

CURRICULUM VITAE

Prepared: 03/02/2014

PART I: GENERAL INFORMATION

Name: Martha Elizabeth Shenton

Office Address: Psychiatry Neuroimaging Laboratory
Department of Psychiatry, Brigham and Women's Hospital



Home Address: [Redacted]

Place of Birth: [Redacted]

Education:

1973	A.B. Wellesley College
1976	M.S. Tufts University
1981	M.A. Harvard University
1984	Ph.D. Harvard University

Postdoctoral Training:

Fellowships:

1984-1986 National Institute of Mental Health (NIMH) –National Research Service Award (T32) Postdoctoral Clinical Research Training Fellow in Biological Psychiatry in the Laboratory of Neurophysiology and in the Cognitive Neuroscience Laboratory, Harvard Medical School (HMS), Department of Psychiatry at the Massachusetts Mental Health Center (MMHC), Boston, MA.

Licensure and Certification:

1987- Licensed Psychologist, Massachusetts Board of Registration of Psychologists (#4297)

Academic Appointments:

1984-1986	Research Fellow in Biological Psychiatry, in the Laboratory of Neurophysiology, Department of Psychiatry, HMS, MMHC, Boston, MA
1986-1989	Instructor in Psychology, Department of Psychiatry, HMS, MMHC, Boston, MA
1989-1993	Assistant Professor of Psychology, Department of Psychiatry, HMS, MMHC, Boston, MA
1993-2000	Associate Professor of Psychology, Consolidated Department of Psychiatry, HMS, Boston, MA
2000-2005	Professor of Psychology, Department of Psychiatry, VA Brockton, HMS, Brockton, MA
2003-	Professor of Radiology, Department of Radiology, Brigham and Women's Hospital, HMS, Boston, MA
2005-	Professor of Psychology, Department of Psychiatry, Brigham and Women's Hospital, HMS, Boston, MA

Hospital or Affiliated Institution Appointments:

1979-1984	Research Fellow in Psychopathology, Psychology Laboratory, Mailman Research Center, McLean Hospital, HMS, Belmont, MA
1984-1986	Research Fellow in Biological Psychiatry, in the Laboratory of Neurophysiology, HMS, Department of Psychiatry, MMHC, Boston, MA
1985-1995	Research Health Scientist (WOC), Department of Psychiatry at the Brockton VA Medical Center, HMS, Brockton, MA
1988-2007	Research Associate, Department of Radiology, Surgical Planning Laboratory, Brigham and Women's Hospital, HMS, Boston, MA
1989-2000	Research Associate in Psychology, Laboratories of Psychiatric Research, McLean Hospital, HMS, Department of Psychiatry, Belmont, MA
1995-1995	Health Statistician, Department of Psychiatry at the Brockton VA Medical Center, HMS, Brockton, MA
1995-1998	Research Health Scientist (WOC), Department of Psychiatry at the Brockton VA Medical Center, HMS, Brockton, MA
1998-2005	Lead Psychologist, Department of Psychiatry at the VA Boston Healthcare System, Brockton Campus, Brockton, MA
2005-	Health Scientist, VA Boston Healthcare System, Brockton Campus, Brockton, MA
2005-2007	Research Associate, Department of Psychiatry, Brigham and Women's Hospital, HMS, Boston, MA
2007-	Senior Scientist, Brigham and Women's Hospital, HMS
2008-	Senior Scientist, Judge Baker Children's Center, HMS

Other Professional Positions and Major Visiting Appointments:

1984-1985	Visiting Lecturer in Psychology, Brandeis University, Waltham, MA
-----------	---

Hospital and Health Care Organization Service and Other Major Administrative Responsibilities:

1986-2005	Clinical Research Advisor for Post-Doctoral Research Fellows in the Department of Psychiatry, VA Boston Healthcare System, HMS, Brockton, MA
1986-2005	Director, Clinical Evaluation Section, Neuroscience Laboratory, HMS, Department of Psychiatry at the Brockton VA Medical Center, Brockton, MA
1987-2005	Director, MRI Section, Laboratory of Neuroscience, HMS, Department of Psychiatry, VA Medical Center, Brockton, MA
1990-2005	Clinical Research Advisor for Visiting Scholars in the Department of Psychiatry, VA Boston Healthcare System, HMS, Brockton, MA
1992-2005	Co-Director, Cognitive Neuroscience Laboratory, Department of Psychiatry, Hospital, HMS, Belmont, MA
1993-1994	Acting Co-Director, Biological Psychiatry, Clinical Research Training Program, Department of Psychiatry, HMS, Boston, MA
1993-1994	Coordinator, Neuroscience Seminar Series, Residency Training Program in Psychiatry, Veterans Affairs Medical Center, HMS, Brockton, MA
1993-1996	Coordinator, Biological Psychiatry, Clinical Research Training Program, Department of Psychiatry, HMS, Boston, MA
1993-	Preceptor, Biological Psychiatry, Clinical Research Training Program, Department of Psychiatry, HMS, Boston, MA
1995-2000	Scientific Co-Director, VA Center for Basic and Clinical Neuroscience Studies of Schizophrenia, VAMC-Brockton, Department of Psychiatry, HMS, Brockton, MA
1995-	Director, Psychiatry and Behavioral Sciences Imaging, Surgical Planning Laboratory, MRI Division, Department of Radiology, Brigham & Women's Hospital, HMS, Boston, MA

- 1995- Director, Clinical Neuroscience Division, Laboratory of Neuroscience, Department of Psychiatry at the Brockton VA Medical Center, and the Boston VA Healthcare System, Brockton Division, HMS, Brockton, MA
- 1996-2008 Associate Director, Clinical Research Training Program, Department of Psychiatry, HMS, Boston, MA
- 2005- Founding Director, Psychiatry Neuroimaging Laboratory, Department of Psychiatry, Brigham and Women's Hospital, HMS, Brockton, MA
- 2007-2012 Director, Resident Pathways Training in Research Program, Harvard South Shore Psychiatry Residency Training Program, HMS, VA Boston Healthcare System, Brockton, MA
- 2008- Co-Director, Clinical Research Training Program, Department of Psychiatry, HMS, Boston, MA

Major Committee Assignments:

International, National and Regional

- 1994-1996 NIMH Special Review Committee (SRC), Ad Hoc Reviewer
- 1994-1996 NIMH Behavioral Science Track Award for Rapid Transition (B/START), Ad Hoc Reviewer
- 1996-1998 NIH Clinical Neuroscience & Biological Psychopathology Review Committee, Member
- 1997 NIH Special Emphasis Panel Review, Member
- 1998-2000 NIH Brain Disorders & Clinical Neuroscience Study Section (BDCN-6), Member
- 1998 Local Committee, XIIth Event-Related Potentials International Congress (EPIC XII), Member
- 1998 NIH Special Emphasis Panel Review, Member
- 1999-2002 Lilly Fellowship Award Committee, *Society of Biological Psychiatry*, Member
- 2000 NIMH Special Emphasis Panel Review, Chair of Teleconferencing IRG
- 2000-2006 Reviewer, The Wellcome Trust
- 2001 Lilly Fellowship Award Committee, *Society of Biological Psychiatry*, Co-Chair
- 2001-2004 Reviewer, March of Dimes, Birth Defects Foundation
- 2001-2003 NIH Brain Disorders & Clinical Neuroscience Study Section (BDCN-6), Member
- 2002 Lilly Fellowship Award Committee, *Society of Biological Psychiatry*, Chair
- 2002 National Institute of Mental Health Workshop Planning Meeting: First Episode Schizophrenia, Member
- 2002 NIMH Special Emphasis Panel Review, BDCN-2, Teleconferencing IRG, Member
- 2002 Department of Veterans Affairs, Washington, DC, Neuroimaging Study Section, Member
- 2002 Department of Veterans Affairs, Washington, DC, REAP Midterm Review Committee, Member
- 2002 NIMH Board of Scientific Counselors Review, Ad Hoc Reviewer
- 2003-2005 Education and Training Committee, *American College of Neuropsychopharmacology*, Member
- 2003-2006 NIH Neural Basis of Psychopathology, Addictions and Sleep Disorders Study Section (NPAS), Member
- 2004-2006 Ethics Committee, *American College of Neuropsychopharmacology*, Member
- 2004 Reviewer, Sheffield Hospitals Charitable Trust for Medical Research, The University of Sheffield
- 2005- International Advisory Board Member, *Schizophrenia International Research Society*
- 2006-2006 Ad Hoc Reviewer for NIH Study Section (ZRG1 BDCN-A 90 S), Molecular Mechanisms, Genetics, and Animal Models of Neuropsychiatric Disorders
- 2006-2006 Ad Hoc Reviewer for NIH Study Section Neural Basis of Psychopathology, Addictions and Sleep Disorders (NPAS)
- 2006 Program Committee, *International Congress on Schizophrenia Research*, Member
- 2007 Reviewer for the Neuroscience and Mental Health Board, *Medical Research Council*, London, UK

2007 Scientific Advisory Board for *Human Brain Mapping*, Member

2007 Scientific Review NIH (Z MH 1 ERB-S), Silvio Conti Centers, Member

2007 VA Biomedical Laboratory Research and Development and Clinical Science and Research and Development (BLRD/CSRD), Career Development Review Panel, Member

2007 Scientific Review NIH (MH BDCN-Member Conflict Committee), Member

2007 Work Group of Scientists to Review Needs for a Special Emphasis Panel on Neurotechnology, National Institutes of Health, Center for Scientific Review, Member

2007 Scientific Review NIH (Z MH1 ERB-C(01), CIDAR Review, Member

2007-2008 University of Minho, Braga, Portugal, Post-Doctoral Fellowship Committee, Member, Government of Portugal

2008 Reviewer for the Research Competitiveness Program for the *American Association for the Advancement of Science*

2008 Scientific Review for NIH EUREKA (Exceptional, Unconventional Research Enabling Knowledge Acceleration) ZNS1 SRB-P(44), Member

2008 Reviewer for the *Welcome Trust*

2008 Ad Hoc Reviewer for ZMH1 CNF-Z01 S (Conferences to Advance Mental Health Research)

2009-2010 Advocacy Committee, *American College of Neuropsychopharmacology*, Member

2009-2011 Ethics Committee, *American College of Neuropsychopharmacology*, Member

2009 *Israel Science Foundation*, Grant Reviewer

2009 Scientific Review NIH (MH ZRG1 BDCN-T(58)R, "Challenge Grants", Member

2009 Program Committee, *Society for International Research on Schizophrenia*, Member

2009 Scientific Review NIH (ZMH1 ERB-C 01 S), National Research Service Award Institutional Training Grants, Member

2010 Scientific Review NIH (ZNS1 SRB-B-21) Study Section, EUREKA (Exceptional, Unconventional Research Enabling Knowledge Acceleration) Study section, Member

2010 NIH National Science Foundation and Graduate Research Fellowship Program (GRFP), Member

2010 Program Committee, *Society for International Research on Schizophrenia*, Member

2010 Reviewer for the *US-Israel Binational Science Foundation*

2010-2012 Membership Committee, *Society for International Research on Schizophrenia*, Member

2010-2012 Awards Committee, *Society for International Research on Schizophrenia*, Member

2010 Scientific Review NIH T32 Institutional Research Training Grant (NIH ZMH1 ERB-S-01), Member

2010 Reviewer for Academy for Interdivisional Innovative Research Incentive Scheme, WOTR Science for Global Development, *the Netherlands Organization for Scientific Research*

2011 Scientific Review NIH (ZNS SRB-B) Study Section, *EUREKA* (Exceptional, Unconventional Research Enabling Knowledge Acceleration) Study Section, Member

2011 *Health Research Board*, Reviewer, Dublin, Ireland

2011 Examiner, Ph.D. dissertation, Melbourne University, Melbourne, Australia

2011 Mentor, *International Congress of Schizophrenia Research*

2011 Special Emphasis Panel for Conflict Members: Autism, Schizophrenia, and Addiction, NIH Study Section ZRG1 BDCN-C(02)M, Member

2011 Scientific Review NIH T32 Institutional Research Training Grant (NIH ZMH1 ERB-S-01), Member

2011 *Swiss National Science Foundation*, Reviewer for Fellowships

2011- Advisory Board, Center for Research in Psychology, School of Psychology, University of Minho, Minho, Portugal, Member

2011 *French National Research Agency*, Reviewer for grant submissions

2011 *World Congress of Psychiatry*, Section on Neuroimaging, Member

2012- Awards Committee, *American Neuropsychiatric Association*

2012- Internal Advisory Council, *Schizophrenia International Research Society*

2012 Ad-hoc Reviewer: NIMH K99/R00 Special Emphasis Panel

2012 *The Swiss National Science Foundation*, Reviewer
 2012-2014 Program Committee, *Society for International Research in Schizophrenia*, Member
 2013 Organizer with Dr. Brett Clements for setting up a reception for NIMH Sponsored Young Investigators for the *International Congress of Schizophrenia*, for all young investigators dating back to 1987
 2013 Reviewer, grants for the *Israel Science Foundation*.
 2013 Program Committee, *Society for International Research on Schizophrenia*, Member
 2013 Program Committee, Young Investigator and Career Awards for the *American Neuropsychiatric Association*, Member
 2013 VA Rehabilitation Research and Development Service, *VA Small Projects in Rehabilitation Research (SPiRE) Award*, Reviewer
 2013 VA Rehabilitation Research and Development Service, *VA Small Projects in Rehabilitation Research (SPiRE) Award*, Reviewer
 2013 NINDS Special Emphasis Panel to review cooperative agreement applications submitted in response to the RFA “International Traumatic Brain Injury Research Initiative: NIH Cooperative Program for Comparative Effectiveness of Clinical Tools and Therapies”, Member
 2013 National Institute of Neurological Disorders and Stroke (NINDS) Special Emphasis Panel [08 XnSI SRB-E(56)], Member
 2013 Brain Trauma-Related Neurodegeneration Workshop, National Institute of Neurological Disorders and Stroke (NINDS), Invited Member
 2013 Developing Standards for Diffusion Tensor Imaging (DTI) and Diffusion Spectrum Imaging (DSI) through Public-Private Partnerships”, sponsored by the *Institute of Medicine’s Forum on Neuroscience and Nervous System Disorders, Health Arm of the National Academy of Science*, Invited Member
 2013 NIH Study Section BDCN-N(58)R Pilot Projects on Sports-Related Brain and Spinal Cord Injury, Member
 2013-2020 NIH, Clinical Neuroscience and Neurodegeneration Study Section (CNN), Member
 2014 Special Emphasis Panel/Scientific Review Group 05 ZDA1 ML-F, Member
 2014 National Institute of Drug Abuse (NIDA), R03 1/Start 10 ZA/1 ABC, Member

Harvard University

1981-1983 Member of the Board of Tutors and Advisors, Department of Psychology (Faculty of Arts and Sciences), Harvard University, Cambridge, MA
 1981-1983 Resident Tutor, Dudley House, Harvard College, Cambridge, MA
 1981-1983 Premedical Advisor for Psychology Majors, Harvard College, Cambridge, MA
 1984-2000 Undergraduate Thesis Advisor, Harvard University, Cambridge, MA
 2000- Member of the Board of Honors Tutors, Department of Psychology (Faculty of Arts and Sciences), Harvard University, Cambridge, MA
 2012- Harvard Graduate Women in Science and Engineering (HGWISE), Mentoring Program, Sponsored by the Office of Faculty Development and Diversity, the Graduate School of Arts and Science, and Harvard Integrated Life Sciences, Mentor

Harvard Medical School

1991-2003 Mysell Committee, Department of Psychiatry, HMS, Member
 1994-1995 Mysell Committee, Department of Psychiatry, HMS, Chairperson
 1994-1996 Career Development Committee, Department of Psychiatry, HMS, Member
 1995-1996 Career Development Committee, Department of Psychiatry, HMS, Co-Chair
 1995-2005 Promotions and Appointments Committee, Department of Psychiatry at the VA Boston Healthcare System, Brockton Division, HMS, Member
 2000 PET Research Oversight Committee, HMS, Member
 2000-2005 Joint Committee on the Status of Women, HMS and Harvard School of Dental Medicine, Member

2000-2009 Standing Committee on Faculty Fellowships in the Faculty of Medicine, HMS, Member
2001- Psychiatry Research Committee, Department of Psychiatry, HMS, Member
2001-2002 Mysell Committee, Department of Psychiatry, Harvard Medical School, Co-Chair
2002-2005 Selection Committee, 50th Anniversary Program for Scholars in Medicine, HMS, Member
2003-2004 Ad Hoc Evaluation Committee for Professor, HMS, Chair
2003-2006 Subcommittee of Professors, HMS, Member
2004-2005 Psychiatry Research Committee, Department of Psychiatry, HMS, Chair
2005-2009 Selection Committee, Eleanor and Miles Shore 50th Anniversary Fellowship Program for Scholars in Medicine, HMS, Member
2006-2006 Ad Hoc Evaluation Committee for Professor, HMS, Chair
2007-2007 Ad Hoc Evaluation Committee for Professor, HMS, Member
2007-2008 Ad Hoc Search Committee for Chair of Radiology, Beth Israel Deaconess Hospital, Member
2008-2009 Ad Hoc Evaluation Committee for Professor, HMS, Member
2010-2011 Ad Hoc Evaluation Committee for Professor, HMS, Chair
2010-2011 Ad Hoc Search Committee for Chair of Neurosurgery, Children's Hospital, HMS, Member
2010 Harvard Catalyst Pilot Grants, Reviewer
2012 HMS-Portugal Program in Collaborative Clinical and Translational Research Grants, Review Committee, Member

Veterans Affairs Boston Healthcare System (Jamaica Plain, Brockton, and West Roxbury)

1998-2000 VA Boston Healthcare System Human Studies Subcommittee, Member
2000-2001 VA Boston Healthcare System Institutional Review Board (IRB), Member
2001-2002 VA Boston Healthcare System, Selection Committee for ACOS R&D, Member
2001-2004 VA Boston Healthcare System, Research and Development Committee, Member
2002-2003 VA Boston Healthcare System, Research and Development Committee, Co-Chair
2002-2004 VA Boston Healthcare System, Steering Committee, R&D Committee, Member
2003-2004 VA Boston Healthcare System, Research and Development Committee, Chair
2003-2004 VA Boston Healthcare System, Selection Committee for ACOS R&D, Member
2004-2005 VA Boston Healthcare System, Research and Development Executive Committee, Member
2008-2009 Co-Coordinator Research Methods Course-PGYII Harvard South Shore Residency Training Program, VA Boston Healthcare System, Brockton, MA
2008-2010 Steering Committee, Harvard South Shore Research Pathway Training Program for Residents in Psychiatry, VA Boston Healthcare System, Brockton, MA, Co-Chair
2010-2012 Steering Committee, Harvard South Shore Research Pathway Training Program for Residents in Psychiatry, VA Boston Healthcare System, Brockton, MA, Chair

