

Curriculum Vitae
Jason M. Watson, Ph.D.
September, 2006

Contact Information:

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Education:

Ph.D., Psychology, Washington University in St. Louis, December, 2001

Dissertation Title: *The role of phonological distinctiveness in word recognition and episodic memory performance*

Committee Chair: Dr. David A. Balota

Core Committee: Drs. David A. Balota, Larry L. Jacoby, Henry L. Roediger, III

M.A., Psychology, Washington University in St. Louis, 2000

Thesis Title: *Semantic, phonological, and hybrid veridical and false memories in healthy older adults and in individuals with dementia of the Alzheimer Type*

Committee Chair: Dr. David A. Balota

B.A., Psychology, University of Arkansas, 1995 – graduated magna cum laude

Positions Held:

Research Associate (January 1, 2002 - June 30, 2004), Department of Psychology, Washington University in St. Louis. Post-doctoral advisor: Dr. Kathleen B. McDermott

Research Scientist (July 1, 2004 – June 30, 2005), Department of Psychology, Washington Univ. in St. Louis

Assistant Professor (July 1, 2005 – present), Department of Psychology, Univ. of Utah

Assistant Investigator (July 1, 2005 – present), The Brain Institute, Univ. of Utah

Principal Investigator (July 1, 2005 – present), Cognitive Science Lab, Univ. of Utah

Participating Faculty (March 22, 2006 - present), Neurosciences Program, Univ. of Utah

Participating Faculty (July 27, 2006 – present), Center on Aging, Univ. of Utah

Research Interests:

illusions of memory
effects of healthy aging and Alzheimer's disease on memory and executive function
functional neuroimaging of reading, remembering, and executive function
brain-behavior relations
word recognition

Teaching Interests:

Cognitive Psychology
Cognitive Aging
Cognitive Neuroscience
Functional Neuroimaging of Cognition
Memory
Neuropsychology

Teaching Experience:

Graduate Courses (The Univ. of Utah)

Memory (to be co-taught with Ray Kesner in Spring, 2007)

Neuropsychology (Fall, 2005; to be taught again in Spring, 2007)

Undergraduate Courses (The Univ. of Utah)

Cognitive Neuropsychology (Spring, 2006; Fall, 2006)

Awards:

Alzheimer's Disease Research Center (ADRC) Directors' Education Award (2000-2001)

Given by the ADRC at Washington University for excellence and outstanding promise for a career in aging and dementia research, \$500.

Roma Schaefer Nooter Award (2000-2001)

Given by Washington University to one graduate student in the Department of Psychology for excellence in scholarship.

Who's Who Among America's Teachers (2005)

Award given to 5% of nation's teachers. Nominated by a former student I mentored as an undergraduate in a Research Experiences/Independent Study course at Washington University in St. Louis.

Departmental and University Service:

Graduate Committee (2005-2007; Psychology Department, Univ. of Utah)

Doctoral Committee (Valentina Dilda, Psychology Dept., Univ. of Utah, Fall 2006)

Doctoral Committee (Ali Froehlich, Psychology Dept., Univ. of Utah, Fall 2006)

Doctoral Committee (Brenda Sieczkowski, English Dept., Univ. of Utah, Fall 2006)

Master's Committee (Matt Kraybill, Psychology Dept., Univ. of Utah, Spring 2006)

Pre-Lim Exam Committee (Russ Costa, Psychology Dept., Univ. of Utah, Fall 2006)

Membership in Professional Organizations:

American Psychological Association
 Association for Psychological Science
 Cognitive Neuroscience Society
 Psychonomic Society
 Rocky Mountain Psychological Association

Professional Service:

Chair/Moderator (April, 2006), Oral Paper Session on Learning/Cognitive Psychology, 76th annual meeting of the Rocky Mountain Psychological Association, Park City, Utah.

Mentor (Summer, 2006), Summer Research Opportunity Program in Psychology (SROP), Department of Psychology, University of Utah, Student: Gerardo Ramirez.

