshop, Santa Fe, NM.
- Zacks, J.M., Speer, N.K., & Swallow, K.M. (2004). *Event perception: A mind-brain perspective*. Invited address given to the symposium Event Representations in Mind and Language, Eugene, OR.
- Zacks, J.M. (2005). *Multiple systems for mental spatial transformations*. Invited address given at Michigan State University, East Lansing, MI.
- Zacks, J.M. (2005). *Carving events at their joints*. Invited address given at Michigan State University, East Lansing, MI.
- Zacks, J.M. (2005). *On the role of movement in event understanding*. Invited talk given at the annual meeting of the American Psychological Society, Los Angeles, CA.
- Zacks, J.M. (2006). *Event perception: A mind/brain perspective*. Invited address given at the University of Toronto, Toronto, Canada.
- Zacks, J.M. (2006). *Event perception: A mind/brain perspective*. Invited address given at the University of Minnesota, Minneapolis, MN.
- Zacks, J. M. (2006). *Components of visuospatial image transformations*. Invited talk given the International Workshop on Knowing That and Knowing How in Space, Bonn University.
- Zacks, J.M. (2007). *Event perception and memory: A mind/brain perspective*. Invited address given at the University of Glasgow, Glasgow, UK.
- Zacks, J.M. (2007). *Event perception and memory: A mind/brain perspective*. Invited address given at the University of Edinburgh, Edinburgh, UK.
- Zacks, J.M. (2008). *Event perception and memory*. Invited address given at Northumbria University, Newcastle, UK.
- Zacks, J.M. (2008). *Event perception and memory control*. Invited address given at the National Institute of Neurological Disorders and Stroke, Bethesda, MD.

- Zacks, J. M. (2008). *Event segmentation and memory*. Invited talk given at the Annual Meeting of the Midwestern Psychological Association, Chicago, IL.
- Zacks, J.M. (2008) Perceptual segmentation of the behaviour stream and the hierarchical organisation of life events. Invited talk given at the SPARK Workshop on Habit and Routine, London, UK.
- Zacks, J.M. (2008) *Event perception and memory: A mind-brain perspective*. Invited address given at Johns Hopkins University.
- Zacks, J.M. (2009) *Representations of events in reading, perception, and memory*. Institute for Information Sciences Colloquium, University of Memphis.
- Zacks, J.M. (2009). *Using neuroimaging to study story understanding*. Neuroscience colloquium given at Weber State University.
- Zacks, J.M. (2009) *Event perception, cognitive control, and memory*. Delta Center Colloquium, University of Iowa (2009).
- Zacks, J.M. (2009) *Event segmentation in perception, memory, and learning*. Curry School of Education Colloquium, University of Virginia.
- Zacks, J.M. (2009) *Event perception, cognitive control, and memory*. Invited address given at the University of Illinois (2009).
- Zacks, J.M. (2010) *The influence of meaning on spatial reasoning: bodies are special*. Invited address given at the NSF International Workshop on Studying Visual and Spatial Reasoning for Design Creativity, Aix-en-Provence.
- Zacks, J.M. (2010) *Event perception and memory across the lifespan*. Invited address given at Northern Illinois University.
- Zacks, J.M. (2010) *Parsing the stream of behavior*. Invited address given at the Leibniz Institute for Knowledge Media Research Center, Tübingen.
- Zacks, J.M. (2010) *Parsing the stream of behavior*. Invited address given at Saarland University.
- Zacks, J.M. (2010) *Events: Gestalts in time*. Keynote address to the Configural Processing Consortium.
- Zacks, J.M. (2011) *Prediction, memory updating, and the perception of events*. Invited address given at the Behavioural and Cognitive Neuroscience Institute, Cambridge University.
- Zacks, J.M. (2011) *Parsing the stream of behavior*. Invited address given at Medical Research Council Cognition & Brain Sciences Unit, Cambridge University.
- Zacks, J.M. (2011) *Flicker, move, cut: Perceiving movies in the mind and brain*. Arts, Sciences & Humanities Colloquium given at Clare Hall, Cambridge University.
- Zacks, J.M. (2011). *Mental transformations of objects and perspective*. Spatial Cognition Colloquium given at the University of Bremen.
- Zacks, J.M. (2011). *Parsing events in perception – and perhaps in action*. Invited address given at the workshop “Architecture of Human Motor Action: From Kinematics to Cognitive Models,” University of Bielefeld.
- Zacks, J.M. (2011) *Event segmentation: Putting the ‘episode’ in episodic memory*. Invited address given at the Perspectives on Autobiographical Memory Development Conference, Aarhus University.
- Zacks, J.M. (2012). *Event perception, cognitive control, and memory*. Psychology Colloquium, Illinois State University.
- Zacks, J.M. (2012). *Event perception, cognitive control, and memory*. Psychology Colloquium, Tufts University.