Brigham and Women's Hospital, Boston, MA

1993-1995 Brain Research Committee, Department of Radiology, Brigham & Women's Hospital, Member
2005-2009 Research Committee, Department of Psychiatry, Brigham and Women's Hospital, Member
2005-2009 Steering Committee, Biomedical Research Institute, Neuroscience Comprehensive Research Center (NCRC), Brigham and Women's Hospital, Member
2005-2007 Council of Biomedical Informatics and Functional and Molecular Imaging, Department of Radiology, Brigham and Women's Hospital, HMS, Member
2005-2008 fMRI Steering Committee, Department of Radiology, Brigham and Women's Hospital, Member
2006-2007 Neuroscience Research Center Working Group, Biomedical Research Institute

- 2007- BRI Bridge Funding Review Committee, Member
- 2007- Neuroscience Work Group, Neuroscience Initiative for Biomedical Research Institute, Member
- 2007- Neuroscience Imaging Service Line Council, Department of Radiology, Brigham and Women's Hospital, Member
- 2009 Research Excellence Awards, Brigham and Women's Hospital, Reviewer
- 2011- Radiology Imaging Core Oversight Committee, and Radiology Core User Committee, BWH Imaging Core and Brigham MRI Research Center (BMRC), Member

Longwood Medical Area, Boston, MA

- 2006-2006 Harvard Longwood Psychiatry Residency Training Program Task Force, Member
- 2006-2010 Harvard Longwood Psychiatry Residency Training Program Advisory Committee, Member
- 2006- Commonwealth Research Center, BI-Deaconess-MMHC, Scientific Advisory Board, Member

Professional Societies:

- 1978-1984 Student Member *American Association for the Advancement of Science*
- 1978-1984 Student Member *the American Psychological Association*
- 1985- *American Psychological Association*, Member
- 1985- *Massachusetts Psychological Association*, Member
- 1989- *Society for Research in Psychopathology*, Member
- 1991-1995 *American Psychopathological Association*, Member
- 1993- *Society of Biological Psychiatry*, Member
- 1994- *American Psychological Society*, Member
- 1999- *International Society for Neuroimaging in Psychiatry*, Member
- 2002- *American College of Neuropsychopharmacology*, Member
- 2005- *Schizophrenia International Research Society*, Member
- 2007- *American College of Neuropsychopharmacology*, Fellow
- 2010- *International College of Neuropsychopharmacology (CINP)*, Member
- 2012- *American Neuropsychiatric Association*, Member
- 2013- *International Brain Injury Association (IBIA)*, Member

Editorial Boards and Review Service:

Editorial Board

- 1996- *Psychiatry Research: Neuroimaging* (Member)
- 1997-2004 *Schizophrenia Bulletin* (Member)
- 2001- *Schizophrenia Research* (Member)
- 2006- *Brain Imaging and Behavior* (Associate Editor)
- 2007- *BMC Psychiatry* (Member)
- 2009- *Schizophrenia Bulletin* (Member)
- 2010- *The International Journal of Neuropsychopharmacology* (Field Editor)
- 2011 *Schizophrenia Research and Treatment* (Guest Editor with Drs. Xu, Haroutunian, and Bartzokis for a Special Issue on *Oligodendrocytes in Schizophrenia*)
- 2012 *Brain Imaging and Behavior* (Guest Editor with Drs. Erin Bigler and David Tate for a Special Issue on *Neuroimaging Contributions to Understanding Mild Traumatic Brain Injury*)
- 2012- *World Journal of Psychiatry*, Member
- 2014 *Schizophrenia Research* (Guest Editor with Dr. Marek Kubicki for Special Issue on *White Matter Abnormalities in Schizophrenia*)

Ad Hoc Reviewer

Archives of General Psychiatry (now JAMA-Psychiatry)
Brain Imaging and Behavior
Cerebral Cortex
Journal of the American Medical Association (JAMA)
The New England Journal of Medicine
Biological Psychiatry
Proceedings of the National Academy of Sciences
Journal of Abnormal Psychology
The Cleft Palate-Craniofacial Journal
Journal of Psychophysiology
Neuropsychopharmacology
Neuroreport
Biological Psychology
Journal of Nervous and Mental Diseases
Epilepsia
Psychiatry Research: Neuroimaging
Journal of Child Psychology and Psychiatry
Neuroscience Letters
American Journal of Medical Genetics
Neuropsychology
International Journal of Neuropsychopharmacology
Psychological Reports: Perceptual and Motor Skills
Journal of International Neuropsychological Society
European Archives of Psychiatry and Clinical Neuroscience
Psychiatry Interpersonal and Biological Processes

American Journal of Psychiatry
Schizophrenia Research
Schizophrenia Bulletin
Psychiatric Research
Journal of Psychiatric Research
Brain
Development and Psychopathology
NeuroImage
PlosONE
Psychosomatic Medicine
Neurology India
Cognitive Brain Research
Harvard Review of Psychiatry
Neurobiology of Disease
Psychological Bulletin
Behavioral Neuroscience
Neuropsychobiology
Hippocampus
European Neuropsychopharmacology
Future Neurology
Neuropsychiatric Genetics
PLos Medicine
Genes, Brain, and Behavior
Pediatrics
Developmental Psychopathology

Awards and Honors:

1973 *Phi Beta Kappa, Eta Chapter, Wellesley College*
1973 *Durant Scholar (Summa cum laude), Wellesley College*
1978-1980 *Merit Fellowship, Harvard University*
1980-1982 *The George & Cecile Naumburg Fellowship for Doctoral Work in the Behavioral Sciences*
1982-1983 *The Peter B. Livingston Dissertation Research Fellowship*
1982-1983 *The Harvard-Danforth Award for Excellence in Teaching*
1984-1986 *NIMH National Research Service Award (NRSA) - Clinical Research Training Fellow*
1988 *Invited participant, The James S. McDonnell Foundation Summer Institute in Cognitive Neuroscience, Harvard University*
1988-1993 *NIMH Research Scientist Development Award (K01)*
1989 *NIMH Young Investigator Award, Internal Congress of Schizophrenia Research*
1991 *William F. Milton Fund Award for Scientific Research, Harvard University*
1992 *Thomas Temple Hoopes Prize for Excellence in the Work of Undergraduates & the Art of Teaching (as Faculty Supervisor shared award with I-han Chou for her Summa cum laude Senior Honor's Thesis submitted to Harvard College)*
1992-1995 *Theodore and Vada Stanley Foundation Research Award for Research on Serious Mental Diseases*
1994-1999 *NIMH Independent Scientist Award (K02)*
1994-1999 *NIMH First Award*
1997-2004 *Senior Mentor for the Stanley Scholars Program, Stanley Medical Research Institute*
1998 *Fifth Recipient of the Joseph Zubin Memorial Fund Award for Research in Psychopathology, Department of Psychiatry, NY State Psychiatric Institute, Columbia University, NY, NY (http://www.wpic.pitt.edu/research/biometrics/zubin_awards.htm)*

- 1999 *William F. Milton Fund Award for Scientific Research*, Harvard University
- 1999-2004 NIMH Independent Scientist Award (K02)
- 2004-2009 NIMH Senior Scientist Award (K05)
- 2008 *Ph.D. Honors Lecture in Recognition of Honor and Achievement in the Field of Psychological Science*, Universidade do Minho, Braga, Portugal
- 2008-2009 *William Silen Lifetime Achievement Award for Mentoring*, Harvard Medical School
(<http://www.mfdp.med.harvard.edu/awards/mentoring/past.html>)
- 2009-2011 *National Alliance for Research in Schizophrenia and Depression (NARSAD) Distinguished Investigator Award*
- 2012 *Catedra Professor Carlos Lloyd Braga Honorary Chair*, Universidade do Minho, Braga, Portugal (http://www.uminho.pt/en/uminho_en/carlos-lloyd-braga-foundation)
(<http://www.fclb.uminho.pt/Default.aspx?tabid=4&pageid=56&lang=pt-PT>)
- 2013 *The Stuart T. Hauser, M.D., Ph.D. Mentorship Award*, Departments of Psychiatry, Harvard Medical School
- 2013 *Research Award*, Department of Psychiatry, Brigham and Women's Hospital, Harvard Medical School

PART II: RESEARCH, TEACHING, AND OTHER CONTRIBUTIONS

Report of Research:

Major Research Interests.

1. The Relationship Between Cognitive, Structural, and Neurophysiological Measures in Schizophrenia
2. MRI Studies in Schizophrenia, Including Image Processing Analyses
3. Evoked Potential Studies in Schizophrenia
4. Biological Markers and Psychiatric Disorders
5. Thought Disorder in Schizophrenia
6. Validity and Reliability of Psychiatric Diagnoses
7. Premorbid Development and Its Association with Onset and Course of Schizophrenia
8. Schizotypal Personality Disorder
9. The Relationship Between Cognitive, Structural, and Neurophysiological Measures in First Episode Psychoses
10. MR Brain Diffusion Tensor Imaging Studies in Schizophrenia and Related Disorders
11. MRI Studies in Post-Traumatic Stress Disorder
12. Transcranial Magnetic Stimulation Studies of Motor and Cognitive Functioning in Normal Healthy Controls, Neurosurgery Patients, and Patients Diagnosed with Schizophrenia
13. Cognitive and Behavioral Correlates of MRI Brain Abnormalities in William's Syndrome
14. Cognitive, Behavioral, and Genetic Correlates of MRI Brain Abnormalities in Velocardiofacial Syndrome
15. Directing the development of image processing tools for MRI and DTI
16. Application of Diffusion Imaging to Mild Traumatic Brain Injury, including repetitive brain injury, the latter sometimes associated with chronic traumatic encephalopathy

Narrative Description of Research. Schizophrenia is a major public health problem that affects close to 1% of the general population and has devastating effects on the psychological and financial resources of the patient, family, and larger community. Unfortunately there is still no clear understanding of the pathology although recent research has made it increasingly clear that biological factors may play an important role. One promising area of research has focused on the detection of abnormalities in the brains of patients afflicted with schizophrenia. Here, both post-mortem and magnetic resonance (MR) structural imaging studies suggest that temporal lobe and temporal lobe limbic system abnormalities, especially pronounced on the left, may be implicated in the pathophysiology of schizophrenia.

The broad goal of Dr. Shenton's research program has been to apply new imaging techniques to the study of schizophrenia in order to determine and to localize brain abnormalities which likely underlie the symptoms and disordered behavior observed in patients diagnosed with schizophrenia. Accordingly, this investigator and her research team have focused their research efforts in trying to define and to localize further brain abnormalities in the temporal lobe in patients with schizophrenia. Newly developed image processing techniques, originally developed for the analysis of multichannel remote sensing data (i.e., satellites), have been employed to analyze high spatial resolution magnetic resonance (MR) scans (1.5-mm and 2-mm slices). The application of these image processing techniques to the investigation of schizophrenia has been particularly helpful because these techniques not only exploit more fully information contained in MR scans, but they also offer more precise and accurate measurements, factors important to schizophrenia where brain abnormalities are often more subtle, and harder to detect, than for other pathophysiological disorders, and where, consequently, precise and accurate measurements become that much more essential.

These techniques have now been used by Dr. Shenton and her coworkers to make volumetric measurements of: (1) whole brain for gray matter, white matter and CSF; (2) temporal lobe (gray and white matter); (3) amygdala-hippocampal complex, (4) parahippocampal gyrus, (5) superior temporal gyrus; (6) cingulate gyrus; (7) parietal lobe; and (8) basal ganglia structures. In addition, an analysis of the gyral pattern in the cortical gray matter surface of the temporal lobes has been completed. Results demonstrate that schizophrenic patients, compared to normal controls, show reductions in volume in temporal lobe limbic system structures (amygdala-hippocampal formation and parahippocampal gyrus), and in superior

temporal gyrus. These abnormalities were found to be more pronounced on the left, were correlated with each other, and there was an observed correlation between measures of formal thought disorder and left superior temporal gyrus volume. The latter finding suggested to the investigator and her coworkers that there was damage to an interconnected neural network that may be important to verbal associations and verbal memory, which may account for the loose associations so often observed in schizophrenia. This line of research is continuing and newer methods are being developed for analyzing the brain, including warping techniques, which may replace the laborious tracing of smaller regions of the brain. Additionally, measures of shape are being applied to brain regions of interest as such measures may be more sensitive than measures of volume alone and they may reflect neurodevelopmental anomalies in the brains of patients diagnosed with schizophrenia. This research has been extended to first onset cases of schizophrenia as well as to individuals diagnosed with schizotypal personality disorder. The former focus is important, as it will allow investigators to discern whether or not brain abnormalities are evident early in the course of the illness, prior to confounding variables such as a chronic illness and long-term effects of neuroleptics. The latter focus is important, as it will allow investigators to discern similarities and differences in a disorder that is genetically linked to schizophrenia but where psychosis is not observed. Finally, Dr. Shenton is also working closely with collaborators investigating hippocampal abnormalities in individuals diagnosed with post-traumatic stress disorder. A morphometric brain study of the amygdala-hippocampus in monozygotic twins was conducted where one twin has PTSD as a result of combat exposure in the Vietnam War, and the other did not. Findings suggested that given that the unaffected co-twin showed reduced volume in the amygdala-hippocampal complex, there may be some individuals who have a predisposition to developing PTSD. Other morphometric studies of brain abnormalities in clinical populations include new studies investigating the cognitive and behavioral correlates of brain abnormalities in Williams's Syndrome patients and in velocardiofacial syndrome, the latter a genetic disorder that, outside of monozygotic twins, has the highest rates for developing schizophrenia.

Work using transcranial magnetic stimulation (TMS) has also been conducted by Dr. Shenton and colleagues in an attempt to understand further cognitive processes are interrupted by TMS, thus affording the opportunity to link processes that occur in the millisecond range with specific loci in the brain. This program of research is being developed to examine motor maps but will be extended to map cortical speech areas in order to determine whether there are differences in language processing between patients with schizophrenia and a normal comparison group. New studies using MR diffusion tensor imaging (MR-DTI) are also being applied to neuropsychiatric disorders. This is a relatively new imaging technique that is important for examining white matter fiber tracts in the brain in schizophrenia. More specifically, unlike conventional MRI, where white matter appears uniform and homogeneous, the novel technology of MR-DTI affords an opportunity to investigate and to quantify normal and abnormal white matter fiber tracts *in vivo* in the human brain. Here Dr. Shenton and her collaborators are focusing on assessing anisotropic diffusion in the uncinate fasciculus, the most prominent white matter fiber tract connecting the frontal and temporal lobe, as well as other fiber tracts likely implicated in schizophrenia. Findings reveal a group by side interaction as well as a lack of normal left greater than right asymmetry in patients with schizophrenia. These findings demonstrate the importance of investigating white matter fiber tracts *in vivo* in schizophrenia, and support the hypothesis of a disruption in normal connectivity between temporo-frontal brain regions in schizophrenia. This work is being extended to first episode psychotic patients and to schizotypal personality disorder.

Another area of research that Dr. Shenton and her colleagues, including Drs. Ross Zafonte, Inga Koerte, Robert Stern, Alex Lin, Paul Echlin, and Howard Eisenberg, are conducting is in the area of traumatic brain injury (TBI). The main damage to the brain is diffuse axonal injury, which is best characterized by diffusion imaging techniques. Mild TBI, in fact, is difficult to characterize using conventional CT and MRI because these imaging techniques are not optimal for detecting diffuse axonal injury, particularly as evinced by mild TBI. Diffusion tractography techniques that can quantify damage along fiber tracts is thus an important new area of research that may add to our understanding of TBI. Dr. Shenton and her colleagues are part of a large PTSD/TBI Clinical Consortium supported by the Department of Defense, which includes 10 sites across the country where neuroimaging will be conducted to understand better the neurobiology of TBI. Work is also being done with Dr. Stern at Boston University in evaluating chronic traumatic encephalopathy using neuroimaging techniques in a sample of retired National Football Players (NFL). A study of professional soccer players without concussion (with Dr. Inga Koerte and colleagues in Germany) as well as a study of ice hockey varsity university players in Canada (with Drs. Paul Echlin, Ofer Pasternak, Karl Helmer, and others), pre- and post-season have also been conducted which demonstrate that repetitive head trauma even at subconcussive levels leads to changes in the white matter integrity of the brain. A new PET study of tau ligands in the brain is just underway to determine whether or not the tau deposits observed in the post-mortem brains of deceased NFL players who had many clinical and cognitive symptoms will be observed in living NFL players using a new PET tau ligand so as to be able to identify early changes in tauopathy

in the brains of living NFL players to then stage possible treatment and efficacy studies to prevent the cascade of progressive changes observed in chronic traumatic encephalopathy.

By applying these new techniques to assess heretofore unmeasurable differences between the brains of normal control subjects and patients afflicted with neuropsychiatric disorders including schizophrenia, mild TBI, and repetitive trauma from TBI, Dr. Shenton and her colleagues hope to understand better the pathophysiology of schizophrenia and other neuropsychiatric disorders.

Research Funding Information:

Past Grant Support.