Reviewing for Professional Journals:

Ad-Hoc Reviewer: (21 total journals)

Acta Psychologica; Aging, Neuropsychology, & Cognition; American Journal of Psychology; Applied Cognitive Psychology; Brain; Current Psychology Letters: Behaviour, Brain & Cognition; Epilepsia; Epilepsy & Behavior; European Journal of Cognitive Psychology; Journal of Abnormal Psychology; Journal of Experimental Psychology: Learning, Memory, & Cognition; Journal of Memory & Language; Journal of Neurology, Neurosurgery, & Psychiatry; Memory, Memory & Cognition; Neuropsychologia; Neuropsychology; Personality & Individual Differences; Psychology & Aging; Psychonomic Bulletin & Review; Quarterly Journal of Experimental Psychology

Publications: (19 total publications)Journal Articles:

Balota, D.A., **Watson, J.M.**, Duchek, J.M., & Ferraro, F.R. (1999). Cross-modal semantic and homograph priming in healthy young, healthy old, and in Alzheimer's disease individuals. *Journal of the International Neuropsychological Society*, 5, 626-640.

McDermott, K.B., & **Watson, J.M.** (2001). The rise and fall of false recall: The impact of presentation duration. *Journal of Memory and Language*, 45, 160-176.

Roediger, H.L., **Watson, J.M.**, McDermott, K.B., & Gallo, D.A. (2001). Factors that determine false recall: A multiple regression analysis. *Psychonomic Bulletin & Review*, 8, 385-407.

Watson, J.M., Balota, D.A., & Sergent-Marshall, S.D. (2001). Semantic, phonological, and hybrid veridical and false memories in healthy older adults and in individuals with dementia of the Alzheimer Type. *Neuropsychology*, 15, 254-267.

Baciu, M.V., **Watson, J.M.**, McDermott, K.B., Wetzel, R.D., Attarian, H., Moran, C.J., & Ojemann, J.G. (2003). Functional MRI reveals an inter-hemispheric dissociation of frontal and temporal language regions in a patient with focal epilepsy. *Epilepsy & Behavior*, 4, 776-780.

- McDermott, K.B., Petersen, S.E, **Watson, J.M.**, & Ojemann, J.G. (2003). A procedure for identifying regions preferentially activated by attention to semantic and phonological relations using functional magnetic resonance imaging. *Neuropsychologia*, *41*, 293-303.
- Watson, J.M.**, Balota, D.A., & Roediger, H.L. (2003). Creating false memories with hybrid lists of semantic and phonological associates: Over-additive false memories produced by converging associative networks. *Journal of Memory and Language*, *49*, 95-118.
- Cortese, M.J., **Watson, J.M.**, Wang, J., & Fugett, A. (2004). Relating distinctive orthographic and phonological processes to episodic memory performance. *Memory & Cognition*, *32*, 632-639.
- Moritz, S., Woodward, T.S., Cuttler, C., Whitman, J., & **Watson, J.M.** (2004). False memories in schizophrenia. *Neuropsychology*, *18*, 276-283.
- Watson, J.M.**, McDermott, K.B., & Balota, D.A. (2004). Attempting to avoid false memories in the Deese/ Roediger-McDermott paradigm: Assessing the combined influence of practice and warnings in young and old adults. *Memory & Cognition*, *32*, 135-141.
- Baciu, M.V., **Watson, J.M.**, Maccotta, L., McDermott, K.B., Buckner, R.L., Gilliam, F.G., & Ojemann, J.G. (2005). Evaluating functional MRI procedures for assessing hemispheric language dominance in neurosurgical patients. *Neuroradiology*, *47*, 835-844.
- Chan, J.C.K., McDermott, K.B., **Watson, J.M.**, & Gallo, D.A. (2005). The importance of material-processing interactions in inducing false memories. *Memory & Cognition*, *33*, 389-395.
- McDermott, K.B., **Watson, J.M.**, & Ojemann, J.G. (2005). Pre-surgical language mapping. *Current Directions in Psychological Science*, *14*, 291-295.
- Watson, J.M.**, Bunting, M.F., Poole, B.J., & Conway, A.R.A. (2005). Individual differences in susceptibility to false memory in the Deese-Roediger-McDermott paradigm. *Journal of Experimental Psychology: Learning, Memory, & Cognition*, *31*, 76-85.
- Cortese, M.J., **Watson, J.M.**, Khanna, M.M., & McCallion, M. (2006). Revisiting distinctive processes in memory. *Psychonomic Bulletin & Review*, *13*, 446-451.

