

## Tali Ditman, Ph.D.

20 Hamilton Road, #103  
Arlington, MA 02474  
tali.ditman@tufts.com  
617-365-7364

### Education

- 2004-2007     **Doctor of Philosophy (Ph.D.)**  
                  **Tufts University**  
Advisors:     Phillip J. Holcomb, Ph.D.; Gina R. Kuperberg, M.D., Ph.D.  
Emphasis:     Neural Indices of Discourse Coherence
- 1999-2001     **Master's of Art (M.A.)**  
                  **Binghamton University (SUNY)**  
Advisor:       David G. Payne, Ph.D.  
Emphasis:     Effects of Repeated Imaginings on False Memory Formation
- 1995-1999     **Bachelor's of Arts (B.A.)**  
                  **Binghamton University (SUNY)**  
Major:         Psychology (Honors)  
Emphasis:     Prospective Memory

### Research Experience

- 2007-present   **Post-doctoral Research Fellow**  
                  **Harvard Medical School**  
                  **Athinoula A. Martinos Center for Biomedical Imaging**  
Advisor:       Gina R. Kuperberg, M.D., Ph.D.  
Emphasis:     Examine discourse comprehension in healthy adults and  
                  schizophrenia patients using neuroimaging techniques
- 2003-2004     **Research Assistant**  
                  **Massachusetts General Hospital**  
                  **Psychiatric Neuroimaging Laboratory**  
Advisor:       Stephan Heckers, M.D.; Anthony Weiss, M.D.  
Emphasis:     Examined brain impairments in schizophrenia using fMRI and  
                  morphometric parcellation of structural images
- 2002-2003     **Clinical Research Assistant**  
                  **McLean Hospital**  
                  **Psychopharmacology Research Laboratory**  
Advisor:       Andrew Stoll, M.D.  
Emphasis:     Evaluated treatment efficacy of natural substances such as  
                  omega-3 fatty acids and vitamin supplements on mood  
                  disorder symptoms
- 2001-2002     **Research Assistant**  
                  **McLean Hospital**  
                  **Psychology Research Laboratory**  
Advisor:       Debra A. Titone, Ph.D.; Philip Holzman, Ph.D.  
Emphasis:     Used behavioral and ERP methodologies to examine language  
                  and memory impairments in patients with schizophrenia

### Awards and Achievements

- 2008 Tufts Psychology Department nominee for Northeastern Association of Graduate Schools Dissertation Research Award
- 2007 Outstanding Academic Achievement Award, Tufts University
- 2006-2007 Dissertation Research Award, American Psychological Association (APA)  
Title: Neural Indices of Discourse Comprehension
- 1999 Poster awarded first prize at *Annual Meeting of the Northeastern Teachers of Psychology Conference*; Awarded travel money to present poster at American Psychological Association (APA) Teaching of Psychology conference

### Publications

- Ditman, T.**, Holcomb, P.J., & Kuperberg, G.R. (in press). Tracking time through language: Temporal shifts rapidly decrease information accessibility during reading. *Psychonomic Bulletin & Review*.
- Brunyé, T.T., **Ditman, T.**, Augustyn, J., & Mahoney, C. Spatial and Nonspatial Integration in Learning and Training with Multimedia Systems. To appear in *Cognitive Effects of Multimedia Learning*. R. Zheng (Ed). IGI Publishing.
- Kuperberg, G.R., **Ditman, T.**, Kreher, D.A., & Goldberg, T. (in press). The cognitive basis of language dysfunction in schizophrenia. To appear in *Handbook of Neuropsychology of Mental Illness*. S. Wood, N. Allen and C. Pantelis (Eds). Cambridge University Press.
- Ditman, T.**, Holcomb, P.J., & Kuperberg, G.R. (2007). An investigation of concurrent ERP and self-paced reading methodologies. *Psychophysiology*, *44*(6), 927-935.
- Ditman, T.**, Holcomb, P.J., & Kuperberg, G.R. (2007). The contributions of lexico-semantic and discourse influences to the resolution of ambiguous categorical anaphors. *Language and Cognitive Processes*, *22*(6), 793-827.
- Ditman, T.**, & Kuperberg, G.R. (2007). The time course of building global coherence in schizophrenia: An electrophysiological investigation. *Psychophysiology*, *44*(6), 991-1001.
- Weiss, A.P., Goff, D., Schacter, D.L., **Ditman, T.**, Freudenreich, O., Henderson, D., & Heckers, S. (2006). Fronto-hippocampal functioning during temporal context monitoring in schizophrenia. *Biological Psychiatry*, *60*(11), 1268-1277.
- Sim, K., DeWitt, I., **Ditman, T.**, Zalesak, M., Greenhouse, I., Goff, D., Weiss, A.P., & Heckers, S. (2006). Hippocampal and parahippocampal volumes in schizophrenia: A structural MRI study. *Schizophrenia Bulletin*, *32*(2), 332-340.
- Ditman, T.**, & Kuperberg, G. (2005). A source monitoring account of auditory verbal hallucinations in patients with schizophrenia. *Harvard Review of Psychiatry*, *13*(5), 280-299.
- Ongur, D., Zalesak, M., Weiss, A.P., **Ditman, T.**, Titone, D., & Heckers, S. (2005). Prefrontal cortical activation during paired object recognition. *Psychiatry Research: Neuroimaging*, *139*(3), 191-198.
- Holt, D. J., Weiss, A.P., Rauch, S.L., Wright, C.I., Zalesak, M., Goff, D.C., **Ditman, T.**, Welsh, R. C., & Heckers, S. (2005). Sustained activation of the hippocampus in response to fearful faces in schizophrenia. *Biological Psychiatry*, *57*(9), 1011-1019.
- Weiss, A.P., Dewitt, I., Goff, D., **Ditman, T.**, & Heckers, S. (2005). Anterior and posterior hippocampal volumes in schizophrenia. *Schizophrenia Research*, *73*, 103-112.