1986-1990	NIMH R01 MH 40799 Neurophysiological Studies of Schizophrenia (PI: Dr. Robert McCarley)	Co-Investigator
1988-1993	NIMH K01 MH 00746 Schizophrenia: Clinical Symptoms & Brain Mechanisms	Principal Investigator
1988-1993	Veterans Administration Merit Review Neurophysiology of Behavior (PI: Dr. Robert McCarley)	Co-Investigator
1990-1993	NIMH R01 MH 40799 Neurophysiological Studies of Schizophrenia (PI: Dr. Robert McCarley)	Co-Investigator
1990-1993	Scottish Rite Foundation Computer Aided Image Analysis of Magnetic Resonance Brain Scans in Schizophrenia	Principal Investigator
1991-1992	William F. Milton Fund Award Analysis of Morphometric Information from MR Brain Images in Schizophrenia Using Newly Developed Techniques	Principal Investigator
1992-1994	Stanley Foundation MR Image Processing Techniques Applied to the Volumetric Analysis of the Superior Temporal Gyrus in Normal Controls and Patients Afflicted with Schizophrenia	Principal Investigator
1992-1995	The Whitaker Foundation Development of Computerized Image Processing Methods for the Quantitative Analysis of Brain Magnetic Resonance Images for the Diagnosis of Schizophrenia (PI: Dr. Ron Kikinis)	Co-Principal Investigator
1992-1997	NIMH P01 MH 31154 Collaborative Biological Research in Schizophrenia (PI: Dr. Philip Holzman) Project: Electrophysiology Studies in Schizophrenia (PI: Dr. Robert McCarley, Co-PI: Shenton)	Co-Principal Investigator, Project
1993-1997	NIMH R01 MH 40799 Neurophysiological Studies of Schizophrenia (PI: Dr. Robert McCarley)	Co-Investigator
1993-1998	Veterans Administration Merit Review Neurophysiology of Behavior (PI: Dr. Robert McCarley)	Co-Investigator

1994-1999	NIMH R29 MH 50740 Computerized Image Analyses of MR Scans in Schizophrenia	Principal Investigator
1994-1999	NIMH K02 MH 01110 Clinical Symptoms & Brain Abnormalities in Schizophrenia	Principal Investigator
1994-1999	NIMH R01 MH 52807 Biological Basis of Schizotypal Personality Disorder (PI: Dr. Robert McCarley)	Co-Principal Investigator
1995-1997	Scottish Rite Foundation Study of Cortical Speech Localization and Verbal Processing Using Rapid-Rate Transcranial Magnetic Stimulation in Normal Controls and Schizophrenic Patients	Principal Investigator
1995-1997	Supplement to NIMH R29 MH 50740 Research Supplement to Promote the Recruitment of Individuals with Disabilities into Biomedical Research Careers	Principal Investigator
1995-1997	NARSAD National Alliance for Schizophrenia and Depression, Young Investigator Award A 3D MRI Study of Temporal Lobe Structures in Schizophrenia and Schizotypal Personality Disorder (PI: Dr. Chandlee Dickey; Co-Mentors: Drs. Robert McCarley and Martha Shenton)	Co-Mentor
1995-2000	VA Center for Basic and Clinical Neuroscience Studies of Schizophrenia The Neuroscience of Schizophrenia (PI: Dr. Robert McCarley)	Scientific Co-Director
1996-1998	NIMH R01 MH 50379 Prospective MRI Study of Hippocampus After Mental Trauma (PI: Dr. Arieh Shalev)	Principal Investigator (sub-contract)
1996-2007	NIMH T32 MH 016259 Clinical Research in Biological and Social Psychiatry (PI: Dr. Stuart T. Hauser)(Grant funded from 07/01/1980-06/30/2006) (2007-2008, not funded: Funded again 07/1/08-06/30/2013, see below)	Co-Investigator
1997-2004	Senior Mentor, Stanley Scholars Program	Principal Investigator
1998-2001	VA Merit Award MRI Hippocampal Volume in Twins Discordant for Combat Exposure and PTSD (PI: Dr. Mark Gilbertson)	Co-Investigator
1998-2003	NIMH R01 MH 40799 Neurophysiological Studies of Schizophrenia (PI: Dr. Robert W. McCarley)	Co-Investigator
1998-2003	VA Merit Award MRI Anatomy of Schizophrenia (PI: Dr. Robert McCarley)	Co-Investigator
1998-2003	NIMH P01 MH 31154 Collaborative Biological Research in Schizophrenia (PI: Dr. Philip Holzman) Project: Dysmorphology Studies in Schizophrenia (PI: Dr. Curtis Deutsch)	Co-Investigator

1999-2000	William F. Milton Fund Award MR Diffusion Tensor Imaging in Schizophrenia	Principal Investigator
1999-2001	NARSAD National Alliance for Schizophrenia and Depression, Young Investigator Award (PI: Dr. Melissa Frumin; Co-Mentors: Drs. Martha Shenton and Robert McCarley)	Co-Mentor
1999-2004	NIMH R01 MH 50740 Computerized Image Analyses of MR Scans in Schizophrenia	Principal Investigator
1999-2004	NIMH K02 MH 01110 Clinical Symptoms & Brain Abnormalities in Schizophrenia	Principal Investigator
2000-2003	VA Merit Award MR Brain Diffusion Tensor Imaging in Schizophrenia	Principal Investigator
2000-2003	Binational Science Foundation Volumetric Analysis of Hippocampal Volume in Posttraumatic Stress Disorder (PI: Dr. Omer Bonne)	American-PI
2000-2004	NIMH R01 MH 60775 Brain Midline Malformations in Schizophrenia (PI: Dr. Curtis Deutsch)	Co-Investigator
2001-2002	Infrastructure Suppl.: NIMH R01 5074 Computerized Image Analyses of MR Scans in Schizophrenia	Principal Investigator
2001-2003	CA R21 89449 Mutual Information Based Image Processing for fMRI (PI: Dr. William Wells III)	Co-Investigator
2001-2003	NIMH R01 MH 50379 Prospective MRI Study of Hippocampus After Mental Trauma (PI: Dr. Arieh Shalev)	Co-Investigator
2001-2003	NARSAD National Alliance for Research in Schizophrenia and Depression, Young Investigator Award A magnetic Resonance Diffusion Tensor Study of the Cingulate Fasciculus in Schizophrenia (PI: Dr. Marek Kubicki; Co-Mentors: Drs. Martha Shenton and Robert McCarley)	Co-Mentor
2000-2005	NIMH R01 MH 52807 Biological Basis of Schizotypal Personality Disorder (PI: Dr. Robert McCarley)	Co-Principal Investigator
2002-2005	VA Merit Award Structural Brain MRI and Neurocognitive Function in Female Nurse Vietnam Veterans (PI: Dr. Mark Gilbertson)	Consultant
2002-2005	NIH/NIA Harvard Older Americans Independence Center (PI: Dr. Lipnitz) (PI on Project #1: Dr. Milberg)	Collaborator
2003-2006	R03 MH068464 White Matter Myelin Abnormalities in Schizophrenia (PI: Dr. Marek Kubicki) (One Year No Cost Extension to 2006)	Co-Investigator

2003-2006	VA Research Enhancement Award Program Neuroimaging Studies in Schizophrenia” (PI: Dr. Robert McCarley)	Co-Principal Investigator
2003-2006	NARSAD National Alliance for Schizophrenia and Depression, Young Investigator Award Understanding the Nature of White Matter Abnormalities in Cingulate Fasciculus in Schizophrenia (PI: Dr. Marek Kubicki; Co-Mentors: Drs. Martha Shenton and Robert McCarley)	Co-Mentor
2003-2007	NIMH R01 MH 40799 Neurophysiological Studies of Schizophrenia (PI: Dr. Robert W. McCarley)	Co-Investigator
2003-2008	VA Merit Award MR Brain Diffusion Tensor Imaging in Schizophrenia	Principal Investigator
2003-2008	VA Merit Award MRI Anatomy of Schizophrenia (PI: Dr. Robert McCarley)	Co-Investigator
2004-2005	NIMH R01 MH 50740 Computerized Image Analyses of MR Scans in Schizophrenia” [No Cost Extension]	Principal Investigator
2004-2010	National Alliance for Medical Imaging Computing (NA-MIC), U54 GM072977-01,NIGHS/NIH (PI: Ron Kikinis). PI of Project 3-A: Brain Connectivity in Schizophrenia (2004-2007) Project: Velocardiofacial Syndrome (PI: Dr. Marek Kubicki) (2007-2010)	Core-Principal Investigator (Co-Investigator: Dr. Martha E. Shenton)
2005-2005	Supplement to NIMH R01 50740 Computerized Image Analyses of MR Scans in Schizophrenia Minority Supplement	Principal Investigator
2004-2009	NIH K05 MH 070047 Clinical Symptoms & Brain Abnormalities in Schizophrenia	Principal Investigator
2005-2009	VA Merit Award Context and the Hippocampus in Unremitting Posttraumatic Stress Disorder (PI: Dr. Mark Gilbertson)	Consultant
2005-2010	NIMH R01 MH 52807 Biological Basis of Schizotypal Personality Disorder (PI: Dr. Robert McCarley)	Co-Principal Investigator
2005-2010	NIMH R01 MH 50740 Computerized Image Analyses of MR Scans in Schizophrenia (1 year No-Cost Extension to 2011)	Principal Investigator
2006-2009	Supplement to NIMH R01 50740 Computerized Image Analyses of MR Scans in Schizophrenia Reentry to Biomedical Research (Dr. Zora Kikinis funded)	Principal Investigator

2009-2009	Supplement to NIMH R01 50740 Computerized Image Analyses of MR Scans in Schizophrenia NIH American Recovery and Reinvestment Act of 2009 (ARRA) Administrative Supplement to R01MH 50740 for Students and Science Educators (NOT-OD-09-060) 2008-2010 (supported six students for hands on research experience in the Psychiatry Neuroimaging Laboratory)	Principal Investigator
2008-2010	NARSAD National Alliance for Schizophrenia and Depression Young Investigator Award White Matter Changes in Subjects with Neuregulin 1 Haplotype HAP-ICE and ErbB4 Schizophrenia Risk Haplotypes (PI: Dr. Zora Kikinis; Co-Mentors: Drs. Martha Shenton, Gabriel Corfas and Raj Kucherlapati)	Co-Mentor
2008-2010	NIMH R21 MH 077979 Behavioral and fMRI study: Social Reciprocity in Schizotypal Personality Disorder” (PI: Dr. Chandlee Dickey)	Co-Investigator/Contributor
2006-2011	Fogarty International Center FIC NIH 2 D43 TW05807 ICOHRTA Research Training Program at Children’s Hospital Boston with Major Foreign Collaborators (MFC) in Turkey in Partnership with NIMH International Mental Health and Developmental Disabilities Research Training Program (PI: Dr. Kerim Munir)	US Program Faculty/Mentor
2006-2011	VA Schizophrenia Center Grant Neuroimaging Insights into Schizophrenia & Treatment Implications (PI: Dr. Robert W. McCarley)	Co-Principal Investigator
2007-2012	NIH R01 MH 074794 Novel DT-MRI Analyses of White Matter in Schizophrenia (PI: Dr. Carl-Fredrik Westin)	Co-Investigator/Contributor
2007-2012	NIMH R01 MH 40799 Neurophysiological Studies of Schizophrenia (PI: Dr. Robert McCarley)	Co-Investigator
2007-2012	NIH 1P50 MH 080272 NIH Mental Health Centers for Interventional Development and Applied Research (CIDAR) Vulnerability to Progression in Schizophrenia” (PI: Dr. Robert W. McCarley) (Project PI: Vulnerability to White Matter Progression in Schizophrenia, and Core PI: Imaging Core) (Continued through No Cost Extension to 6/30/2013)	Project PI and Core PI
2008-2011	FIRCA R03 TW008134 MRI and Neurological Findings in Schizophrenia, ADHD, and Healthy Controls Study conducted in Istanbul, Turkey (Site PI: Dr. Ozgur Oner) (Continued through No Cost Extension to 2012)	Principal Investigator/Mentor
2008-2012	National Health & Medical Research Council Australian Government MHMRC Training Fellowship (PI: Dr. Thomas Whitford)	Supervisor/Mentor
2008-2013	NIMH T32 MH 016259-29 Clinical Research in Biological and Social Psychiatry Name change to: The Stuart T. Hauser Clinical Research Training Program in Biological & Social Psychiatry. Grant entering 29 th year: (07/01/1980-6/30/2013) (2007-2008, not funded)	Principal Investigator

Dr. Shenton was a fellow from 1984-1986 on this grant and then an investigator and Associate Director on this grant from 1996 to 2007. The grant was renewed in 2008. At this time, Dr. Shenton became PI and Co-Director following the untimely death of Dr. Stuart Hauser.

2009-2011	NIH/NIMH R21 MH083205 Language and Risk in Schizophrenia (PI: Dr. Lynn DeLisi)	Investigator
2009-2012	VA Merit Award MR Brain Imaging of Frontal-Striatal-Thalamic Circuits in Schizophrenia (PI: Dr. James Levitt)	Co-Investigator
2009-2011	NIH R21 MH083205 Language and Risk for Schizophrenia (PI: Dr. Lynn DeLisi)	Investigator
2009-2011	CIMIT Center for Integration of Medicine and Innovative Technology Solider in Medicine Award Traumatic Brain Injury Diagnosis with Diffusion MRI (PI: Dr. Sylvain Bouix)(Continued through No Cost Extension – 2012)	Mentor
2009-2011	NARSAD National Alliance for Research in Schizophrenia and Depression Distinguished Investigator Award (Continued through no cost extension to 2013) A Novel Application for Diffusion-Weighted Functional Magnetic Resonance Imaging to Schizophrenia: A More Robust Measure of Brain Activation	Principal Investigator

Current Grant Support.

1998-2013	NIH P41 RR13218 Neuroimaging Analysis Center (PI: Dr. Ferenc Jolesz, Co-PI Dr. Ron Kikinis) Project: Interactive Digital Anatomy Atlas of the Brain Project: Schizophrenia (1998-2003 Dr. Shenton was PI on the Schizophrenia Project) (2003-2013 Dr. Shenton was a Collaborative Partner and Investigator)	Principal Investigator (2projects)/Investigator (PI: Dr. Martha E. Shenton) (PI: Dr. Martha E. Shenton)
2003-2013	NIH P41 RR13218 Neuroimaging Analysis Center (PI: Dr. Ron Kikinis) Project: The Development of White Matter Tools Based on Diffusion MRI (PI: Dr. Carl-Fredrik Westin)	Co-Investigator/Collaborative Partner
2008-2013	W81XWH-08-2-0159 Department of Defense Harvard Clinical Defense Consortium (HCDC): PTSD/TBI Clinical Consortium (PI: Dr. Ross Zafonte, Co-PIs: Drs. Martha Shenton and Roger Pitman) (Overall PI: Dr. Murray Stein, UCSD)	Co-Principal Investigator (NCE 09/30/2014)
2009-2014	NIMH R01 MH 082918 Computational Morphometry in Schizophrenia and Related Disorders (PI: Dr. Sylvain Bouix)	Co-Principal Investigator
2009-2013	NIA R01 AG034554 Social and Neural Underpinnings of Octogenarian Wellbeing (PI: Dr. Robert Waldinger) (No Cost Extension through 2014)	Co-Investigator

2009-2013	W81XWH-08-2-0159 Department of Defense Neuroimaging Leadership for the 10 PTSD/TBI Clinical Consortium Sites (Other PIs: Drs. Ron Kikinis and Bruce Rosen)	PI Neuroimaging Leadership Core (No Cost Extension to 09/30/14)
2009-2014	VA Merit Award MR Brain Diffusion Tensor Imaging in Schizophrenia	Principal Investigator
2010-2011	CIMIT Center for Integration of Medicine and Innovative Technology Improving Imaging of Diffuse Axonal Injury in Traumatic Brain Injury (Co-PI: Drs. Bruce Kristal and Ross Zafonte)(Continued through No Cost Extension to 2013)	Principal Investigator
2010-2012	NARSAD National Alliance for Schizophrenia and Depression Young Investigator Award Investigating the Utility of Two Neurophysiological Biomarkers in Predicting Transition to Schizophrenia in Ultra-High Risk Individuals (PI: Dr. Thomas Whitford; Co-Mentors: Drs. Martha Shenton, Christos Pantelis and Judith Ford) (Continued through No Cost Extension to 2014)	Co-Mentor
2010-2014	NIA R01 AG034155 Identifying Biomarkers of Alzheimer's in Insulin Resistant Patients Using MRI (PI: Dr. Gail Musen)	Co-Investigator
2011-2012	CIMIT Center for Integration of Medicine and Innovative Technology Diagnosis of Diffuse Axonal Injury Using Robust Tract-Based Quantification of Diffusion Tensor Imaging (PI: Dr. Lauren O'Donnell)(Continued through No Cost Extension to 2014)	Collaborator
2011-2012	CIMIT Center for Integration of Medicine and Innovative Technology Neurochemical and Multimodal Markers for Chronic Traumatic Encephalopathy (PI: Dr. Alexander Lin)(Continued through No Cost Extension to 2014)	Co-Investigator
2011-2013	W81XWH-08-2-0159 Project: Brain Indices of Risk for PTSD Following Mild TBI (No Cost Extension to 09/30/14) (PI: Dr. Connie Duncan)	Co-PI and PI Subaward
2011-2013	W81XWH-08-2-0159 Project: Post-Processing of Images for Clinical Consortium (No Cost Extension to 09/30/14) (Other PIs: Drs. Ron Kikinis and Bruce Rosen)	Principal Investigator
2011-2013	W81XWH-08-2-0159 Pilot Project: Novel Functional and Structural Biomarkers of Neuroinflammation and White Matter Change in TBI: A Potential New Diagnostic and Therapeutic Approach (Co-PIs: Drs. Emily Stern and Ross Zafonte) (No Cost Extension to 09/30/14)	Principal Investigator
2011-2013	W81XWH-08-2-0159 Project: A Randomized-Clinical Trial of Glyburide (RP-1127) for TBI (PI: Dr. Howard Eisenberg)	Principal Investigator of Subaward (No Cost Extension to 09/30/14)
2011-2014	NINDS R01 NS078337-01 Project: Chronic Traumatic Encephalopathy: Clinical Presentation and Biomarkers (PI: Dr. Robert Stern)	Co-Investigator

2011-2015	NIMH R01 MH090291-01 Project: Fetal Hormonal Programming of Sex Differences in Aging of the Memory Circuitry (PI: Dr. Jill Goldstein)	Co-Investigator
2012-2015	NIH/NIMH 5R01MH64824-11 Project: Biomarkers for Psychosis in Velocardiofacial Syndrome (PI: Dr. Wendy Kates)	Consultant
2012-2017	NIH R01 MH 074794 Novel DT-MRI Analyses of White Matter in Schizophrenia (PI: Dr. Carl-Fredrik Westin)	Co-Investigator/Contributor
2012-2017	R01 MH 097979 Taking Advanced Diffusion Imaging to the Clinic for Pediatric Patients with ADHS (PI: Dr. Yogesh Rathi)	Significant Contributor
2013-2016	F31 NS 081957 Ruth L. Kirchstein National Research Service Award for Individual Pre-Doctoral Fellows Frontal Lobe Neuroimaging as a Biomarker of Chronic Traumatic Encephalopathy (PI: Dr. Julie Stamm, Sponsor Dr. Robert Stern)	Co-Sponsor
2013-2015	NARSAD National Alliance for Schizophrenia and Depression Young Investigator Award Free-Water as a Novel Imaging Biomarker for the Investigation of Inflammation and Degeneration Dynamics in Schizophrenia (PI: Dr. Ofer Pasternak; Co-Mentors: Drs. Martha Shenton and Marek Kubicki)	Co-Mentor
2013-2018	VA Career Development Award Providence VAMC PTSD and the Default Network: Developing Imaging Phenotypes (PI: Dr. Noah Philip)	Co-Mentor
2013-2018	K23 MH 097844 Cognitive Processing Therapy for PTSD with Co-Morbid Mild Traumatic Brain Injury (PI: Dr. Kaloyan Tanev)(Co-Mentors: Drs. Martha Shenton and Roger Pitman)	Co-Mentor
2013-2018	NIMH T32 MH 016259-29 Clinical Research in Biological and Social Psychiatry Name change to: The Stuart T. Hauser Clinical Research Training Program in Biological & Social Psychiatry. Grant entering 34 th year: (07/01/1980-6/30/2018) (2007-2008, not funded) Dr. Shenton was a fellow from 1984-1986 on this grant and then an investigator and Associate Director on this grant from 1996 to 2007. The grant was renewed in 2008. At this time, Dr. Shenton became PI and Co-Director following the untimely death of Dr. Stuart Hauser.	Principal Investigator
2014-2018	W81XWH-13-2-0063 Congressionally Directed Medical Research Programs (CDMRP) Traumatic Brain Injury Award "Tau Imaging of Chronic Traumatic Encephalopathy" Co-Partnering PI: Dr. Robert Stern	Principal Investigator
2014-2018	VA Merit Award Development of MR Biomarkers of Brain Injury in Acute and Chronic mTBI	Principal Investigator