- Zacks, J.M. (2012). *Segmentation in event perception and memory*. International Congress of Psychology, Cape Town, South Africa.
- Zacks, J.M. (2012) *Movies in the mind and brain*. Keynote address, Midbrains Undergraduate Neuroscience Conference, Carleton College.
- Zacks, J.M. (2012). *Event perception, cognitive control, and memory*. Psychology Colloquium, Tufts University.
- Zacks, J.M. (2013). *Event perception, cognitive control, and memory*. Cognitive Science Colloquium, University of Arizona.
- Zacks, J.M. (2013). *Event perception, cognitive control, and memory*. Ebbinghaus Empire Colloquium, University of Toronto.
- Zacks, J.M. (2013). *Event perception, cognitive control, and memory*. Center for Language Sciences Colloquium, University of California at Irvine.
- Zacks, J.M. (2013). *Everyday event perception and memory and memory in PTSD*. Narrative Networks Investigator Meeting, Arlington, VA.
- Zacks, J.M. (2013). *Event Perception, Cognitive Control, Discourse Comprehension and Memory*. Institute for Research in Cognitive Science Colloquium, University of Pennsylvania.
- Zacks, J.M. (2013). *Event Perception, Cognitive Control, Discourse Comprehension and Memory*. Cognitive Science Symposium, Arizona State University.

CONFERENCE PROCEEDINGS AND ABSTRACTS (SINCE 2008)

- Shelton, A., Lau, Y., Zacks, J., & Yoon, B. C. (2008). The opportunistic use of reference frames for rotating scene stimuli. *Journal of Vision*, 8, 739.
- Kurby, C.A., Zacks, J.M., & Xia, J. (2008). fMRI evidence for the activation of modality-specific images during silent reading. *18th Annual Conference of the Society for Text and Discourse*, Memphis, Tennessee.
- Kurby, C.A., Zacks, J.M., Shriver, S., Mehta, R., & Brewer, S. (2008). Event memory and hierarchical segmentation in younger and older adults. *Cognitive Aging Conference*, Atlanta, Georgia.
- Zacks, J.M. (2008). Perceptual events and the elements of memory encoding. *Memory Disorders Research Society*, Saint Louis, MO.
- Zacks, J. M., Swallow, K. M., Barch, D. M., Head, D., Maley, C. J., & Holder, D. (2009). *Retrieving information from a new event selectively activates the medial temporal lobes*. Paper presented at the Annual Meeting of the Cognitive Neuroscience Society, San Francisco.
- Kurby, C. A. & Zacks, J. M. (2009). *fMRI evidence for the activation of modality-specific images during narrative comprehension*. Paper presented at the Annual Meeting of the Cognitive Neuroscience Society, San Francisco.
- Larson-Prior, L. J., Tamez, E. M., Nolan, T. S., Hale, S., Myerson, J. & Zacks, J. M. (2009) *Imaging motor learning before and after sleep*. Paper presented at the 23<sup>rd</sup> Annual Meeting of the Associated Professional Sleep Societies, Seattle, WA.
- Kurby, C. A. & Zacks, J. M. (2009). *Perceptual predictions break down at event boundaries*. Paper presented at the Annual Meeting of the Cognitive Science Society, Amsterdam, Netherlands.
- Zacks, J. M. (2009). *Event segmentation drives memory updating*. Paper presented at the Annual Meeting of the Cognitive Science Society, Amsterdam, Netherlands.