Book Chapters:

- Balota, D.A., & **Watson, J.M.** (2000). Methods in cognitive psychology. In A.E. Kazdin, (Ed.), *Encyclopedia of Psychology*. New York, New York: Oxford University Press.
- Roediger, H.L., Balota, D.A., & **Watson, J.M.** (2001). Spreading activation and arousal of false memories. In H.L. Roediger, J.S. Nairne, I. Neath, & A.M. Surprenant (Eds.), *The Nature of Remembering: Essays in Honor of Robert G. Crowder* (pp. 95-115). Washington DC: American Psychological Association.

Manuscripts In Press:

- Meade, M. L., **Watson, J.M.**, Balota, D.A., & Roediger, H.L. The roles of spreading activation and retrieval mode in producing false recognition in the DRM paradigm. *Journal of Memory & Language*.

Yap, M.J., Balota, D.A., Cortese, M.J., & **Watson, J.M.** Single versus dual process models of lexical decision performance: Insights from RT distributional analysis. *Journal of Experimental Psychology: Human Perception & Performance*.

Manuscripts Under Review:

Christ, S.E., **Watson, J.M.**, & McDermott, K.B. *ALE meta-analysis of the neural substrates of deception*.

Hutchison, K.A., Balota, D.A., Cortese, M.J., & **Watson, J.M.** *Predicting semantic priming at the item-level*.

Szpunar, K.K., **Watson, J.M.**, & McDermott, K.B. *Neural correlates of mental time travel*.

Manuscripts In Preparation:

Ojemann, J.G., **Watson, J.M.**, Baciou, M.V., & McDermott, K.B. *Using fMRI to localize frontal and temporal language regions in neurosurgical patients*.

Watson, J.M. *Individual differences in cognitive control and susceptibility to false memories*.

Watson, J.M., Christ, S.E., & McDermott, K.B. *Transient and sustained neural correlates of episodic retrieval of action events*.

Selected Ongoing Projects:

Watson, J.M. *Individual differences in cognitive control in young and old adults*.

Funding Proposals:

In Preparation:

Individual differences in cognitive control in healthy old adults. (PI – Jason M. Watson. Proposal to be submitted to The University of Utah Research Committee; November 15, 2006; \$6,000). The major goal of this project is to investigate individual differences in cognitive control (i.e., the ability to stay on task and to minimize distraction) in a set of 100-150 healthy old adults. These old adults will also form a pool of potential participants for future cognitive aging studies in my laboratory.

Under Revision:

Functional neuroimaging of age-related changes in cognitive control (PI – Jason M. Watson). Proposal submitted to The University of Utah Research Foundation (Funding Incentive Seed Grant; February 15, 2006; \$35,000). The major goal of this project is to use functional MRI to investigate the neural correlates of age-related changes in cognitive control. This project was not funded during this evaluation period and will be revised for a future seed grant application cycle (most likely for the February 15 or August 15, 2007 deadline).

Functional neuroimaging of individual differences in cognitive control (PI – Jason M. Watson; Co-Investigator – Jim Lee). Proposal submitted to National Institute of Mental Health (R03; February 1, 2006; \$100,000). The major goal of this project is to use functional MRI to investigate the neural substrates of cognitive control (i.e.,

the ability to stay on task and to minimize distraction) in dorsolateral prefrontal cortex of young adults. This project was not funded during this evaluation period and will be revised and incorporated into a future grant application cycle (most likely integrated into an NIH K Award proposal in 2007 on aging and cognitive control with Dr. Norman Foster at The University of Utah Center for Alzheimer's Care, Imaging, and Research).

Using functional neuroimaging to investigate reading development in second language learners. (Co-PIs – MaryAnn Christison & Jason M. Watson). Proposal submitted to The University of Utah Synergy Program (May 1, 2006; \$83,253.50). The major goal of this proposal is to develop an interdisciplinary research project between the Departments of Linguistics and Psychology where functional MRI is used to contribute to a better understanding of second language reading that may ultimately inform the educational practice of teaching reading to second language learners. This project was not funded during this evaluation period, though the reviews were favorable enough to encourage us to submit a revision. We are also considering submitting this proposal outside the university to the National Science Foundation (NSF).