Report of Teaching:

Local Contributions

Tufts University

1975-1976

Motivation, Psychology Department, Tufts University, Medford, MA
Teaching Fellow
50 undergraduates
5 hours/week for two semesters

Brandeis University

1985-1986

Abnormal Psychology, Psychology Department, Brandeis University, Waltham, MA
Visiting Lecturer
45 undergraduates
20 hours/week for two semesters

Harvard University

1979-1980

Stress and Illness, Psychology & Social Relations, Harvard University, Cambridge, MA
Teaching Fellow
75 undergraduates
5 hours/week for one semester

Human Nature, Psychology and Social Relations, Harvard University, Cambridge, MA
Teaching Fellow

75 undergraduates
5 hours/week for one semester

1980-1981

Methods in the Social Sciences, Psychology and Social Relations, Harvard University, Cambridge, MA
Teaching Fellow
35 undergraduates
10 hours/week for one semester

Developmental Psychopathology, Psychology and Social Relations, Harvard University, Cambridge, MA
Teaching Fellow
40 undergraduates
5 hours/week for one semester

1981-1982

Sophomore Tutorial, Psychology & Social Relations, Harvard University, Cambridge, MA
Sophomore Tutor
12 undergraduates per semester
20 hours/week for two semesters

Stress and Illness, Psychology & Social Relations, Harvard University, Cambridge, MA
Teaching Fellow
80 undergraduates
5 hours/week for one semester

1982-1983

Sophomore Tutorial, Psychology & Social Relations, Harvard University, Cambridge, MA
Sophomore Tutor
12 undergraduates per semester
20 hours/week for two semesters

Methods in the Social Sciences, Psychology and Social Relations, Harvard University, Cambridge, MA
Teaching Fellow
35 undergraduates
10 hours/week for one semester

1983-1984 Schizophrenia, Psychology and Social Relations, Harvard University, Cambridge, MA
Teaching Fellow
45 undergraduates
10 hours/week for one semester

Other Teaching/Advisory Responsibilities at Harvard University

1981-1983 Resident Tutor and Adviser, Dudley House, Harvard College, Cambridge, MA
Resident Tutor and Adviser to 80 undergraduate Psychology & Social Relations Majors
1984- Thesis Advisor, Harvard College, Cambridge, MA
2000- Member, Board of Honors Tutors, Department of Psychology (Arts and Sciences), Harvard University, Cambridge, MA

Harvard Medical School

1986-2005 Clinical Research Advisor for Post-Doctoral Research Fellows in the Dept. of Psychiatry, VA Boston Healthcare System, Harvard Medical School, Brockton, MA (see section on Supervisory Role for specific students). Mentor on research projects (2 hours per week). Mentor and post-doctoral fellows on their research projects (5-10 hours per week).

1990-2005 Clinical Research Advisor for Visiting Scholars in the Department of Psychiatry, VA Boston Healthcare System, Harvard Medical School, Brockton, MA (see also Supervisory Role for specific students). Mentor visiting scholars on research projects (2 hours/week)

1993-1994 Acting Co-Director, Biological Psychiatry, Clinical Research Training Program, Department of Psychiatry, Harvard Medical School. Responsible for coordinating the Clinical Research Training Program, including the weekly seminar where fellows met weekly for a didactic seminar (2-3 hours per week).

1993-1994 Coordinator, Lecturer, Neuroscience Seminar Series, Residency Training Program, Department of Psychiatry, Harvard Medical School, VAMC-Brockton, MA. Responsible for coordinating a yearlong seminar series on neuroscience (5 hours per week).

1993-1996 Coordinator, Lecturer, Biological Psychiatry, Clinical Research Training Program, Department of Psychiatry, Harvard Medical School. Assisted in coordinating the Clinical Research Training Program seminars and in the administrative aspects of the program (3 hours per week).

1993- Preceptor, Biological Psychiatry, Clinical Research Training Program, Department of Psychiatry, Harvard Medical School (see section Supervisory Role for specific students). Preceptor on individual research projects for post-doctoral fellows (10-20 hrs. per week).

1996-2007 Associate Director, Clinical Research Training Program, Department of Psychiatry, HMS. Responsible for assisting in coordinating and administrating aspects of the Clinical Research Training Program, including co-directing the weekly seminar (2-3 hours per week).

2008- Co-Director, and PI, Clinical Research Training Program, Department of Psychiatry, HMS. Responsible for assisting in coordinating and administering aspects of the Clinical Research Training Program, including co-directing the weekly seminar (2-3 hours per week).

VA Boston Healthcare System

2008-2010 Co-Organized the Research Methods PGY-II course as part of the Harvard South Shore Residency Training Program in Psychiatry, VA Boston Healthcare System, Brockton, MA

2008-2012 Direct monthly seminar for Residency Pathway to Research Training Program, Harvard South Shore Residency Training Program in Psychiatry, VA Boston Healthcare System, Brockton, MA

Advisory and Supervisory Responsibilities:

Dr. Shenton has mentored many talented researchers over the course of her career, including 6 Professors, 7 Associate Professors, 18 Assistant Professors, 10 Instructors, and 1 Senior Scientist.

Preceptorships

1991-1994 Hiroto Hokama, M.D., Ph.D., Research Fellow, Visiting Scholars Program, Clinical Neuroscience Division, Laboratory of Neuroscience, Department of Psychiatry, Harvard Medical School (received the *Neal Mysell Award*, 1994, for most outstanding poster presentation at the *Second Annual Research Day*, Department of Psychiatry, Harvard Medical School). (See Bibliography portion of CV for first author and co-authorship on abstracts, papers, and presentations at professional meetings). (Currently Assistant Professor, Department of Psychiatry, University of Ryukyu, Okinawa).

1994-1995 Hirokazu Ohta, M.D., Ph.D., Research Fellow, Visiting Scholars Program, Clinical Neuroscience Division, Laboratory of Neuroscience, Department of Psychiatry, Harvard Medical School. (See CV for first author and co-authorship on abstracts, papers, and presentations at professional meetings). (Currently Director, Hirayasu Hospital, Okinawa).

1994-1995 Chiara Portas, M.D., Research Fellow, Visiting Scholars Program, Basic and Clinical Neuroscience Divisions Laboratory of Neuroscience, Department of Psychiatry, Harvard Medical School. (See Bibliography portion of CV for first authorship and co-authorship on abstracts, papers). (Currently Professor at the London Sleep Clinic and Honorary Fellow at the Institute of Neurology, University of London, London, England.)

1994-2007 Chandlee Dickey, M.D., Research Fellow, and now Assistant Professor, Clinical Neuroscience Division, Laboratory of Neuroscience, Department of Psychiatry, Harvard Medical School, and Psychiatry Neuroimaging Laboratory, Department of Psychiatry, Brigham and Women's Hospital, Harvard Medical School (*Ethel Dupont Warren Fellowship* 1995-1996; *NARSAD Young Investigator Award* 1995-1997; NIMH Sponsored, *Schizophrenia Young Investigator Award* 1997; *VA Postdoctoral Fellowship in Neuropsychiatry Research/Neurosciences* 1997-2000; *VA Career Development Award* 2000-2003; *VA Advanced Career Development Award* 2003-2006). (Other funding: R21 2008-2010.) (See CV for first author/co-authorship on papers). Currently Residency Training Director, South Shore Residency Training Program in Psychiatry, Harvard Medical School.

1994-1996 Dan Iosifescu, M.D., Research Fellow, Clinical Neuroscience Division, Laboratory of Neuroscience, Department of Psychiatry, Harvard Medical School. (See Bibliography

portion of CV for first author and co-authorship on abstracts, papers, and presentations at professional meetings; *Hackett Award*, 2000, for paper written as first author on elastic matching while in the laboratory). Chief Resident in Psychiatry, followed by Instructor and Assistant Professor in the Department of Psychiatry, Massachusetts General Hospital, Harvard Medical School. Also, received a *Kaplan Fellowship on Depression Research Award* in 2000 from the Department of Psychiatry, Harvard Medical School, a *Livingston Fellowship Research Award* in 2001 from the Department of Psychiatry Harvard Medical School, an *America Psychiatric Association Young Investigator Travel Award* in 2001, a *Clinical Investigator Training Program Fellowship* at the Harvard/MIT Health Sciences and Technology (HST), in collaboration with Pfizer, Inc., in 2001, a NARSAD (National Alliance for Research in Schizophrenia and Depression) in 2001-2002, a *New Investigator Award* from NCEU (New Clinical Drug Evaluation Unit, National Institute of Mental Health) in 2002, a *K23 Award* from NIMH from 2003-2008, PI of a project that is part of a U54 grant to Drs. Keohane and Glaser in 2007-2009, R01 funding from NIH from 2008-2013, listed as *Best Doctors in America* (Psychiatry Section: Mood and Anxiety Disorders, for 2005-2006, listed in the Best Doctors in Boston (Psychiatry) in Boston Magazine in 2006, a *Sidney R. Baer Jr. Foundation Young Investigator Award from NARSAD* (National Alliance for Research on Schizophrenia and Depression) 2006-2008, listed in *Best Doctors in America* (Psychiatry Section: Mood and Anxiety Disorders) 2007-2008, and listed in *Best Doctors in Boston* (Psychiatry) in Boston Magazine, 2008. He is currently Associate Professor of Psychiatry and Neuroscience and Director of the Mood and Anxiety Disorders Program at Ichan School of Medicine at Mount Sinai.

- 1994-1998 Geoff Potts, Ph.D., Research Fellow, Clinical Neuroscience Division, Laboratory of Neuroscience, Department of Psychiatry a VAMC-Brockton, Harvard Medical School (*Peter B. Livingston Fellowship* 1996-1997; *NARSAD Young Investigator Award* 1998-2000). (See also Bibliography portion of CV for first and co-authorship on abstracts, papers, and presentations). (Currently, Assistant Professor of Psychology, Rice University, Texas, and now Assistant Professor of Psychology, Florida State University.)
- 1995-1996 Hajime Arakaki, M.D., Visiting Instructor, Clinical Neuroscience Division, Laboratory of Neuroscience, Department of Psychiatry, Harvard Medical School. (See Bibliography portion of CV for first author and co-authorship on abstracts, papers and presentations at professional meetings.) (Currently Assistant Professor Department of Psychiatry, University of Ryukyu, and Director, Arakaki Hospital, Okinawa.)
- 1995-1997
(see also 2004-2005) Paola Mazzoni, Medical Student from the University of Chicago taking a leave of absence to conduct clinical research studies in the Clinical Neuroscience Division, Laboratory of Neuroscience, Department of Psychiatry, Harvard Medical School. (See bibliography portion of CV for co-authorship on abstracts and presentations at professional meetings). (Resident in Psychiatry at Massachusetts General Hospital, Harvard Medical School, Boston, MA, and completed residency training at Duke University School of Medicine, Durham, NC, completed a fellowship in Child Psychiatry at the Columbia University College of Physicians and Surgeons and is now on staff at Cornell Medical School as a research fellow and staff psychiatrist.)
- 1995-1998 Jun Soo Kwon, M.D., Ph.D., Visiting Assistant Professor, Visiting Scholars Program, Clinical Neuroscience Division, Laboratory of Neuroscience, Department of Psychiatry, Harvard Medical School. (See Bibliography portion of CV for first author and co-authorship on abstracts and presentations at professional meetings). (Assistant Professor, and Associate Professor, and now Professor and Chair, Department of Psychiatry, National University College of Medicine, Seoul, South Korea, where he has received the *Paul Janssen Schizophrenia Award* from the Korean Neuropsychiatric Association, October, 2000, for his work in schizophrenia. *The Wunsch Medical Award*, 2009, the

most honorable award from the Korean Academy of Medical Sciences, Seoul National University, Seoul, South Korea).

- 1995-1999 Yoshio Hirayasu, M.D., Ph.D., Visiting Assistant Professor, Visiting Scholars Program, Clinical Neuroscience Division, Laboratory of Neuroscience, Department of Psychiatry, Harvard Medical School. (See Bibliography portion of CV for first author & co-authorship on abstracts, papers, and presentations at professional meetings). (Currently Professor and Chairman, Department of Psychiatry, Yokohama City University School of Medicine, Yokohama, Japan, and, as of April 1, 2010, also President of Yokohama City University Hospital Medical Center, Yokohama, Japan.)
- 1996-2000 Jane Anderson, Ph.D., NIMH Post-Doctoral Research Fellow, Clinical Research Training Program in Biological Psychiatry, Clinical Neuroscience Division, Laboratory of Neuroscience, Department of Psychiatry, Harvard Medical School (1996-1997; *Peter Livingston Fellowship Award* 1997-1998; *NIMH Individual Postdoctoral National Research Service Award* 1997-1998; 1999-2000). (See Bibliography portion of CV for first author and co-authorship on papers, abstracts and presentations at professional meetings). (Currently at home raising her son.)
- 1997-2004 Melissa Frumin, M.D., Post-Doctoral Research Fellow, and then Instructor, Clinical Neuroscience Division, Laboratory of Neuroscience, Department of Psychiatry, Harvard Medical School (*Ethel Dupont-Warren Fellowship* 1997-1998; *VA Postdoctoral Fellowship in Neuropsychiatry Research/Neurosciences* 1998-2001; *NARSAD Young Investigator Award* 1999-2001; *VA Career Development Award* 2002-2005). (See Bibliography portion of CV for first author and co-authorship on papers, abstracts, and presentations at professional meetings). (Currently Instructor, Department of Psychiatry, BI-Deaconess and Massachusetts Mental Health Center, Harvard Medical School.)
- 1998-1999 Shin Tanaka, M.D., Research Fellow, Visiting Scholars Program, Clinical Neuroscience Division, Laboratory of Neuroscience, Department of Psychiatry, Harvard Medical School (see CV for first and co-authorship on abstracts, papers, and presentations at professional meetings). (Currently, Instructor, Department of Psychiatry, University of Ryukyu, Okinawa.)
- 1999-2001 Almos Nagy, M.D., Research Fellow, Clinical Neuroscience Division, Laboratory of Neuroscience, Department of Psychiatry, Harvard Medical School. (See Bibliography portion of CV for first author and co-authorship on papers, abstracts and presentations at professional meetings). (Currently a resident in Psychiatry at the South Shore Residency Training Program, Department of Psychiatry, Harvard Medical School.)
- 1999-2001 Khang Uk Lee, M.D., Ph.D., Visiting Assistant Professor, Clinical Neuroscience Division, Laboratory of Neuroscience, Department of Psychiatry, Harvard Medical School (supported through funds from The Catholic University of Korea, and from NIMH funds). (See Bibliography portion of CV for first author and co-authorship on papers, abstracts and presentations at professional meetings). (Currently Associate Professor of Psychiatry, The Catholic University Medical College, Seoul, Korea.)
- 1999- Marek R. Kubicki, M.D., Ph.D., Visiting Assistant Professor, and then Assistant Professor, Clinical Neuroscience Division, Laboratory of Neuroscience, Department of Psychiatry, Harvard Medical School and Assistant Professor, and now Associate Professor, Departments of Psychiatry and Radiology, Psychiatry Neuroimaging Laboratory, Brigham and Women's Hospital, Harvard Medical School, Boston, MA (has been supported by a fellowship from the Kosciuszko Foundation, Poland, and from NIMH funds; received the *Neal Mysell Award*, 2000, for most outstanding poster presentation at the *Eighth Annual Research Day*, Department of Psychiatry, Harvard Medical School; *NARSAD Young Investigator Award* 2001-2003 and 2003-2005; *11th*

Biennial Winter Workshop in Schizophrenia, Young Investigator Award, Davos, Switzerland, 2002; NIMH Schizophrenia Young Investigator Award 2003; ACNP Young Investigator Travel Award, 2004; William F. Milton Fund Award for Scientific Research, Harvard University, 2005.(See Bibliography of CV for first author and co-authorship on papers, abstracts and presentations at professional meetings, and two R01s from NIMH).