- Kurby, C. A. & Zacks, J. M. (2009). *Indexing situations at event boundaries*. Paper presented at the Annual Meeting of the Society for Text and Discourse, Rotterdam, Netherlands.
- Zacks, J. M. (2009). *Neuroimaging investigations of continuous reading*. Paper presented at the Annual Meeting of the Society for Text and Discourse, Rotterdam, Netherlands.
- Kurby, C. A., & Zacks, J. M. (2009). Readers describe more situational dimensions at event boundaries. *Abstracts of the Psychonomic Society, 12*, p. 58.
- Kurby, C. A., Zacks, J. M., & Haroutunian, N. (2009). *Event boundaries and everyday clairvoyance*. *Abstracts of the Psychonomic Society, 12*, p. 121.
- Mereu, S., Zacks, J.M., Kurby, C. A., & Lleras, A. (2010) *Prediction prevents rapid resumption from being disrupted after the target's location has changed*. Presented at the annual meeting of the Vision Sciences Society, Naples, FL.
- Sargent, J., & Zacks, J. (2010). Chunking in spatial memory from route experience. *Abstracts of the Psychonomic Society, 13*, p. 82.
- Bangert A.S., Kurby, C.A., Zacks, J.M., Deng, A., & Bryant, J.E. (2010). Eventful experience speeds up time. *Abstracts of the Psychonomic Society, 13*, p. 43.
- Huff, M., & Zacks, J.M. (2010). Visual target detection is impaired at event boundaries. *Abstracts of the Psychonomic Society, 13*, p. 43.
- Yu, A.B., Zacks, J.M., & D'Andrea, L.M. (2010). Body parts facilitate non-rotational processes during judgments about rotated figures. *Abstracts of the Psychonomic Society, 13*, p. 81-82.
- Zacks, J.M. & Magliano, J.P. (2011). Editing and the perception of events in film. *Abstracts of the Psychonomic Society, 14*, p. 8.
- Sargent, J.Q., Zacks, J.M., Zacks, R.T., Hambrick, D.Z., Eisenberg, M.L., & Beck, T.M. Event segmentation ability uniquely predicts memory. *Abstracts of the Psychonomic Society, 14*, p. 205.
- Kurby, C.A. & Zacks, J.M. (2011). Priming shows that episodic memory is structured according to perceptual events. *Abstracts of the Psychonomic Society, 14*, p. 205.
- Zacks, Jeffrey M. (2012). A role for event representations in perception, prediction and memory-updating. *Proceedings of the Annual Meeting of the Cognitive Neuroscience Society* (p. 23).
- Kurby, C. A., Sargent, J. Q., Bailey, H. R. & Zacks, Jeffrey M. (2012). Event segmentation and memory in younger and older adults: An fMRI investigation. *Cognitive Aging Conference*.
- Bailey, H. R., Hambrick, D. Z., Zacks, R. T., Head, D., Kurby, C. A. & Zacks, J. M. (2012). Event perception and medial temporal lobe atrophy in cognitive normal aging and early stage Alzheimer's disease. *Cognitive Aging Conference*.
- Sargent, J. Q., Hambrick, D. Z., Zacks, R. T., Head, D., Kurby, C. A., Eisenberg, M. L., et al. (2012). Event segmentation ability uniquely predicts memory in younger and older adults. *Cognitive Aging Conference*.
- Bailey, H.R., Zacks, J.M., Kurby, C.A., & Giovanetti, T. Event perception ability predicts action performance. *Abstracts of the Psychonomic Society, 15*, p. 72.
- Eisenberg, M. L., Sargent, J.Q., & Zacks, J.M. Post-traumatic stress disorder symptom severity predicts event processing performance. *Abstracts of the Psychonomic Society, 15*, p. 200.
- Sargent, J.Q., Zacks, J.M., Philbeck, J.W., Flores, S. Distraction shrinks space (2013). *Annual Meeting of the Association for Psychological Science, 2013*.

Kurby, C. A., Zacks, J. M., Sargent, Jesse Q. & Bailey, H. R. (forthcoming). Aging and event segmentation: An fMRI investigation of individual differences in event perception and memory. *Abstracts of the Psychonomic Society* (Vol. 16). Saint Louis.

## University Service

### Administrative

- Chair, Library Committee, Washington University Psychology Department, 2009-present.
- Chair, Colloquium Committee, Washington University Psychology Department, 2005-2009.
- Member, Undergraduate Council Committee to assess emerging technologies, 2007-2008.
- Member, Undergraduate Council (oversees all aspects of the undergraduate experience), 2008-present.
- Member, Human Behavioral Neuroscience Search Committee, Washington University Department of Psychology, 2006-2007.
- Member, Neuroscience Program Admissions Committee, Washington University, 2006-2008.
- Member, McDonnell Center for Systems Neuroscience Operations Committee, Washington University, 2007-present.
- Member, Hilltop Campus Human Subjects Committee, Washington University, 2002-2003.
- Member, Computer Committee, Washington University Department of Psychology, 2002-present.
- Member, Image Analysis Center Committee, Washington University Psychology Department, 1999-2010.
- Member, *ad hoc* committee on "Libraries in a time of constraint." 2010.
- Member, Bicycle Pedestrian Access and Circulation Task Force, 2011-present.
- Member, Faculty Activity Reporting Advisory Group, 2014-present.
- Coordinator, Pew undergraduate research symposium, Washington University Department of Psychology, Fall 2001, Fall 2002.
- Leader, fMRI methods reading group, Washington University, 2002.