Heckers, S., Zalesak, M., Weiss, A.P., **Ditman, T.**, & Titone, D. (2004). Hippocampal activation during transitive inference in humans. *Hippocampus*, 14(2), 153-162.

Titone, D., **Ditman, T.**, Holzman, P.S., Matthyse, S.M., Eichenbaum, H., & Levy, D. (2004). Transitive inference in schizophrenia: Impairments in relational memory organization. *Schizophrenia Research*, 68, 235-247.

### **Manuscripts under Review**

Kuperberg, G.R., Kreher, D.A., & **Ditman, T.** What can event-related potentials tell us about language, and perhaps even thought, in schizophrenia?

### **Manuscripts in Preparation**

**Ditman, T.**, Holcomb, P.J., & Kuperberg, G.R. When distance matters: Tracking spatial information during reading comprehension.

**Ditman, T.**, Holcomb, P.J., & Kuperberg, G.R. The influence of discourse focus on anaphor resolution: A simultaneous self-paced reading and ERP investigation

**Ditman, T.**, Kuperberg, G.R., et al. The resolution of ambiguous categorical anaphors in schizophrenia patients.

### **Conference Proceedings and Presentations**

**Ditman, T.**, & Kuperberg, G.R. An ERP examination of lexico-semantic and contextual influences across sentence boundaries in schizophrenia. *Poster accepted to be presented at the Annual Meeting of the Cognitive Neuroscience Society, 2008.*

De Grauwe, S., Swain, A., **Ditman, T.**, Holcomb, P.J., & Kuperberg, G.R. Electrophysiological insights into the processing of nominal metaphors. *Poster accepted to be presented at the Annual Meeting of the Cognitive Neuroscience Society, 2008.*

Kuperberg, G.R., Cohn, N., Choi, A., Paczynski, M., **Ditman, T.**, Holcomb, P.J., & Jackendoff, R. An Event-related potential study of complement coercion. *Poster accepted to be presented at the Annual Meeting of the Cognitive Neuroscience Society, 2008.*

**Ditman, T.**, Holcomb, P., & Kuperberg, G.R. An electrophysiological examination of temporal cue use during discourse comprehension. *Poster presented at the Annual Meeting of the Psychonomic Society, 2007.*

**Ditman, T.**, Holcomb, P.J., & Kuperberg, G.R. The influence of discourse focus on anaphor resolution: A simultaneous self-paced reading and ERP investigation. *Poster presented at the Emerging Trends in Psychology Conference Series, 1: Building Meaning from Language, Medford, MA.*

Emerson, J., Brunyé, T.T., **Ditman, T.**, & Taylor, H.A. Reading and memory costs with processing backward temporal shifts in narrative discourse. *Poster presented at the Emerging Trends in Psychology Conference Series, 1: Building Meaning from Language, Medford, MA.*