- 2000-2001 Jay Nierenberg, M.D., Ph.D., Longwood Residency Training Program, PYG-IV, Department of Psychiatry, Harvard Medical School, and Research Fellow, Clinical Neuroscience Division, Laboratory of Neuroscience, Department of Psychiatry, Harvard Medical School (*Ethel Dupont-Warren Fellowship 2000-2001; NIMH Young Investigator Award 2003*). (See Bibliography portion of CV for first author and co-authorship on papers, abstracts and presentations at professional meetings.)(Currently a Senior Researcher at the Nathan Kline Institute, Orangeburg, NY.)
- 2000-2002 Kiyoto Kasai, M.D., Ph.D., Visiting Instructor, Visiting Scholars Program, Clinical Neuroscience Division, Laboratory of Neuroscience, Department of Psychiatry, Harvard Medical School (supported through funds from the University of Tokyo, Japan and then by NIH funds). (See Bibliography portion of CV for first author and co-authorship on papers, abstracts and presentations at professional meetings.) (Currently Professor and Head, Department of Neuropsychiatry, University of Tokyo. Youngest Professor in Japan.)
- 2000-2003 Toshiaki Onitsuka, M.D., Ph.D., Visiting Instructor, Visiting Scholars Program, Clinical Neuroscience Division, Laboratory of Neuroscience, Department of Psychiatry, Harvard Medical School (supported through funds from Kyushu University Medical School, Fukuoka, Japan, and then by NIH funds). (See Bibliography portion of CV for first author and co-authorship on papers, abstracts and presentations at professional meetings.) (Currently staff member at Fukuoka Prefectural Dazaifu Hospital Psychiatric Clinic and Assistant Professor and Director, Psychiatry Neurophysiology Laboratory, Department of Neuropsychiatry, Graduate School of Medical Sciences, Kyushu University.)
- 2000- Kevin Spencer, Ph.D., Research Fellow in the Clinical Research Training Program in Biological Psychiatry, then Instructor, Assistant Professor, and now Associate Professor, Clinical Neuroscience Division, Laboratory of Neuroscience, Department of Psychiatry, Boston VA Healthcare System, and Harvard Medical School (*Peter B. Livingston Award 2000-2001; National Research Service Award NIMH 2001-2002; NARSAD Young Investigator Award 2002-2004; Neal Mysell Award, 2002, for most outstanding poster presentation at the Tenth Annual Research Day, Department of Psychiatry, Harvard Medical School; NARSAD Young Investigator Award 2004-2006; 13th Biennial Winter Workshop in Schizophrenia, Senior Investigator Award, Davos, Switzerland, 2006; R01 funding from NIMH 2008-2013*). (See Bibliography portion of CV for first author and co-authorship on papers, abstracts and presentations.)
- 2001-2004 Hae Jeong Park, Ph.D., Visiting Research Fellow, Visiting Scholars Program, Clinical Neuroscience Division, Laboratory of Neuroscience, Department of Psychiatry, Boston VA Healthcare System, Brockton Division, and Harvard Medical School (supported in part from the Seoul National University, South Korea for year one, and in part from grants from NIH).(See Bibliography portion of CV for first author and co-authorship on papers, abstracts and presentations).(Currently Associate Professor, Department of Radiology and Division of Nuclear Medicine, Yonsei University College of Medicine, Seoul, Korea, and Adjunct Associate Professor, Department of Psychiatry, and Adjunct Professor, Biomedical Science & Engineering major of the graduate school at Yonsei University and the Brain Korea 21 Project for Medical Science, and Associate Professor of the Severance Biomedical Science Institute, Yonsei University College of Medicine, South Korea.)

- 2001-2005 Xiangyang Li, M.D., Ph.D., Research Fellow in the Clinical Research Training Program in Biological Psychiatry, Clinical Neuroscience Division, Laboratory of Neuroscience, Department of Psychiatry, Boston VA Healthcare System, and Harvard Medical School (*VA Postdoctoral Fellowship in Neuropsychiatry Research/Neurosciences 2002-2005.*) (See Bibliography portion of CV for first author and co-authorship on papers, abstracts and presentations at professional meetings.)
- 2002-2003 Na Young Ji, M.D., Research Associate, Clinical Neuroscience Division, Laboratory of Neuroscience, Department of Psychiatry, Boston Healthcare System, and Harvard Medical School. Working part-time evaluating brain structures in schizotypal personality disorder prior to entering residency training in psychiatry (supported in part from funds from the Stanley Medical Research Institute Senior Scholars Program).(See Bibliography portion of CV for first author and co-authorship on papers, abstracts and presentations at professional meetings.) (Completed Residency Training in Psychiatry at the University of North Carolina, Chapel Hill, NC -2003-2008, and entered Child Fellowship program in Psychiatry. Now Assistant Professor, Kennedy Krieger Institute, Baltimore, MD.)
- 2002-2003 Anders Brun, M.S., Research Associate, Clinical Neuroscience Division, Laboratory of Neuroscience, Department of Psychiatry, Boston Healthcare System, and Harvard Medical School. Working on fiber tracking using diffusion tensor images (supported from a grant from NIH).(See Bibliography portion of CV for first author and co-authorship on papers, abstracts and presentations).(Currently a Ph.D. candidate in Medical Imaging in the Department of Biomedical Engineering, Linköping University, Linköping, Sweden.)
- 2002-2004 Noriomi Kuroki, M.D., Visiting Research Fellow, Visiting Scholars Program, Clinical Neuroscience Division, Laboratory of Neuroscience, Department of Psychiatry, VA Boston Healthcare System, and Harvard Medical School (supported in part by The Japanese Society for the Promotion of Science and Scholarship for Studying Abroad, the Wellfide Medicinal Research Foundation, and from NIH grant support).*Neal Mysell Award, 2004*, for most outstanding poster presentation at the *Twelfth Annual Research Day*, Department of Psychiatry, Harvard Medical School.(See Bibliography portion of CV for first author and co-authorship on papers, abstracts and presentations).(Currently Instructor, Department of Neuropsychiatry, University of Tokyo Hospital, Tokyo, Japan.)
- 2002-2005 Flavia May, B.A., Volunteer, Clinical Neuroscience Division, Laboratory of Neuroscience, Department of Psychiatry, Boston Healthcare System, and Harvard Medical School. (See Bibliography portion of CV for first author and co-authorship on papers, abstracts and presentations)
- 2003-2003 Brenda Bemporad, Ph.D., Volunteer, Clinical Neuroscience Division, Laboratory of Neuroscience, Department of Psychiatry, VA Boston Healthcare System, Harvard Medical School.
- 2003-2005 Min-Seong Koo, M.D., Ph.D., Visiting Research Fellow, Visiting Scholars Program, Clinical Neuroscience Division, Laboratory of Neuroscience, Department of Psychiatry, Boston VA Healthcare System, and Harvard Medical School, visiting from College of Medicine, Kwandong University, Seoul, Korea. (Supported from NIH funds.) (See Bibliography portion of CV for first author and co-authorship on papers, abstracts and presentations.) (Currently Associate Dean of Clinical Education, Associate Professor, and Chair of the Department of Psychiatry, Kwandong University College of Medicine and Chair and Director of Myung-Ji Hospital, Seoul, Korea.)

- 2003-2007 Motoaki Nakamura, M.D., Visiting Research Fellow, Visiting Scholars Program, Clinical Neuroscience Division, Laboratory of Neuroscience, Department of Psychiatry, Boston VA Healthcare System, and Harvard Medical School, and Psychiatry Neuroimaging Laboratory, Department of Psychiatry, Brigham and Women's Hospital, Harvard Medical School. *International Congress of Schizophrenia Research Young Investigator Award*, 2005. *Neal Mysell Award*, 2005, for most outstanding poster presentation at the *Thirteenth Annual Research Day*, Department of Psychiatry, Harvard Medical School. *13th Biennial Winter Workshop in Schizophrenia, Young Investigator Award*, Davos, Switzerland, 2006. (Supported in part from a scholarship for studying abroad through the Mitsubishi Pharma Research Foundation, Japan, and supported in part by NIH funds.)(See Bibliography portion of CV for first author and co-authorship on papers, abstracts and presentations.)(Currently Visiting Researcher, Department of Psychiatry, Yokohama City University School of Medicine, Yokohama, Japan.)
- 2003- Sylvain Bouix, Ph.D., Postdoctoral Research Fellow (2003-2005), Clinical Neuroscience Division, Laboratory of Neuroscience, Department of Psychiatry, Boston VA Healthcare System, and Harvard Medical School. Instructor (2005-2008), Instructor (2005-2008), and Assistant Professor (2008-present), Psychiatry Neuroimaging Laboratory, Department of Psychiatry Brigham and Women's Hospital, Harvard Medical School, Boston, MA. (Center for Integration of Medicine and Innovative Technology-CIMIT-Solider in Medicine Award and R01 funding from NIMH from 2009 to 2014.)(See Bibliography portion of CV for first author and co-authorship on papers, abstracts and presentations.)
- 2004-2005 Takeshi Yoshida, M.D., Visiting Research Fellow, Visiting Scholars Program, Clinical Neuroscience Division, Laboratory of Neuroscience, Department of Psychiatry, Boston VA Healthcare System, and Harvard Medical School, visiting from National Defense Medical School, Saitama, Japan. (See Bibliography portion of CV for first author and co-authorship on papers, abstracts and presentations). (Currently Visiting Researcher, Department of Psychiatry, Yokohama City University School of Medicine, Yokohama, Japan.)
- 2004-2006 KangUk Lee, M.D., Ph.D., Visiting Research Fellow, Visiting Scholars Program, Clinical Neuroscience Division, Laboratory of Neuroscience, Department of Psychiatry, Boston VA Healthcare System, and Harvard Medical School, and Psychiatry Neuroimaging Laboratory, Brigham and Women's Hospital, Harvard Medical School. Visiting from Seoul National University College of Medicine, Seoul, South Korea. (See Bibliography portion of CV for first author and co-authorship on papers, abstracts and presentations.)(Currently Associate Dean of Graduate Education and Research, Professor, and Head, Department of Psychiatry, Kangwon National University College of Medicine, Chunchon, South Korea.)
- 2004-2005 Paola Mazzoni, M.D., Research Fellow, Clinical Neuroscience Division, Laboratory of Neuroscience, Department of Psychiatry, Boston VA Healthcare System, and Harvard Medical School. Completed her residency training in psychiatry at Duke University Medical School. (Currently a child fellow in Psychiatry at Columbia College of Physicians and Surgeons.
- 2005-2007 Marc Niethammer, Ph.D., Post-Doctoral Research Fellow, Psychiatry Neuroimaging Laboratory, Department of Psychiatry, Brigham and Women's Hospital, and Harvard Medical School. (See Bibliography portion of CV for first author and co-authorship on papers, abstracts and presentations.)(Currently Assistant Professor, Department of Computer Science, University of North Carolina.)

- 2005-2008 Toshio Kawashima, M.D., Ph.D., Visiting Research Fellow, Clinical Neuroscience Division, Laboratory of Neuroscience, Department of Psychiatry, Boston VA Healthcare System, and Psychiatry Neuroimaging Laboratory, Brigham and Women's Hospital, Harvard Medical School, visiting from Kyushu University, Fukuoka, Japan. (Currently, Staff psychiatrist at Fukuoka Prefectural Psychiatric Center Dazaifu Hospital and Assistant Professor in the Department of Psychiatry, Kyushu University, Fukuoka, Japan.)
- 2006-2008 Katharina Quintus, M.S., Research Associate, Psychiatry Neuroimaging Laboratory, Brigham and Women's Hospital, Harvard Medical School.
- 2006- Jennifer Fitzsimmons, M.D., Post-Doctoral Research Fellow, and now Instructor (2009), Psychiatry Neuroimaging Laboratory, Department of Psychiatry, Brigham and Women's Hospital, and Harvard Medical School.
- 2006- Zora Kikinis, M.D., Post-Doctoral Research Fellow and now Instructor (2009), Psychiatry Neuroimaging Laboratory, Department of Psychiatry, Brigham and Women's Hospital, and Harvard Medical School. (2006-2009 *Reentry to Biomedical Research, supplement* to NIMH R01 Computerized Image Processing Analyses in Schizophrenia; *NARSAD Young Investigator Award*, 2008-2010). *Harvard Catalyst Clinical Research Center Junior Investigator Laboratory Support Award* (2011.)
- 2006-2007 Bumseok Jeong, M.D., Ph.D., Visiting Research Fellow, Clinical Neuroscience Division, Laboratory of Neuroscience, Department of Psychiatry, Boston VA Healthcare System, Harvard Medical School and Psychiatry Neuroimaging Laboratory, Psychiatry Department, Brigham and Women's Hospital; visiting from Seoul National University, Seoul, South Korea. Moved to Eulji University, South Korea and then to the Korean Advanced Institute of Science and Technology, Graduate School of Medical Science & Engineering, Department of Psychiatry, KAIST Clinic, Daejeon, Republic of Korea, where he is Associate Professor.
- 2006-2007 Gudrun Rosenberger, M.D., Visiting Research Fellow, Psychiatry Neuroimaging Laboratory, Department of Psychiatry, Brigham and Women's Hospital, and Harvard Medical School. Visiting from the Department of Psychiatry, Medical University of Innsbruck, Innsbruck, Austria. (Currently Psychiatrist, Department of Psychiatry, Medical University of Innsbruck, Innsbruck, Austria.)
- 2007-2008 Jungsu Oh, Ph.D., Visiting Research Fellow, Psychiatry Neuroimaging Laboratory, Department of Psychiatry, Brigham and Women's Hospital, and Harvard Medical School. Visiting from Department of Nuclear Medicine, Seoul National University College of Medicine, Seoul, South Korea (Currently, Assistant Professor, Department of Psychiatry, Seoul National University College of Medicine, Seoul, South Korea.)
- 2007- Yogesh Rathi, Ph.D., Post-Doctoral Research Fellow (2007-2008), Instructor (2008), and Assistant Professor (2009), Psychiatry Neuroimaging Laboratory, Department of Psychiatry, Brigham and Women's Hospital, and Harvard Medical School (*Information System and Research Council grant award*; "Diffusion Modeling and Fiber Cup Award" for the best tractography algorithm competition held during MICCAI – *Medical Image Computing and Computer Assisted Intervention* Conference, 2009). *October 2012*: New and Notables: The NIMH has [cited Dr. Rathi's](#) R01 recently funded research among new investigators. This project will use new computational and acquisition approaches in order to shorten the time needed for conducting advanced diffusion imaging. *2013*: selected to participate in the course for *HMS Leadership Development for Physicians and Scientists*.

- 2007-2008 Lucas Torres, M.D., Post-Doctoral Research Fellow, Psychiatry Neuroimaging Laboratory, Department of Psychiatry, Brigham and Women's Hospital, and Harvard Medical School.
- 2007-2007 Aristotle Voineskos, M.D., Visiting Research Fellow, Psychiatry Neuroimaging Laboratory, Department of Psychiatry, Brigham and Women's Hospital, and Harvard Medical School. Visiting from Toronto University School of Medicine, Toronto, CA, where he is a 4th year resident in Psychiatry. Completed 5th year residency training in 2008 and received in 2007 the *American Association of Geriatric Psychiatry Stepping Stone Award*, the *Society of Biological Psychiatry Travel Scholarship*, a *Robin Hunter Memorial Award for Best Resident Research Project at the Department of Psychiatry*, University of Toronto, the *Best Resident in Geriatric Psychiatry Award in the Department of Psychiatry, University of Toronto*, and the *World Congress of Psychiatric Genetics Travel Scholarship*. In addition, in 2008 he was selected for *Research Colloquium for Junior Investigators (American Psychiatric Association)*, the *Best Presentation by a Resident - 34th Annual Harvey Stancer Research Day*, University of Toronto, and he received a *Canadian Institutes of Health Research (CIHR-2008-2011) Clinical Scientist Award (Phase I)* for a project entitled "Identifying Genetic Vulnerabilities that Mediate Differences in Connectivity in Schizophrenia Across the Adult Lifespan: A Diffusion Tensor Imaging and Genetics Study". *APIRE/AstraZeneca Young Minds in Psychiatry Award*, the *American Psychiatric Association*, 2009. (Completing residency training in Psychiatry, Toronto University School of Medicine, Toronto, Canada, and now Instructor in the Department of Psychiatry, Toronto University School of Medicine.)
- 2007-2010 William Burch, M.D., Ph.D., Staff Psychiatrist and Instructor, Department of Psychiatry, VA Boston Healthcare System, Brockton, MA (2007-2009) and then Staff Psychiatrist, Department of Psychiatry, VA Bedford Healthcare System, and Instructor, Psychiatry Neuroimaging Laboratory, Department of Psychiatry, Brigham and Women's Hospital, and Harvard Medical School.
- 2008-2011 Takeshi Asami, M.D., Ph.D., Visiting Research Fellow, Psychiatry Neuroimaging Laboratory, Department of Psychiatry, Brigham and Women's Hospital, Harvard Medical School, and the Clinical Neuroscience Division, Laboratory of Neuroscience, VA Boston Healthcare System, and Department of Psychiatry, Harvard Medical School. Funded from the Department of Psychiatry, Yokohama City University School of Medicine, Yokohama, Japan. Currently Assistant Professor, Department of Psychiatry, Yokohama University School of Medicine.
- 2008-2012 Jason Schneiderman, Ph.D., Post-Doctoral Research Fellow, Clinical Research Training Program in Biological Psychiatry, and Post-Doctoral Research Fellow, Department of Psychiatry, Harvard Medical School, and member of the Psychiatry Neuroimaging Laboratory, Department of Psychiatry, Brigham and Women's Hospital, Harvard Medical School (see CV for publications). *International Congress of Schizophrenia Research Young Investigator Award*, 2009.
- 2008-2008 Francisco Romo-Nava, M.D., Visiting Research Fellow, Psychiatry Neuroimaging Laboratory, Department of Psychiatry, Brigham and Women's Hospital, Harvard Medical School. Visiting and funded from the National Institute of Psychiatry, Mexico City, Mexico. Currently, staff physician, National Institute of Psychiatry, Mexico City, Mexico. 1st place for poster at the poster session, *XXI National Meeting of the Mexican Psychiatric Association*, Acapulco, Mexico, November 13-20th, 2009.
- 2008-2009 Julien Von Siebenthal, Ph.D., Post-Doctoral Research Fellow, Psychiatry Neuroimaging Laboratory, Department of Psychiatry, Brigham and Women's Hospital, Harvard Medical

School (see CV for publications). Currently, Post-Doctoral Research Fellow, Children's Hospital, Boston, MA.