### Courses Taught At Washington University

- Experimental Psychology (Psychology 301)
- Psychology and Technology (Psychology 4191)
- Topics in Spatial Cognition (Psychology 5365)
- Events, Time, Plans and Goals (Psychology 5335)
- Cognitive Neuroscience of Film (Psychology 488/Philosophy-Neuroscience-Psychology 4488)
- Advanced Cognitive Psychology (Psychology 5087)
- Current Debates in Psychology (Psychology 4702)

### Postdoctoral Fellows Supervised

Pascale Michelon (2000-2002; currently lecturer at Washington University)

Christopher A. Kurby (2007-2009; currently faculty member at Grand Valley State University)

Jesse Q. Sargent (2009-2012)

Heather Bailey (2009-2013)

David A. Gold (2012-present)

Lauren L. Richmond (2013-present)

## **Graduate Students Supervised**

Nicole K. Speer (2001-2005)

Khena M. Swallow (2001-2007)

Alfred G. Yu (2006-present)

Charles B. Brenner (2010-present)

Michelle L. Eisenberg (2010-present)

## **Honors Theses and Special Majors**

Rohini Coorg (2003 honors student, went on to M.D. at University of Texas)

Shawn Kumar (2004 special major, went on to work as a biomedical engineer)

Sarah Berson (2004 honors student, went on to a PhD program in Linguistics at the University of California, Berkeley)

Adam Cullman-Clark (2006 honors student, went to law school at the University of Michigan)

Michelle Eisenberg (2009 Philosophy-Neuroscience-Psychology honors student, went on to graduate school in Psychology at Washington University)

## **Graduate Theses**

DISSERTATION SUPERVISOR: Nicole Speer (PhD, 2005), "Text Comprehension Processes in the Brain;" Khena M. Swallow (PhD, 2006), "On the Impact of Event Boundaries on Memory for Recently Encountered Information."

MASTERS SUPERVISOR: Alfred Yu (Psychology MA, 2009)

THESIS COMMITTEE MEMBER: Dan Roe (Psychology PhD, 2000), Pete Mandik (Philosophy PhD, 2000), Liz Gehr (Psychology PhD, 2001), Whit Schonbein (Philosophy PhD, 2002), Susan Moore (Art Masters, 2003), Khena Swallow (Psychology Masters, Advisor, 2003), James Robert Thompson (Philosophy PhD, 2004), Jeremy Reynolds (Psychology PhD, 2005), Lena Sestokas (Psychology Masters, 2007), Aimee Callender (Psychology PhD, 2008), William Knapp (Psychology PhD, 2008), Christopher Fetsch (Neuroscience PhD, 2009), Adam Savine (Psychology Masters, 2009), Andrew Butler (Psychology PhD, 2009), Ji Hae Li (Psychology MA, 2010), Adam Savine (Psychology MA, 2010), , Alecia Vogel (Neuroscience, 2010), Santiago Amaya Gomez (Philosophy-Neuroscience-Psychology PhD, 2011), Michelle Eisenberg (Psychology MA, Chair, 2012).

THESIS EXAMINER: Adi Zaimi (Rutgers University Psychology PhD, 2005), Adam Savine (Psychology MA, 2009).



## **Undergraduate Students and Research Assistants**

Vincent Li (2000), Andrea Golloher (2000-2002), Fredrica Mayer (2000), William Chee (2001), Matthew Sorem (2000-2001), Kevin Lohrasbi (2001), Bart Phillips (2001), Melissa Vogel (2001), Justin Lerner (2002-2003), Julian Ott (2002-2003), Richard Zernickow (2004), Jason Gwinn (2004), Rahal Kahanda (2004), Thanh Phuong Nguyen (2004), Brian Glass (2005-2006), Stephanie Brewer (2006-2007), Derek Holder (2006-2007), Shruti Pandita (2007-2008), Laura D'Andrade (2007-2008), Stephanie Brewer (2006-2008), Jonathan Xia (2007-2008), Albert Deng (2008-2010), Sylvia Lee (2008-2009), Tiina Luning (2008-2009), Rebecca Heymann (2008-2009), Hanisha Manickavasagan (2009-2010), James Edward Bryant (2009-2010), Melody Brenneisen (2010-2011), Owen Footer (2010), Jacob Marks (2010-2011), Alice Turski (2011-2012), Sarah Kloepper (2011-2012), Amy Garcia (2011-2012), Trish Yeh (2011-2012), Claudia Landazabal (2012-2014), Jason Li (2012), Adam Cohen (2012-2013), Mary Jessica Hawkins (2011-2013), Caroline Grossman (2013-2014), Yinyuan Zheng (2013-2014), Samuel Shields (2014), Thomas Nichols (2014), Todd Vogel (2014).