**Ditman, T.**, Holcomb, P., & Kuperberg, G.R. The influence of discourse focus on anaphor resolution: A simultaneous self-paced reading and ERP investigation. *Poster presented at the Annual Meeting of the Cognitive Neuroscience Society, New York, 2007.*

Paczynski, M., **Ditman, T.**, Okano, K., & Kuperberg, G.R. Drawing inferences during reading: An ERP study. *Poster presented at the Annual Meeting of the Cognitive Neuroscience Society, New York, 2007.*

- De Grauwe, S., Davis, L.J., **Ditman, T.**, Paczynski, M., Holcomb, P.J., & Kuperberg, G.R. Electrophysiological insights into the processing of nominal metaphors. *Poster presented at the Annual Meeting of the Cognitive Neuroscience Society, New York, 2007.*
- Ditman, T.**, Kreher, D., Holcomb, P., & Kuperberg, G.R. The neural correlates of causal bridging inferences in patients with schizophrenia. *Poster presented at the Annual Meeting of the Cognitive Neuroscience Society, California, 2006.*
- Paczynski, M., Kreher, D.A., **Ditman, T.**, Holcomb, P., & Kuperberg, G.R. Electrophysiological evidence for the role of animacy and lexico-semantic associations in processing nouns within passive structures. *Poster presented at the Annual Meeting of the Cognitive Neuroscience Society, California, 2006.*
- Ditman, T.**, Holcomb, P.J., & Kuperberg, G.R. The contributions of lexico-semantic and discourse influence to the resolution of ambiguous categorical anaphors. *Poster presented at the Annual Meeting of the Psychonomic Society, 2005.*
- Heckers, S., Zalesak, M., **Ditman, T.**, Goff, D., Dewitt, I., & Weiss, A.P. Increased hippocampal recruitment during episodic memory in schizophrenia. *Poster presented at the 11<sup>th</sup> Annual Meeting of the Organization for Human Brain Mapping, Toronto, Canada, 2005.*
- Heckers, S., Zalesak, M., Freudenreich, O., DeWitt, I., **Ditman, T.**, Goff, D., & Weiss, A.P. Increased hippocampal recruitment during episodic memory in schizophrenia. *Presented at the 20th International Congress on Schizophrenia Research, 2005.*
- Ditman, T.**, Holcomb, P.J., & Kuperberg, G. Examining anaphor resolution using event-related potentials. *Poster presented at the Annual Meeting of the Cognitive Neuroscience Society, New York, 2005.*
- Ditman, T.**, Holcomb, P.J., & Kuperberg, G. Examining anaphor resolution using event-related potentials. *Paper presented at the Annual Meeting of the Eastern Psychological Association, Boston, 2005.*
- Holt, D.J., Weiss, A.P., **Ditman, T.**, Wright, C.I., Rauch, S.L., Goff, D.C., & Heckers, S. Evidence for sustained hippocampal response to fearful faces in schizophrenia. *Poster presented at the Annual Meeting of the Organization for Human Brain Mapping, Budapest, Hungary, 2004.*
- Ongür, D., Zalesak, M., Weiss, A., **Ditman, T.**, Titone, D., & Heckers, S. Prefrontal cortical activation during paired object recognition. *Poster presented at the Annual Meeting of the Organization for Human Brain Mapping, Budapest, Hungary, 2004.*
- Zalesak, M., Weiss, A.P., Dewitt, I., **Ditman, T.**, & Heckers, S. Medial temporal lobe activation in episodic vs. familiarity-based memory retrieval. *Poster presented at the Annual Meeting of the Organization for Human Brain Mapping, Budapest, Hungary, 2004.*
- Zalesak, M., Weiss, A.P., Dewitt, I., **Ditman, T.**, & Heckers, S. Medial temporal lobe activation in episodic vs. familiarity-based memory retrieval. *Paper presented at the Annual Meeting of the International Society for Magnetic Resonance Imaging in Medicine, Kyoto, Japan, 2004.*
- Weiss, A.P., **Ditman, T.**, Goff, D., Schacter, D., & Heckers, S. Aberrant anterior hippocampal activity during contextual memory decision in schizophrenia. *Poster presented at the Annual Meeting of Biological Psychiatry, 2004.*
- Holt, D.J., Weiss, A.P., **Ditman, T.**, Wright, C.I., Rauch, S.L., Goff, D.C., & Heckers, S. Decreased habituation of hippocampal activation of fearful faces in schizophrenia. *Poster presented at the Annual Meeting of Biological Psychiatry, 2004.*
- Zalesak, M., Weiss, A. P., Dewitt, I., **Ditman, T.**, & Heckers, S. Medial temporal lobe activation in episodic vs. familiarity-based memory retrieval. *Poster presented at the Health Science and Technology Forum, Boston, MA, 2004.*