- 2008-2010 Sun Woo Lee, M.D., Visiting Associate Professor, Psychiatry Neuroimaging Laboratory, Department of Psychiatry, Brigham and Women's Hospital, and Harvard Medical School. Visiting from the Department of Psychiatry, Chungnam National University Hospital, Chungnam National University College of Medicine, Gung-gu, Daejeon, South Korea. Funded from Chungnam National University Hospital, Chungnam National University College of Medicine, Gung-gu Daejeon South Korea.
- 2008-2011 An Nguyen, M.D., Resident in Psychiatry, South Shore Residency Training Program, VA Boston Healthcare System, Brockton, and Harvard Medical School, Research Fellow, Psychiatry Neuroimaging Laboratory, Department of Psychiatry, Brigham and Women's Hospital, Harvard Medical School, and now Clinical Fellow in Psychiatry, Children's Hospital, Harvard Medical School. (Mysell Best Poster Finalist, 2009). (See also CV for publications.)
- 2008-2010 Thomas Whitford, Ph.D., Visiting Research Fellow, Psychiatry Neuroimaging Laboratory, Department of Psychiatry, Brigham and Women's Hospital, and Harvard Medical School. Visiting from University of Sydney, Sydney, Australia. Funded from a National Health and Medical Research Council Australian Government (MHMRC) Training Fellowship (Honorable mention, SIRS Contest Winning Essay, 2nd *Schizophrenia International Research Society Conference*). (Recipient a *NARSAD Young Investigator Award* 2010-2012.) (See also CV for publications).
- 2008- Peter Savadjiev, Ph.D., Post-doctoral Research Fellow, Psychiatry Neuroimaging Laboratory, Department of Psychiatry, Brigham and Women's Hospital, Harvard Medical School. (Recipient of the *2009MICCAI Young Scientist Award* for the best paper: <http://ubimon.doc.ic.ac.uk/MICCAI09/m773.html>). (See also CV for publications.)
- 2008-2011 Toshiyuku Ohtani, M.D., Ph.D., Visiting Research Fellow, Psychiatry Neuroimaging Laboratory, Department of Psychiatry, Brigham and Women's Hospital, Harvard Medical School, and the Clinical Neuroscience Division, Laboratory of Neuroscience, VA Boston Healthcare System, and Department of Psychiatry, Harvard Medical School. Funded from Department of Neuropsychiatry, Kyushu University, Maidashi, Higashiku, Fukuoka, Japan. Finalist, Top Poster Award *Society for Biological Psychiatry*, 2010, New Orleans, LA. Currently Associate Professor, Safety and Health Organization, Chiba University, Inage-ku, Chiba, Japan.
- 2009- Hesham Hamoda, M.D., Clinical Fellow in Psychiatry, Children's Hospital, Harvard Medical School, and Fellow, Psychiatry Neuroimaging Laboratory, Brigham and Women's Hospital, Harvard Medical School. Recipient of a *Dupont-Warren Fellowship*, Harvard Medical School, and a *Livingston Fellowship Award*, Harvard Medical School. Recipient of an *American Psychiatric Association Junior Investigator Award* (2011). Also recipient of the *Eleanor and Miles Shore Fellowship for Scholars in Medicine*, Harvard Medical School (2011).
- 2009-2009 (see also 2011-2014) Inga Koerte, M.D., Visiting Research Fellow, Psychiatry Neuroimaging Laboratory, Department of Psychiatry, Brigham and Women's Hospital, Harvard Medical School. Funded from Ludwig-Maximillan-University, Munich, Germany and by the Robert Bosch Foundation - stipend for fast-track program for excellence and leadership skills for outstanding women in science, 20 stipends given in the entire country. (See CV for publications; currently completing her residency training in neuroradiology.)
- 2009- Taiga Hosokawa, M.D., Ph.D., Visiting Research Fellow, Psychiatry Neuroimaging Laboratory, Department of Psychiatry, Brigham and Women's Hospital, Harvard Medical

School, and the Clinical Neuroscience Division, Laboratory of Neuroscience, VA Boston Healthcare System, and Department of Psychiatry, Harvard Medical School. Funded from the Department of Psychiatry, University of Tokyo, Tokyo, Japan.

- 2009-2011 Tatsui Onitsuka, M.D., Ph.D., Visiting Research Fellow, Psychiatry Neuroimaging Laboratory, Department of Psychiatry, Brigham and Women's Hospital, Harvard Medical School, and the Clinical Neuroscience Division, Laboratory of Neuroscience, VA Boston Healthcare System, and Department of Psychiatry, Harvard Medical School. Funded from the Department of Psychiatry, Yokohama City University School of Medicine, Yokohama, Japan.
- 2009-2010 Hsiao Piau Ng, Ph.D., Visiting Research Fellow, Psychiatry Neuroimaging Laboratory, Department of Psychiatry, Brigham and Women's Hospital, Harvard Medical School. Funded from the Agency for Science, Technology and Research (A*STAR), Singapore Bio-imaging Consortium, Singapore. Recipient of an *NIMH Young Investigator Travel Award* to attend the *2nd Schizophrenia Scientific Conference* Sponsored by the *Schizophrenia International Research Society* (2010), one of top 3 finalists for A*STAR investigatorship (SERC) October, 2010.
- 2009-2011 Sang-Hyuk Lee, M.D., Ph.D., Visiting Research Fellow, Psychiatry Neuroimaging Laboratory, Department of Psychiatry, Brigham and Women's Hospital, Harvard Medical School, and the Clinical Neuroscience Division, Laboratory of Neuroscience, VA Boston Healthcare System, and Department of Psychiatry, Harvard Medical School. Funded from CHA University School of Medicine, Seoul, South Korea.
- 2009-2011 Yukiko Saito, M.D., Ph.D., Visiting Research Fellow, Psychiatry Neuroimaging Laboratory, Department of Psychiatry, Brigham and Women's Hospital, Harvard Medical School. Funded from Kansai Medical University, Suita, Osaka, Japan. Currently Assistant Professor of Neuropsychiatry, Kansai Medical University, Osaka, Japan.
- 2009- Ofer Pasternak, Ph.D., Post-doctoral Research Fellow, and now Instructor, Psychiatry Neuroimaging Laboratory, Department of Psychiatry, Brigham and Women's Hospital, Harvard Medical School. Funded through a *Fulbright Scholarship* and through grant funds to Drs. Shenton and Westin. *NARSAD Young Investigator Award*, 2013-2015.
- 2009-2011 Po Chang Hsu, Research Fellow, Psychiatry Neuroimaging Laboratory, Department of Psychiatry, Brigham and Women's Hospital, and Master's degree candidate, Neurobiology, Harvard Extension Division, Harvard University.
- 2010- Demien Wasserman, Ph.D., Post-doctoral Research Fellow, Psychiatry Neuroimaging Laboratory, Department of Psychiatry, and Laboratory of Mathematical Imaging, and Surgical Planning Laboratory, Department of Radiology, Brigham and Women's Hospital, Harvard Medical School.
- 2010-2011 Marlene Wigand, Visiting Research Fellow, Psychiatry Neuroimaging Laboratory, Department of Psychiatry, Brigham and Women's Hospital, Harvard Medical School, Boston, MA. Medical student from the University of Munich, Germany. Funded through a scholarship awarded to only the top 1% of students, the *studienstiftung des deutschen volkes*.
- 2010-2011 Christian Clemm, Visiting Research Fellow, Psychiatry Neuroimaging Laboratory, Department of Psychiatry, Brigham and Women's Hospital, Harvard Medical School, Boston, MA. Medical Student from the University of Munich, Germany. Funded through a scholarship awarded to only the top 1% of students, the *studienstiftung des deutschen volkes*.

- 2010-2011 Karl Egger, M.D., Visiting Research Fellow, Psychiatry Neuroimaging Laboratory, of Psychiatry, Brigham and Women's Hospital, Harvard Medical School, MA. Funded from the University of Innsbruck School of Medicine, Innsbruck, Austria.
- 2010-2012 Meina Quan, M.D., Ph.D., Visiting Research Fellow, Psychiatry Neuroimaging Laboratory, Department of Psychiatry, Brigham and Women's Hospital, Harvard Medical School, Boston, MA, and Clinical Neuroscience Division, Laboratory of Neuroscience, Department of Psychiatry, VA Boston Healthcare System, Brockton, MA and Harvard Medical School. From Nankai University School of Medicine, Tianjin, The People's Republic of China. Dr. Quan's abstract submitted for *The Society of Biological Psychiatry* (SOBP), with the title "Abnormalities of White Matter Tracts between Rostral Middle Frontal Gyrus / Inferior Frontal Gyrus and Striatum in First-Episode Schizophrenia", was selected as one of 47 out of over 600 abstracts, to be considered for the Top Poster Award (2011). Recipient of *Outstanding Ph.D. Graduate* Nankai University, The People's Republic of China. Recipient of a Livingston Award (2012). Recipient of a Travel Award in 2012, one of 36 selected from 240 applicants, to participate in the 3rd *Biennial Schizophrenia Research Conference* to be held in Florence, Italy, and sponsored by the *Schizophrenia International Research Society* (SIRS).
- 2010-2012 Tomohide Roppongi, M.D., Ph.D., Visiting Research Fellow, Clinical Neuroscience Division, Laboratory of Neuroscience, Department of Psychiatry, VA Boston Healthcare System, Brockton, MA and Harvard Medical School and Psychiatry Neuroimaging Laboratory, Department of Psychiatry, Brigham and Women's Hospital, Harvard Medical School, Boston, MA. Funded from Hirosaki University School of Medicine, Hirosaki, Japan.
- 2011-2012 Yingying Tang, Ph.D., Visiting Research Fellow, Psychiatry Neuroimaging Laboratory, Department of Psychiatry, Brigham and Women's Hospital, Harvard Medical School, Boston, MA. Visiting from Department of Biomedical Engineering Shanghai Jiao Tong University, Shanghai, China.
- 2011-2012 Calegero Montedoro, medical and Ph.D. school candidate, Université Catholique de Louvain School of Medicine, Louvain-la-Neuve, Belgium.
- 2011- Inga Koerte, M.D. Visiting Lecturer and Research Associate in the Psychiatry Neuroimaging Laboratory, Department of Psychiatry, Brigham and Women's Hospital, Harvard Medical School, from Ludwig-Maximilian-University, Munich, Germany. LMU Förderung für Forschung und Lehre, *LMU Munich grant for Young Investigators* (2009-2011); *Robert-Bosch-Foundation, Germany, stipend for 2-year FAST TRACK Program for Excellence and Leadership Skills for Outstanding Women in Science* (2011-present); *Deutsche Gesellschaft für Neuroradiologie, Germany, Marc-Dünzl-Prize, Young Investigator Award* (2011); *Deutscher Akademischer Austauschdienst, Germany, Scholarship for 6-month Research Fellowship* (2011-2012); *Else-Kröner-Fresenius-Stiftung, Germany, 2-year Research Fellowship*, 1 out of 3 stipends of the *Else-Kröner Memorial Award* (2012-present). Professor in the Department of Pediatric Psychiatry, Ludwig-Maximilian-University of Munich, Munich German (2013).
- 2011- Julie Stamm, Pre-Doctoral Student, Boston University School of Medicine, Anatomy and Neurobiology Ph.D. Program. (*F31 Ruth L. Kruschstein National Research Service Award for Individual Pre-Doctoral Students*; F31NS 081957 "Frontal Lobe Neuroimaging as a Biomarker of Chronic Traumatic Encephalopathy").
- 2011- Noah Philips, M.D., Assistant Professor of Psychiatry and Human Behavior (Clinical), Brown University and Providence VAMC. Received a *VA Career Development Award* (2013-2018) entitled "PTSD and the Default Network: Developing Imaging Phenotypes", with Dr. Shenton as a Co-Mentor.

- 2011- Kaloyan Tanev, M.D., Assistant Psychiatrist in Psychiatry, Massachusetts General Hospital, and Instructor, Harvard Medical School. Received a K23 MH097844 entitled “Cognitive Processing Therapy for PTSD with Co-Morbid Mild Traumatic Brain Injury” (2013-2018), with Drs. Shenton and Roger Pitman as Co-Mentors.
- 2012-2012 Fan Zhang, Ph.D. Professor in Computer Science and Engineering, Henana University, China, Visiting Professor, Psychiatry Neuroimaging Laboratory, Department of Psychiatry, Brigham and Women’s Hospital, Harvard Medical School, Boston MA, for 6 months to learn image processing pipeline for diffusion tensor imaging and to assist in algorithm development with other computer scientists.
- 2012-2013 William Panenka MSc, M.D. Visiting Post-doctoral Research Fellow in the Psychiatry Neuroimaging Laboratory, Department of Psychiatry, Harvard Medical School, Boston, MA. He is a Neurologist from the University of British Columbia, Vancouver, British Columbia, Canada, who began focusing in 2011 on MRI imaging correlates of addiction and disease in a cohort of socially disadvantaged, largely drug addicted individuals in Vancouver. He is in the PNL to learn more about traumatic brain injury (TBI) and more sophisticated MRI techniques that are useful in understanding TBI.
- 2013-2013 Elif Gürdenz. Observership in the Psychiatry Neuroimaging Laboratory, Department of Psychiatry and Department of Radiology, Brigham and Women’s Hospital, Harvard Medical School. Fifth year medical student at Istanbul University, Cerrahpaşa Medical Faculty, Istanbul, Turkey.
- 2013-2013 Ünsal Aydinoğlu, M.D. Observership in the Psychiatry Neuroimaging Laboratory, Department of Psychiatry and Department of Radiology, Brigham and Women’s Hospital, Harvard Medical School. Psychiatry Resident at Atatürk University, Faculty of Medicine, Department of Psychiatry, Erzurum, Turkey.
- 2013-2013 Pedro Rosa, M.D. Observership in the Psychiatry Neuroimaging Laboratory, Department of Psychiatry and Department of Radiology, Brigham and Women’s Hospital, Harvard Medical School. Psychiatry Residency (2011-2014), Institute of Psychiatry at the University of São Paulo Medical School, São Paulo, Brazil.
- 2013-2013 Katharine Innsbrinker, M.D. Observership in the Psychiatry Neuroimaging Laboratory, Department of Psychiatry and Department of Radiology, Brigham and Women’s Hospital, Harvard Medical School. Fifth year resident in Psychiatry, University of Gethenborg, Gethenborg, Sweden.
- 2013-2014 Takeshi Sasaki, M.D. Visiting Post-doctoral Research Fellow in the Psychiatry Neuroimaging Laboratory, Department of Psychiatry, Brigham and Women’s Hospital, Harvard Medical School, Boston, MA. He received his training from the Tokyo Medical and Dental School (TMDU), and is sponsored by the TMDU-HMS exchange program entitled “the Strategic Young Researcher Overseas Visits Program for Accelerating Brain Circulation” sponsored by the *Japan Society for the Promotion of Science*. Dr. Shenton was selected as one of eight professors at HMS to be a part of this program as a mentor. Dr. Sasaki has a background in PET imaging and at the PNL he will pursue his interest in diffusion MRI.
- 2013-2014 Ahmed Adel Fouad Eid, Observership in the Psychiatry Neuroimaging Laboratory, Department of Psychiatry and Department of Radiology, Brigham and Women’s Hospital, Harvard Medical School. Last year in medical school, Faculty of Medicine Alexandria University, Alexandria, Egypt.

2013- Beth Ripley, M.D., Ph.D. Research Fellow in the Psychiatry Neuroimaging Laboratory, Department of Psychiatry and Department of Radiology, Brigham and Women's Hospital, Harvard Medical School. Chief Resident in Radiology, Brigham and Women's Hospital, Harvard Medical School.

Thesis Supervision of Graduate Students

2013-2014 Talis M. Swisher, A.B. Masters of Science in Biomedical Sciences student at Tufts University School of Medicine, Public Health & Professional Programs. Reader for thesis entitled: "White Matter Integrity of the Cingulum Bundle in Healthy Aging".

Thesis Supervision of Undergraduates

1991-1992 I-han Chou, Class of 1992, Department of Psychology, Harvard College. Senior Honors Thesis: "A magnetic resonance imaging study of the cingulate gyrus in schizophrenia". This Summa cum laude thesis was awarded the Thomas Temple Hoopes Prize for Excellence in the Work of an Undergraduate and Faculty Member. (Received, a Ph.D. in the Cognitive Neuroscience Program at the Massachusetts Institute of Technology).(See Bibliography portion of CV for first author and co-authorship on papers, abstracts and presentations).

1994-1995 Robert Donnino, Class of 1995, Department of Psychology, Harvard College. Senior Honors Thesis: "The parietal lobes and schizophrenia: A quantitative magnetic resonance imaging study." This thesis was awarded *Magna cum laude*. This paper was published in the *American Journal of Psychiatry* (1999) with Rob as second author. (See Bibliography portion of CV for first author and co-authorship on papers, abstracts and presentations). (Currently, graduated from Medical School at SUNY-Stony Brook, completed residency training in internal medicine at SUNY-Stony Brook, and is practicing medicine in New York).

1997-1998 Janos Zahajsky, Class of 1998, Cognitive Neuroscience Major (Departments of Psychology and Biology), Harvard College. Senior Honors Thesis: "An Analysis of Volumetric Differences Between the Fornices of Schizophrenic and Normal Subjects Using MRI Imaging and Specialized Image Processing Software." This thesis was awarded *Magna cum laude*. This work has been published in *Schizophrenia Research* (2001), where Janos is first author. (As a medical school at Mount Sinai, he received a *Howard Hughes Medical Institute and the National Institute of Health Research Scholars Program Fellowship* to conduct biomedical research at NIH 2000-2001. He then completed medical school at Mount Sinai, and his residency training in the Psychiatry Residency Training Program at Massachusetts General Hospital, Harvard Medical School. Currently he is staff psychiatrist at UCSF).(See Bibliography portion of CV for first author and co-authorship on papers, abstracts and presentations).

2001-2002 Laura Wiegand, Class of 2002, Cognitive Neuroscience Major (Departments of Psychology and Biology), Harvard College. Senior Honors Thesis: "Prefrontal Cortical Thickness Abnormalities in Schizophrenia: A Magnetic Resonance Imaging Study." This thesis was awarded *Magna plus cum laude*. (One paper from this work is published in *Biological Psychiatry*, with Laura as first author, and the second paper from this work is published in the *American Journal of Psychiatry*. She is currently a medical student at the University of Pittsburgh).(See Bibliography portion of CV for first author and co-authorship on papers, abstracts and presentations).

2001-2002 Kathleen Rose, Class of 2002, Cognitive Neuroscience Major (Departments of Psychology and Biology), Harvard College. Senior Honors Thesis: "Morphologic

Analysis of the Temporal Pole in Schizotypal Personality Disorder Using Magnetic Resonance Imaging.” This thesis was awarded *Magna cum laude*.

- 2012-2013 Jessica Zuo, Class of 2013, Neurobiology Major, Departments of Neurobiology and Neuroscience, Harvard College. Senior Honors Thesis: “Clinical Symptoms Correlate with White Matter Abnormalities in First-Episode Schizophrenia Patients”.
- 2013- Wendy Melissa Coronado, Class of 2014, Neurobiology Major, Department of Neurobiology and Neuroscience, Harvard College. Senior Honors Thesis: “Role of the hypothalamus in schizophrenia.”