Invited Lectures:

Grand Rounds (June, 2003), Department of Pediatrics, St. Louis Children's Hospital, Washington University School of Medicine.

Grand Rounds (October, 2003), Department of Neurology, Barnes-Jewish Hospital, Washington University School of Medicine.

Colloquium (January, 2004), Department of Psychology, Montana State University.

In The News:

Wilson, D. (April, 2004). *Heading in the right direction: Basic research in psychology leads to safer brain surgery.* Article on fMRI of language and neurosurgical work with Drs. McDermott and Ojemann that appears in the *Observer* of the American Psychological Society.

Kersting, K. (February, 2005). *Increased cognitive control helps prevent false memories.* Article on individual differences and associative memory illusion work that appears in the *Monitor on Psychology* of the American Psychological Association.

Logan, J. (September, 2005). *New faculty to put their heads together.* Article announcing my appointment as an Assistant Investigator in The Brain Institute at The University of Utah that appears in the Institute's monthly newsletter, *Thought*.

Logan, J. (February, 2006). *Understanding the aging mind.* Article discussing my research agenda and appointment as an Assistant Investigator in The Brain Institute at The University of Utah.

Conference Presentations: (27 total presentations)

- Watson, J.M.**, Balota, D.A., & Paul, S.T. (1997). *Summation of activation with multiple orthographic and/or phonological primes*. Paper presented at the meeting of the Midwestern Psychological Association, Chicago, Illinois.
- Anderson, M., **Watson, J.M.**, Balota, D.A., & Paul, S.T. (1998). *Do spelling and sound cues always help pronunciation?* Poster presented at the meeting of the Southeastern Psychological Association.
- Balota, D.A., Cortese, M.J., **Watson, J.M.**, & Spieler, D.H. (1998). *Chronometric studies of word recognition: Beyond measures of central tendency*. Paper presented at the 39th annual meeting of the Psychonomic Society, Dallas, Texas.
- Balota, D.A., Faust, M.E., & **Watson, J.M.** (1998). *Priming lexical retrieval processes in healthy young and older adults*. Paper presented at the Cognitive Aging Conference, Atlanta, Georgia.
- Roediger, H.L., Gallo, D.A., **Watson, J.M.**, & Balota, D.A. (1998). *Eliminating and enhancing illusory memories*. Paper presented at the 39th annual meeting of the Psychonomic Society, Dallas, Texas.
- Watson, J.M.**, Balota, D.A., & Roediger, H.L. (1998). *The role of semantic and phonological activation in creating false memories*. Paper presented at the meeting of the Midwestern Psychological Association, Chicago, Illinois.
- Cortese, M.J., Balota, D.A., & **Watson, J.M.** (1999). *The interaction between semantic and phonological processes in reading aloud*. Poster presented at the 40th annual meeting of the Psychonomic Society, Los Angeles, California.
- Roediger, H.L., Balota, D.A., & **Watson, J.M.** (1999). *Spreading activation and the arousal of false memories*. Paper presented at the Yale conference in honor of Robert G. Crowder.
- Roediger, H.L., **Watson, J.M.**, McDermott, K.B., & Gallo, D.A. (1999). *Determining the factors that cause associative memory illusions*. Paper presented at the meeting of the American Psychological Society, Denver, Colorado.
- Watson, J.M.**, Balota, D.A., Duchek, J.M., & Ferraro, F.R. (1999). *Cross-modal priming in young, old, and dementia of the Alzheimer's type: Explorations of semantic memory*. Paper presented at the meeting of the Midwestern Psychological Association, Chicago, Illinois.
- Watson, J.M.**, Balota, D.A., Sergent-Marshall, S.D., & Duchek, J.M. (2000). *Semantic and phonological false memories in young, healthy old, and Alzheimer's Disease*. Poster presented at the 41st annual meeting of the Psychonomic Society, New Orleans, Louisiana.
- Watson, J.M.**, & McDermott, K.B. (2000). *Presentation duration and false recall: Evidence for multiple factors underlying associatively-induced memory illusions*. Paper presented at the meeting of the Midwestern Psychological Association, Chicago, Illinois.
- Watson, J.M.**, McDermott, K.B., & Balota, D.A. (2000). *Veridical and false memories in young and healthy older adults using repeated study/test trials with warning instructions*. Poster presented at the Cognitive Aging Conference, Atlanta, Georgia.
- McDermott, K.B., **Watson, J.M.**, Petersen, S., & Ojemann, J. (2001). *A method for the preferential activation of semantic and phonological processing areas using fMRI*. Paper presented at the 42nd annual meeting of the Psychonomic Society, Orlando,