- Titone, D., **Ditman, T.**, & Lawrence, J. Non-verbal "declarative" memory in Alzheimer dementia patients and healthy elderly adults: Evidence from an order transitivity task. *Poster presented at the Annual Meeting of the Cognitive Neuroscience Society, 2002.*
- Payne, D.G. & **Ditman, T.** Testing the source monitoring framework and misattribution of familiarity of false memories produced by imagination. *Poster presented at the Annual Meeting of the Psychonomic Society, 2001.*
- Payne, D.G., **Ditman, T.**, & Rosenfeld, L. Effects of repeated imaginings on false memory and source monitoring accuracy. *Paper presented at the Annual Meeting of the American Psychological Society, Miami, FL, 2000.*
- Payne, D.G., Calabrese, V., & **Ditman, T.** Examining memory beliefs and strategies in college-aged students. *Poster presented at the Society for Applied Research in Memory and Cognition (SARMAC), Miami, FL, 2000.*
- Payne, D.G. Calabrese, V., **Ditman, T.**, Kwasny, J.M. Brainerd, C.J., & Reyna, V.F. Testing a dual-retrieval model of veridical and false recall. *Paper presented at the Annual Meeting of the Psychonomic Society, 2000.*
- Benoit, G.E., Calabrese, V., Rehfeld, S.A., Kwasny, J.M., **Ditman, T.**, & Payne, D.G. False recall and recognition for emotionally laden words. *Poster presented at the Annual Meeting of the Eastern Psychological Association, 2000.*
- Ditman, T.**, Payne, D.G., Rosenfeld, L.B., & Benoit, G.E. The effects of repeated imaginings on memory. *Paper presented at the Annual Meeting of the Eastern Psychological Association, 2000.*
- Ditman, T.**, Macalister H.E., & Payne, D.G. A lab course in general psychology. *Poster presented at the Annual Meeting of the Northeastern Teachers of Psychology Conference, 1999.* (Note: This poster was awarded the first prize for posters presented at the Meeting.)
- Ditman, T.**, Macalister H.E., & Payne, D.G. A lab course in general psychology. *Poster presented at the Annual Meeting of the American Psychological Association, 1999.*
- Payne, D.G., Rosenfeld, L., **Ditman, T.**, Benoit, G., & Calabrese, V. Repeated imaginings affect veridical and false memories for dyadic action events. *Paper presented at the Annual Meeting of the Psychonomic Society, 1999.*
- Ditman, T.**, Lampinen, J.M., Neuschatz, J.S., & Mooney, M. The use of fraudulent identification to obtain alcohol by college students. *Poster presented at the Annual Meeting of the American Psychological Association, 1999.*

### Teaching Experience

Physiological Psychology, Mount Ida College. 2008  
 Research Methods in Psychology, Binghamton University, 2001 (2 semesters)  
 Laboratory in Cognition, Binghamton University, 2001  
 Statistics (Teaching Assistant), Binghamton University, 2000  
 Laboratory in General Psychology (Teaching Assistant), Binghamton University, 1998-1999 (3 semesters)

### Invited Lectures and Talks

February 5, 2008, Cognitive Neuroscience Methods, Tufts University  
 March 29, 2007, Schizophrenia and the Brain, Tufts University  
 October 16, 2005, An ERP Examination of Comprehension, Edward Gibson's Laboratory, MIT  
 January 25, 2007, Cognitive Neuroscience Methods, Tufts University  
 February 20, 2007, Semantics and Meaning, Tufts University

**Professional Activities**

Ad Hoc Reviewer: BioMed; Brain Research; Discourse Processes; Harvard Review of Psychiatry; Language and Cognitive Processes; Language and Linguistics Compass; Neuropsychology; Neuroscience Letters; Psychophysiology

Tufts University Psycholinguistics Faculty Search Committee, 2007

Conference Committee, "Building Meaning from Language" conference, Tufts University, 2006-2007

Tufts University Cognitive Faculty Search Committee, 2006

Summer Fellowship, Society for Applied Research in Memory and Cognition (SARMAC), Fall, 1999 – Spring, 2001