Independent Study Supervision of Undergraduates

- 1981-1982 Christine Gasperetti, Department of Psychology, Harvard College, Cambridge, MA (co-author publication in *Schizophr Bull*, 1986;12(3):484-495).
- 1982-1983 Ellyn Kestnbaum, Department of Psychology, Harvard College, Cambridge, MA (First author publication in *Am J Psychiatry*, 1988;145:944-949).
- 1982-1983 Andrew Busch, Department of Psychology, Harvard College, Cambridge, MA
- 1990-1991 I-han Chou, Department of Psychology, Harvard College, Cambridge, MA (First author and co-author on abstracts-- see Bibliography of CV).
- 1993-1994 Robert Donnino, Department of Psychology, Harvard College, Cambridge, MA (Senior Honors thesis written up and published in *Am J Psychiatry*, 2000; see also co-authorship on other publications and abstracts -- see Bibliography portion of CV).
- 1993-1994 Michelle Ballard, Department of Psychology, Wellesley College, Wellesley, MA. Worked for Independent Study credit.
- 1993-1994 Stephanie Rose, Department of Psychology, Wellesley College, Wellesley, MA. Worked for Independent Study credit.
- 1994-1995 Emma Kwong, Department of Psychology, Wellesley College, Wellesley, MA. Worked for Independent Study credit.
- 1994-1995 Laura Gravelin, Department of Psychology, Wellesley College, Wellesley, MA. Worked for Independent Study credit.
- 1997-1998 Michelle Harper, Department of Psychology, Harvard College, Cambridge, MA. Volunteered in the laboratory.
- 2000-2000 Elizabeth David, Department of Psychology, Wellesley College, Wellesley, MA. Volunteered in the laboratory then became research assistant, went to medical school.
- 2000-2000 Amanda Knowles, Department of Psychology, Wellesley College, Wellesley, MA. Worked for Independent Study credit.
- 2012- Jonathan Duskin, Boston University, Class of 2015, independent study.
- 2013- Marcia Frimpong, Wellesley College, Class of 2015, independent study.
- 2013- Helen Baker, Boston University, Class of 2014, independent study.

Other Advisor and Supervisory Responsibilities

- 1988- James Levitt, M.D., Instructor, and now Associate Professor, Clinical Neuroscience Division, Laboratory of Neuroscience, Department of Psychiatry, Harvard Medical School and Psychiatry Neuroimaging Laboratory, Department of Psychiatry, Brigham and Women's Hospital, Harvard Medical School. (Milton Award for Scientific Research, Harvard University; VA Merit Award for research studies in schizophrenia). (See Bibliography portion of CV for first author and co-authorship on numerous abstracts, papers, and presentations.)
- 1991-1992 Jill Goldstein, Ph.D., retraining for neuroimaging and part of the Clinical Research Training Program, Department of Psychiatry, Harvard Medical School. Now Professor and Director of Women's Health Research, Brigham and Women's Hospital, Harvard Medical, Boston, MA. School, and Director of the Women's Health Center, Brigham and Women's Hospital. (See Bibliography portion of CV for co-authorship on abstracts, papers, and presentations.) (Currently Professor of Psychiatry and Medicine, and Director of Research for The Connor's Center for Women's Health, Brigham and Women's Hospital, Harvard Medical School.)
- 1992-1995 Dorothy Holinger, Ph.D., Instructor, Department of Psychiatry, Harvard Medical School. (See Bibliography portion of CV for first and co-authorship on papers, and presentations). (Currently in private practice.)
- 1992- Margaret Niznikiewicz, Ph.D., Assistant Professor, Clinical Neuroscience Division and Director of Event Related Potential Studies at MMHC Imaging Laboratory, Laboratory of Neuroscience, Department of Psychiatry, Harvard Medical School (*NARSAD Young Investigator Award* 1994-1996). Is co-PI on a VA MERIT Award and has received R01 grant funding from NIMH for her event-related potential studies of schizophrenia. (See also Bibliography portion of CV for first author and co-authorship on numerous abstracts, papers, and presentations.)
- 1992-2013 Dean Salisbury, Ph.D., Post-doctoral Research Fellow, then Assistant and now Associate Professor in the Department of Psychiatry, and Director of the Cognitive Neuroscience Laboratory, McLean Hospital, Harvard Medical School, and Director of First Episode Event Related Potential Studies, Laboratory of Neuroscience, Department of Psychiatry, Harvard Medical School (*NIMH Schizophrenia Young Investigator Award* 1993; *James S. McDonnell Foundation Award in Cognitive Neuroscience* 1993-1995; *NARSAD Young Investigator Award* 1995-1997; *NARSAD Young Investigator Award* 1997-1999). Has received R01 grant funding from NIMH for his event-related potential studies of schizophrenia. Now Associate Professor, Department of Psychiatry, Pittsburgh School of Medicine, Pittsburgh, PA. (See also Bibliography of CV for first author and co-authorship on numerous abstracts, papers, & presentations.)

Supervision of Research Assistants

Most of the RA's listed below have entered either a Ph.D. program or medical school, and many have made important contributors to the research work which has been recognized by co-authorship on publications.

1984-1985	Michael Bachop	2001-2002	Valerie Rosenberg
1985-1986	Ruth Ballinger	2002-2004	Daniel Schwartz
1985-1986	Melanie Cane	2002-2004	Rachel Berman

1986-1989	Brian Marcy	2002-2005	Lisa Lucia
1988-1989	Amy Ludwig	2002-2003	Laura Wiegand
1988-1990	Virginia Penhune	2002-2003	Sara Rabbit
1989-1990	Erik Mondrow	2002-2004	Meredith Klump
1990-1992	Seth Pollak	2002-2004	Sunnie Kim
1991-1992	R. Scott Smith	2003-2004	Aaron Baer
1991-1993	Mathew Kimble	2003-2004	Sophie Woolston
1992-1993	Lloyd Smith	2003-2005	Katherine Long
1992-1993	I-han Chou	2003-2005	Erin Connor
1992-1993	Lisa Kaplan	2003-2005	Matthew Koskowski
1993-1994	Sue Law	2003-2005	Kankshi Thakur
1993-1995	Jonathan Solinger	2004-2006	Courtney Brown
1993-1996	Andrea Sherwood	2004-2006	Adam Cohen
1994-1996	Maria Karapelou	2004-2006	Laura Rosnow
1994-1996	Jay Allard	2004-2006	Georgia Bushell
1995-1996	Robert Donnino	2004-2006	Mark Dreusicke
1995-1996	Richard Van Rhoads	2004-2006	Elizabeth Lewis
1995-1996	Sarah Carrigan	2005-2006	Lillian Hsu
1995-1997	Paola Mazzoni	2005-2008	Douglas Markant
1995-2000	Iris Fischer	2006-2008	Usman Khan
1996-1997	Sare Akdag	2006-2012	Katherine Smith
1996-2001	Engeat Teh	2006-2008	Charles Davidson
1996-1998	Creola Petrescu	2006-2010	Jorge Alvarado
1996-1998	Tanya Kisler	2007-2010	Laurel Bobrow
1996-1998	Joanna Gainski	2008-2013	Padmapriya Srinivasan
1997-1998	Claire Stylianopoulos	2008-2010	Douglas Terry
1997-2000	Deirdre Farrell	2008-2010	Andrew Rausch

1998-1999	Stephanie Fraone	2008-2012	Paula Pelavin
1998-1999	Alaka Pellock	2009-2011	Katherine Hawley
1998-1999	Danielle Synderman	2009-2012	Mai-Anh Vu
1998-1999	Christopher Dodd	2009-2012	Thomas Ballinger
1998-2000	Jonathan Sutton	2009-2012	Alexander LaVenture
1998-2000	Ashley Kricun	2010-2012	Rebecca King
1999-2000	Sara Corriveau	2011-2012	Daniel McCaffrey
1999-2001	Aleksandra Ciszewski	2011-2012	Kelsey Smith
1999-2001	Christopher Allen	2010-	Talis Swisher
1999-2001	Eric Berry	2012-	Kathryn Green
1999-2001	Carlye Griggs	2012-	Michelle Giwerc
2000-2001	Lynn Stravinski	2012-	Brian Dahlben
2000-2001	Elizabeth David	2012-	Eli Fredman
2000-2002	Anita Madan	2013-2014	Charles Yergatian
2000-2002	Sarah Toner		
2001-2002	Jessica Allen		
2001-2002	Megan Fagan		
2001-2003	Magdalena Spencer		
2001-2004	Susan Demeo		
2001-2003	Hal Ersner-Hershfield		
2001-2003	Nicola Sumorok		

Summer Research Internships

1988	Melanie Cane
1989-1993	Jennifer Haimson
1990	Erik Mondrow
1991	Erik Mondrow
1994	Maaike Van Ingen
1995-1996	Claire Stylianopoulos

Summer Internships, Continued with the Stanley Scholars Program, Stanley Medical Research Institute

Dr. Shenton was selected by the Stanley Foundation to be a *Senior Scientist Mentor for the Stanley Scholars Program*. The Scholars Program, established by this Foundation, selects Senior Mentors from across North America to supervise the activities of trainees in summer research positions. Dr. Shenton was selected to be one of 27 such mentors across the US and Canada to participate in this program, which was funded from 1997 to 2004. During this 7 year period 130 students were funded, working with 44 different faculty members. This program provided a unique educational opportunity for high school students, undergraduate students, and medical students. In fact, this was the first such program to include high school students. The main goal of this program was to introduce students to hands-on experience working in a research laboratory that was focused on understanding mental illness. For most of these students, this was their first experience working in a laboratory.

<i>Year</i>	<i>Student</i>	<i>Preceptor(s)</i>
1997	Jay Allard	Cynthia Wible, Ph.D.
	Robert Anagnoson	Jill Goldstein, Ph.D.
	Sarah DeLong	Margaret Niznikiewicz, Ph.D.
	Brett Rutherford	Dean Salisbury, Ph.D.
	Tanya Sitnikova	Dean Salisbury, Ph.D.
	Paula Teixeira	Robert Greene, Ph.D., M.D.
	Matthew Wecksell	Martha Shenton, Ph.D.
	Nyasha Warren	Brian O'Donnell, Ph.D.
1998	Friederika Aceto	Heidi Gralinski, Ph.D./Stuart Hauser, M.D., Ph.D.
	Sare Akdag	Paul Nestor, Ph.D.
	Gina Clark	Philip Holzman, Ph.D./Deborah Levy, Ph.D.
	Massimo DeSantis	Yoshio Hirayasu, M.D., Ph.D./Melissa Frumin, M.D.
	Jennifer Doubilet	Robert Waldinger, M.D.
	Polina Golland	Melissa Frumin, M.D.
	Carolyn Kloek	Heidi Gralinski, Ph.D./Stuart Hauser, M.D., Ph.D.
	Briana Martino	Curtis Deutsch, Ph.D.
	Silvina Moncho	Paul Nestor, Ph.D.
	Juliana Pare-Blagoev	Cynthia Wible, Ph.D.
	Rima Saad	Lisa Najavits, M.D.
	David Sherman	Curtis Deutsch, Ph.D.
Tatiana Sitnikova	Dean Salisbury, Ph.D.	

	Shoshana Sokoloff	Jill Goldstein, Ph.D.
	Michael Ward	Larry Seidman, Ph.D.
	Alexander Wolfe	Margaret Niznikiewicz, Ph.D.
	Janos Zahajsky	Martha Shenton, Ph.D.
1999	Sarah Anh	Chandlee Dickey, M.D.
	Seema Arora	Jane Anderson, Ph.D./Dean Salisbury, Ph.D.
	Payal Bansal	James Levitt, M.D.
	Gina Clark	Philip Holzman, Ph.D./Deborah Levy, Ph.D.
	Elizabeth David	Marek Kubicki, M.D., Ph.D./Melissa Frumin, M.D.
	Elton Dean III	Jill Goldstein, Ph.D.
	Jennifer Doubilet	Robert Waldinger, M.D.
	Ana Garnecho	Dean Salisbury, Ph.D.
	S. Duke Han	Paul Nestor, Ph.D.
	Thomas Knowles	Joseph P. Coyle, M.D.
	Silvina Moncho	Paul Nestor, Ph.D.
	Jon-Paul Pepper	Margaret Niznikiewicz, Ph.D.
	Marcela Ramirez	Laverne Gugino, M.D.
	Heidi Wencel	Larry Seidman, Ph.D.
	Christopher Zoumalan	Martha Shenton, Ph.D./Ron Kikinis, M.D.
2000	Amron Bevels	Judith Ford, Ph.D.
	Elton Dean III	Jill Goldstein, Ph.D.
	Daniel Fox	Melissa Frumin, M.D.
	Michele Friedman	Margaret Niznikiewicz, Ph.D./Paul Nestor, Ph.D.
	Aaron Jackson-Bonner	Dean Salisbury, Ph.D.
	S. Duke Han	Paul Nestor, Ph.D./Margaret Niznikiewicz, Ph.D.
	Amanda Knowles	Chandlee Dickey, M.D.
	Joshua Maniscalco	Robert Waldinger, M.D.

	Eric Morrow	Laura Prager, M.D.
	Andrea Okruch	Dean Salisbury, Ph.D.
	Elizabeth Olsen	Marek Kubicki, M.D., Ph.D.
	Megan Niman	Deborah Titone, Ph.D.
	Jennifer Tobin	Robert Strecker, Ph.D.
2001	Laura Epstein	Dean Salisbury, Ph.D./Chandlee Dickey, M.D.
	Trifon Fitchorov	Marek Kubicki, M.D., Ph.D.
	Daniel Fox	Carl-Fredrik Westin, Ph.D./Melissa Frumin, M.D.
	Xiao Lao	Steve Matthysee, Ph.D.
	Natasha Gosek	Melissa Frumin, M.D.
	Aaron Strange	Robert Strecker, Ph.D.
	Laura Wiegand	Martha E. Shenton, Ph.D.
	Patrick McGann	Joseph P. Coyle, M.D.
	Erin Rand-Giovannetti	Deborah Titone, Ph.D.
	Amber Bonogofsky	Judith Ford, Ph.D.
	Caroline Connor	Phil Holzman, Ph.D.
	Daniel Fishman	Robert Waldinger, M.D.
	Patricia Sinaiko	Stuart Hauser, M.D., Ph.D./Heidi Gralinski, Ph.D.
	Terri Huh	Paul Nestor, Ph.D./Cynthia Wible, Ph.D.
	Safa Sadeghpour	Francine Benes, M.D., Ph.D.
	Carlene MacMillan	Heidi Gralinski, Ph.D./Stuart Hauser, M.D., Ph.D.
2002	Laura Epstein	Chandlee Dickey, M.D.
	Jessica Santiccioli	Margaret Niznikiewicz, Ph.D.
	Joshua Seidman	Robert Stickgold, Ph.D.
	Aaron Strong	Robert Strecker, Ph.D.
	Michael Niznikiewicz	Martha E. Shenton, Ph.D./Marek Kubicki, M.D., Ph.D.
	Erica Lee	Jill Goldstein, Ph.D.

	Mina Xu	Chandlee Dickey, M.D.
	Christopher Allen	Paul Nestor, Ph.D.
	Seth Willen	Barbara Wolfe, Ph.D./David Jimerson, M.D.
	Ethan Schechter	Larry Seidman, Ph.D.
	Lori Schwartz	Dean Salisbury, Ph.D.
	Pauline Kim	Deborah Titone, Ph.D.
	Moira Traci	Robert Waldinger, M.D.
	Patrick Thronson	Deborah Levy, Ph.D./Phil Holzman, Ph.D.
	Tanya Rinderknecht	Judith Ford, Ph.D.
	Kartik Sreenivasan	Daniel Mathalon, Ph.D., M.D.
	Carlene MacMillan	Stuart Hauser M.D., Ph.D./Heidi Gralinski, Ph.D.
	Ramy Joseph El-Khoury	Robert Strecker, Ph.D.
	Ruth Perlmutter	Kevin Spencer, Ph.D.
	Katherine Rose	Chandlee Dickey, M.D./Martha E. Shenton, Ph.D.
	Olga Valdman	Kevin Spencer, Ph.D./Paul Nestor, Ph.D.
2003	Caroline Conner	Miles Cunningham, M.D., Ph.D.
	Victoria Jo	Martha E. Shenton, Ph.D./Chandlee Dickey, M.D.
	Na Young Ji	Martha E. Shenton, Ph.D./Chandlee Dickey, M.D.
	Mina Xu	Chandlee Dickey, M.D.
	Payman Zamani	James Levitt, M.D.
	Grant Thomas-Lepore	Carl-Fredrik Westin, Ph.D.
	Jacob Albertson	Carl-Fredrik Westin, Ph.D./Martha E. Shenton, Ph.D.
	Ruth Perlmutter	Kevin Spencer, Ph.D.
	Christopher Allen	Paul Nestor, Ph.D.
	Andrea Klunder	Chandlee Dickey, M.D./Martha E. Shenton, Ph.D.
	S. Duke Han	Cynthia Wible, Ph.D.

	Amanda Rivers	Mahesh Thakker, Ph.D.
	Julie Breines	Stuart Hauser, M.D., Ph.D./Heidi Gralinski, Ph.D.
	Jessica Santiccioli	Margaret Niznikiewicz, Ph.D.
	Katrik Sreenivasan	Daniel Mathalon, Ph.D., M.D.
	Charles Kochan, III	Judith Ford, Ph.D.
	Alexa Irish	Larry Seidman, Ph.D.
	Andrea Roe	Deborah Levy, Ph.D./Philip Holzman, Ph.D.
	Tad Brunye	Deborah Yurgelun-Todd, Ph.D.
	Julia Gefter	Robert Waldinger, M.D.
2004	Jacob Albertson	Carl-Fredrik Westin, Ph.D.
	Alexa Irish	Chandlee Dickey, M.D.
	Peter Epstein	Chandlee Dickey, M.D./Martha Shenton, Ph.D.
	Michael Niznikiewicz	Kevin Spencer, Ph.D.
	Dovid Greene	Chandlee Dickey, M.D.
	Charles Kochan, III	Judith Ford, Ph.D.
	Katrik Sreenivasan	Daniel Mathalon, Ph.D., M.D.
	Ruth Perlmutter	Kevin Spencer, Ph.D.
	Christopher Allen	Margaret Niznikiewicz, Ph.D.
	Ankit Patel	Mahesh Thakkar, Ph.D.
	Christopher Harte	Deborah Levy, Ph.D.
	Joshua Seidman	Larry Seidman, Ph.D.
	Michael Schiller	Larry Seidman, Ph.D.
	Jenna Houranieh	Margaret Niznikiewicz, Ph.D.
	Lonnie Spinelli	Robert Waldinger, M.D.
	Sarah Erich	Stuart Hauser, M.D., Ph.D./Heidi Baker-Gralinski, Ph.D.
	KC LeGrand Collins	Dean Salisbury, Ph.D.