Florida.

- Chan, J.C.K., McDermott, K.B., **Watson, J.M.**, Gallo, D.A., & Duchek, J.M. (2002). *The importance of stimulus congruent processing in creating false memories*. Poster presented at the 43rd annual meeting of the Psychonomic Society, Kansas City, Missouri.
- Poole, B.J., **Watson, J.M.**, Bunting, M.F., & Conway, A. (2002). *Individual differences in susceptibility to false memory*. Poster presented at the meeting of the Midwestern Psychological Association, Chicago, Illinois.
- Watson, J.M.** & Balota, D.A. (2002) *The role of phonological distinctiveness in word recognition and episodic memory performance*. Poster presented at the 43rd annual meeting of the Psychonomic Society, Kansas City, Missouri.
- McDermott, K.B., **Watson, J.M.**, Baciú, M.V., & Ojemann, J.G. (2003). *Results from an fMRI language identification protocol align consistently with those from electrical stimulation mapping*. Paper presented at the 44th annual meeting of the Psychonomic Society, Vancouver, B.C., Canada.
- Ojemann, J.G., Baciú, M.V., **Watson, J.M.**, McDermott, K.B., Wetzel, R.D., Attarian, H., & Moran, C.J. (2003). *fMRI reveals an inter-hemispheric dissociation of frontal and temporal language regions in a patient with focal epilepsy*. Poster presented at the 10th annual meeting of the Cognitive Neuroscience Society, New York, NY.
- Ojemann, J.G., **Watson, J.M.**, Baciú, M.V., & McDermott, K.B. (2003). *A reliable fMRI paradigm for localizing posterior language sites*. Poster presented at the 71st annual meeting of the American Association of Neurological Surgery, San Diego, CA.
- Ojemann, J.G., **Watson, J.M.**, Baciú, M.V., & McDermott, K.B. (2003). *A fMRI paradigm that predicts posterior language sites*. Poster presented at the 9th annual meeting of the Organization for Human Brain Mapping, New York, NY.
- Poole, B.J., **Watson, J.M.**, Bunting, M.F., Clift, A.L., & Conway, A.R. (2003). *Individual differences in susceptibility to false memory*. Poster presented at the 15th annual meeting of the American Psychological Society, Atlanta, Georgia.
- Watson, J.M.**, Ojemann, J.G., Baciú, M.V., McDermott, K.B., & Leonard, J.R. (2003) *fMRI preoperatively identifies language regions in pediatric neurosurgical patients*. Poster presented at the 44th annual meeting of the Psychonomic Society, Vancouver, B.C., Canada.
- Meade, M.L., **Watson, J.M.**, Balota, D.A., & Roediger, H.L. (2004). *An examination of spreading activation and false memory on lexical decision and speeded recognition tests*. Poster presented at the 16th annual meeting of the American Psychological Society, Chicago, Illinois.
- Watson, J.M.**, & Balota, D.A. (2004). *Lexical processing and episodic memory: Influences of regularity, concreteness, and frequency*. Poster presented at the 45th annual meeting of the Psychonomic Society, Minneapolis, Minnesota.
- Szpunar, K.K., **Watson, J.M.**, & McDermott, K.B. (2006). *Brain regions involved in autobiographical memory and projecting oneself into the future*. Paper presented at the 4th meeting of the International Conference on Memory, Sydney, Australia.
- Watson, J.M.** (2006). *Individual differences in cognitive control and susceptibility to false memories*. Paper to be presented at the 47th annual meeting of the Psychonomic Society, Houston, Texas.