	Mukund Sureshababu	Dean Salisbury, Ph.D.
2005	Alexa Irish	Martha E. Shenton, Ph.D.
	Michael Niznikiewicz	Paul Nestor, Ph.D.
<i>Summer Research Internships, and Research Internships, following end of Stanley Fellowships</i>		
2005	Christopher Webber	Martha E. Shenton, Ph.D.(Minority supplement to R01)
	Anjuli Singh	Chandlee Dickey, M.D. (Undergraduate Tufts University.)
2006	James Fish	Martha E. Shenton, Ph.D./KhangUk Lee, M.D. (High School Student from Cambridge Ridge and Latin, and the Program Success, HMS)
	Matthew Isabel	Martha E. Shenton, Ph.D. (High School Student from the Brooks School)
	Jasmine Rollins	Marek Kubicki, M.D., Ph.D./Martha E. Shenton, Ph.D. (High School Student from the Human Resources Summer Internship Program, BWH)
	Sophie Norstrom	Motoiaki Nakamura, M.D./Martha E. Shenton, Ph.D.(High School Student from Norway)
2007	Douglas Terry	Marek Kubicki, M.D., Ph.D./Martha E. Shenton, Ph.D. (Undergraduate at Tufts University)
	Jonathan Hendrickson	Marek Kubicki, M.D., Ph.D./Martha E. Shenton, Ph.D. (High School Student from the Brooks School)
	Jacqueline Goldberg	James Levitt, M.D./Martha E. Shenton, Ph.D. (Medical Student from Upstate Medical University College of Medicine)
	Morgan Circa	James Levitt, M.D./Martha E. Shenton, Ph.D. (Undergraduate, West Virginia University)
	John Chakerian	Chandlee Dickey, M.D./Martha E. Shenton, Ph.D. (Undergraduate, Stanford University)
	Melissa Mendoza	Martha E. Shenton, Ph.D. (High School Student from the Windsor School and the Human Resources Summer Internship Program, BWH)
	Francois Budin	Sylvain Bouix, Ph.D. (Graduate student in Computer Science and Engineering, University of Lyon, France)
2008	Rebecca King	Thomas Whitford, Ph.D. (Undergraduate from the University of Rochester, Rochester, NY)

	Michelle Chiu	Zora Kikinis, Ph.D. (High School Student from the Brooks School)
	Eric Melonoka	Sylvain Bouix, Ph.D. and Marek Kubicki, M.D., Ph.D. (Undergraduate from Brigham Young University)
	Jalpa Patel	Sylvain Bouix, Ph.D. (Master's student at Wayne State University)
	James Malcolm	Yogesth Rathi, Ph.D. (3 rd year graduate student in Computer Science and Electrical Engineering, Georgia Tech)
2009	Rebecca King	Thomas Whitford, Ph.D. (Undergraduate from the University of Rochester, Rochester, NY)
	Eric Melonokas	Sylvain Bouix, Ph.D. and Marek Kubicki, M.D., Ph.D. (Undergraduate from Brigham Young University)
	Priyanka Chilakamarri	Jason Schneiderman, Ph.D. (Undergraduate from Brandeis University)
	Sam Burnim	Zora Kikinis, Ph.D. (High School Student The Brooks School)
	Tali Swisher	Thomas Whitford, Ph.D. and Marek Kubicki, M.D., Ph.D. (Undergraduate Vassar College)
	Sam Atwood	Jason Schneiderman, Ph.D. (B.S. in 2008 from Skidmore College)
	Po-Chang Hsu	Martha E. Shenton, Ph.D. (Master's Thesis Candidate, Harvard Extension Division, Neurobiology)
	Khalima Bolden	Martha E. Shenton, Ph.D. and Jason Schneiderman, Ph.D. (Master's Candidate, Boston University, Department of Psychology)
2010	Khalima Bolden	Martha E. Shenton, Ph.D. and Jason Schneiderman, Ph.D. (Master's Candidate, Boston University, Department of Psychology)
	Priyanka Chilakamarri	Jason Schneiderman, Ph.D. (Undergraduate Brandeis University – 2011)
	Andrew Hyatt	Zora Kikinis, Ph.D. (Undergraduate Middlebury College -2012)
	Jacob Besen	Tom Whitford, Ph.D. (High School Student – Brooks School)
	Edward Vargas	Sylvain Bouix, Ph.D. (High School Student – Herricks Senior High School) (via Research Science Institute)
	Borah Kim	Zora Kikinis, Ph.D. and Yogesh Rathi, Ph.D. (Resident in Psychiatry, Seoul National University College of Medicine, South Korea)
	Junhee Lee	Sang-Hyuk Lee, M.D., Ph.D. (Medical Student, Seoul National University College of Medicine, South Korea)

2011	Jennifer Anderson	Marek Kubicki, M.D, Ph.D. (Undergraduate Emmanuel College – 2011)
	David King	Sylvain Bouix, Ph.D. (Undergraduate University of Rochester - 2014)
	Andre Michalowski	Marek Kubicki, M.D., Ph.D. (Undergraduate University of Massachusetts - Amherst - 2014)
	Danielle Pulton	Jennifer Fitzsimmons, M.D. (Undergraduate Brandeis University – 2012)
	Mariana Shirokova	Jim Levitt, M.D. (Undergraduate University of Massachusetts – Amherst – 2013)
	Felipe Hernandez	Sylvain Bouix, Ph.D. (MIT RSI program - from Louisiana School for Math, Science, and the Arts - 2012)
	Shizhi (Simon) Liang	Zora Kikinis, Ph.D. (Brooks School - 2012)
	Jean Alper	Mai-Anh Vu and James Levitt, M.D. (Emmanuel College – 2012)
	Christian Baumgartner	Yogesh Rathi, Ph.D. (Master’s candidate ETH, Zurich, Switzerland)
	Sung Joon Cho	Zora Kikinis, Ph.D. (M.D., M.S., Ph.D. candidate CHA University Medical School, Seoul, South Korea)
	Marc Muehlmann	Inga Koerte, M.D. (Medical Student Ludwig-Maximillian-University, Munich, Germany)
	Jessica Zuo	Martha Shenton, Ph.D./Marek Kubicki, M.D., Ph.D. (Harvard College, 2013)
	Neil Houston	James Levitt, M.D. (Roanoke College, B.A.)
2012	Jessica Zuo	Martha Shenton, Ph.D./Marek Kubicki, M.D., Ph.D. (Harvard College, 2013)
	Marc Muehlmann	Inga Koerte, M.D. (Medical Student Ludwig-Maximillian-University, Munich, Germany)
	David Kaufmann	Inga Koerte, M.D. (Medical Student Ludwig-Maximillian-University, Munich, Germany)
	Elizabeth Hartl	Inga Koerte, M.D. (Medical Student Ludwig-Maximillian-University, Munich, Germany)
	Andre Michalowski	Marek Kubicki, M.D., Ph.D. (Undergraduate University of Massachusetts – Amherst – 2014)
	Chandler Dunn	Zora Kikinis, Ph.D., and Jennifer Fitzsimmons, M.D. (High School Student, Brooks School)
	Sindy Tan	Sylvain Bouix, Ph.D. (High School Student – Hunter College High School – 2013)(via Research Science Institute-MIT)

	Mucahid Sarisoy	James Levitt (Medical Student – Marmara University, School of Medicine, Istanbul, Turkey)
	Yilmaz Satirer	Jennifer Fitzsimmons and Martha Shenton (Medical Student – Hacettepe University School of Medicine, Ankara, Turkey; 621 rank out of 1.8 million for university entrance exam)
	Hitomi Takahashi	Taiga Hosokawa, M.D., Ph.D. (Simmons College, A.B., 2012 magna cum laude)
	Nora Karara	Inga Koerte, M.D. (Medical Student at the University of Bonn, Germany)
	Kang-Ik Cho	Martha Shenton, Ph.D. (Observer, BSc in Neuroscience and Mental Health in Biomedical Sciences, Imperial College London, United Kingdom, 2010, and working in Jun Soo Kwon’s Laboratory at Seoul University, South Korea)
	Jonathan Duskin	Martha Shenton, Ph.D. (undergraduate in Neuroscience and Philosophy, internship/course credit from Boston University)
	Khatab Yacoub	Martha Shenton, Ph.D., Brian Dahlben, M.S., Marek Kubicki, M.D., Ph.D. (Post-BA University of Texas)
	Nitika Anand	Martha Shenton, Ph.D. (undergraduate Brandeis University class of 2013)
2013	Michael Mayinger	Inga Koerte, M.D. (medical student at Ludwig-Maximilian-University, Munich, Germany)
	Jonathan Duskin	Martha Shenton, Ph.D. (undergraduate in Neuroscience and Philosophy, internship/course credit from Boston University)
	Tommy Tang	Zora Kikinis, Ph.D. (Brooks Student, class of 2014)
	Phoebe Cai	Sylvain Bouix, Ph.D. (MIT RSI program – Long Island, NY, class of 2014)
	Halen Baker	Marek Kubicki, M.D., Ph.D. (undergraduate Boston University class of 2014)
	Marcia Frimpong	Martha Shenton, Ph.D. (undergraduate Wellesley College class of 2015)
	Melissa Coronado	Martha Shenton, Ph.D., Marek Kubicki, M.D., Ph.D. (undergraduate senior honors thesis student Harvard College, class of 2014)
	Caroline Loy	Zora Kikinis, Ph.D. (undergraduate Cornell University, class of 2015)
	Daniel Daniluk	Marek Kubicki, M.D., Ph.D. (undergraduate UMASS, Amherst, class of 2015)

Regional, National, and International Contributions:

Invited Presentations (primary or co-author)

- 1978 Paper presented on Patient Report of Problems and Staff Attention to Patient Problems as Predictors of Treatment Outcome, at *the 131st Annual Meeting of the American Psychiatric Association* Panel Discussion of Compliance with Recommended Follow-up Treatment, Atlanta, GA.
- Paper presented on The Problem Oriented Treatment Record, in Symposium on Advances in Empirical Assessment in Clinical Settings, *American Psychology Association*, Toronto, Ontario, Canada.
- 1979 Paper presented on The Assessment of Patient Outcome Based on the Problem Oriented Record, at *the 132nd Annual Meeting of the American Psychiatric Association* Panel Discussion on the Problem Oriented System in Psychiatry, Chicago, IL.
- 1981 Invited speaker; Thought Disorder in Psychotic Patients, presented at *FolchiPi Lecture Series*, Mailman Research Center, McLean Hospital, Belmont, MA.
- Invited speaker; Discriminability of Thought Disorder in Psychotic Patients, presented at *Psychopathology Lecture Series*. William James Hall, Harvard University, Cambridge, MA.
- Paper presented on Diagnostic Discriminability of Thought Disorder in Mania and Schizophrenia, *American Psychological Association*, Washington, DC.
- 1985 Paper presented on P300 and Spectral Topography in Schizophrenics and Normals, *IVth World Congress of Biological Psychiatry*, Philadelphia, PA.
- 1987 Paper presented on P300 Positive Symptom Correlates in Schizophrenia at *the 140th Annual Meeting of the American Psychiatric Association Symposia* Session, Chicago, IL
- 1989 Paper presented on P300 and Schizophrenia at the Topographical Mapping of Brain Electrical Activity: Neuropsychiatric and Neuropsychological Applications, A Symposium, *The Institute of Living*, Hartford, CT.
- Paper presented on Late Auditory Event-Related Potentials and an Excitotoxicity Model of Pathology in Schizophrenia, at *Department of Veterans Affairs Research Symposium on Schizophrenia*, Denver, CO.
- 1990 Invited speaker; Brain Imaging Techniques in Schizophrenia, Grand Rounds Presentation, *Department of Psychiatry, Burbank Hospital*, Fitchburg, MA.
- Paper presented, on Computer Assisted Volumetric Measurements of Brain and CSF Spaces in Schizophrenics and Normal Control Subjects using MRI, presented at the *Fifth Annual Meeting of the Society for Research in Psychopathology*, Boulder, CO.
- 1991 Invited speaker; Imaging Studies in Schizophrenia: Update, presented at the *Massachusetts Mental Health Center Psychopharmacology Lecture Series*, Boston, MA.
- Paper presented on P3 Amplitude in Schizophrenic Patients and Their Family Members, *Biological Psychiatry*.
- Paper presented on Premorbid Adjustment in Schizophrenia, *Biological Psychiatry*.

- Paper presented on Does the Attentional Asymmetry in Schizophrenia Reflect a Dysfunction in the Left Hemisphere Inhibitory Operations? *Biological Psychiatry*.
- 1992 Paper presented on Temporal Lobe Abnormalities in Schizophrenia are Related to An Increase in Thought Disorder: A computerized, quantitative MRI study, *Biological Psychiatry*.
- Paper presented on Auditory P300 Amplitude and Left Posterior Superior Temporal Gyrus Volume Reduction in Schizophrenia, *Biological Psychiatry*.
- Paper presented on P300 Asymmetries and Temporal Lobe Pathology, at Symposium on Psychosis and the Temporal Lobe, *145th Annual Meeting of the American Psychiatric Association*.
- Invited speaker; Temporal Lobe Structural Abnormalities in Schizophrenia, presented at the “*Scientific Symposium on Psychopathology: The Evolving Science of Mental Disorder*,” to honor Professor Philip Holzman, American Academy of Arts & Sciences, Cambridge, MA.
- Paper presented on P300 Asymmetry in Schizophrenia: Association with Left Posterior Superior Temporal Gyrus Volume Reduction. Symposium on ERP aspects of schizophrenia, *EPIC X Congress*, Budapest, Hungary.
- 1993 Paper presented on Temporal Lobe Abnormalities in Schizophrenia, *at the International Congress on Schizophrenia Research*, Colorado Springs, CO.
- Paper presented on Alterations in Left Temporal and Temporal Lobe Gyral Pattern in Schizophrenia, *Biological Psychiatry*, San Francisco, CA.
- Paper presented on Temporal Lobe: MRI, ERP, and Clinical Pathology, in symposium: “Psychoses: Structure and function in three brain systems,” *at the 146th Annual Meeting of the American Psychiatric Association*, San Francisco, CA.
- Paper presented on Clinical Symptoms and Temporal Lobe MR Volume Measures in Schizophrenia, at the Panel Group: “Dopamine and Cognition: The Schizophrenia Connection,” *32nd Annual Meeting of the American College of Neuropsychopharmacology*, Honolulu, Hawaii.
- Paper presented Temporal Lobe Volume Reduction and Thought Disorder in Schizophrenia, at the Panel Group: “Models of Psychosis: Pathophysiology,” *32nd Annual Meeting of the American College of Neuropsychopharmacology*, Honolulu, Hawaii.
- 1994 Invited speaker; Imaging Studies: Relationship with Symptomatology, at “New Developments in Schizophrenia,” University of Utrecht, The Netherlands.
- Paper presented on 3D Warping of Digital Anatomic Atlas onto Patient's Data Sets, at the *12th Annual Meeting of the Society for Magnetic Resonance Imaging*, Dallas, TX.
- Paper presented on the Superior Temporal Gyrus and Thought Disorder, presented in the symposium session, “Schizophrenia: Imaging and a new pathophysiology,” the sesquicentennial meeting of the *147th Annual Meeting of the American Psychiatric Association*, Philadelphia, PA.
- Paper presented on Warp Speed: MRI Windows on the Brain and Behavior, in the symposium session, “Schizophrenia: Imaging and a new pathophysiology,” the sesquicentennial meeting of the *147th Annual Meeting of the American Psychiatric Association*, Philadelphia, PA.

Paper presented on 3D Surface Renderings of the Planum Temporale in Schizophrenia: A Quantitative MRI Study, at the ninth annual meeting of the *Society for Research in Psychopathology*, Miami FL.

Invited speaker; Temporal Lobe Findings in Schizophrenia, at *the Massachusetts Mental Health Center Psychopharmacology Lecture Series*, Boston, MA.

Paper presented on The Frontal Lobe in Schizophrenia: ERP, MRI, and Neuropsychological Data, at the Symposia, Converging Perspectives on Frontal Lobe, at the *Society for Psychophysiological Research*, Atlanta, GA.

Paper presented on Does P3 Topography Discriminate Schizophrenic Psychosis from Affective Psychosis? Presented at *the 24th Annual Meeting of the Society for Neuroscience*, Miami FL.

Paper presented on An ERP Study of P3A to Novel Sounds and P3B to Target Tones in Schizophrenia, presented at *the 24th Annual Meeting of the Society for Neuroscience*, Miami FL.

Paper presented on Parcellation of Human Prefrontal Cortex Using High Resolution MRI: A Volumetric Study of Schizophrenic and Control Subjects, presented at *the 24th Annual Meeting of the Society for Neuroscience*, Miami, FL.

1995 Invited speaker; Neuroimaging Studies in Schizophrenia, *Okinawa Psychiatric Association*, University of the Ryukyus, Nishihara Town, Okinawa, Japan.

Invited speaker; Temporal Lobe Findings in Schizophrenia, *Grand Rounds Presentation*, Department of Psychiatry, University of Alabama, Birmingham, AL.

Paper presented on Temporal Lobe Dysfunction and Schizotypal Personality Disorder, presented in the Symposium session, "Brain structure and function in the schizophrenia spectrum," *148th Annual Meeting of the American Psychiatric Association*, Miami, FL.

Paper presented on Schizotypal Disorder: Cognitive, Behavioral, and Neuropathological Indicators, *Biological Psychiatry*, Miami, FL.

Invited speaker; The Relationship Between Temporal Lobe Abnormalities and Schizophrenia, presented at the *Behavioral Neurology Unit, Beth Israel Hospital*, Boston, MA.

Paper presented on Neurologic, Neurophysiologic, and Neuroanatomic Abnormalities in Chronic, Combat-Related PTSD, presentation within the symposium, "Neurobiological Advances in PTSD," *2nd International Conference on New Directions in Affective Disorders*, Jerusalem, Israel.

Invited speaker; Anatomical Abnormalities in the Temporal Lobe in Schizophrenia, presented in symposia on neuroimaging and schizophrenia, *8th Annual Congress of European College of Neuropsychopharmacology*, Venice, Italy.

Paper presented on Abnormal P3 Topography in First Episode Schizophrenia-Like Psychosis, *The 35th Annual Meeting of the Society for Psychophysiological Research*, Toronto, Ontario, Canada.

Paper presented on the Harvard Brain Atlas: A Teaching and Visualization Tool, at the Symposium on Biomedical Visualization. *IEEE Visualization Conference 1995*, Atlanta, GA.

Invited speaker; Neuroimaging in Schizophrenia, *Mental Health and Behavioral Sciences Council, Clinical Case Conference Schedule, Department of Psychiatry, VAMC-Brockton*, Harvard Medical School, Brockton, MA.

Paper presented on A Neural Circuit Model of Schizophrenic Pathology: Failure of Recurrent Inhibition, presented as part of the panel session, "The Neurophysiology of Abnormal Function in Schizophrenia Spectrum: Risk and Protective Factors", 34th Annual Meeting of the American College of Neuropsychopharmacology, San Juan, Puerto Rico.

1996 Invited speaker; Neurocognitive Correlates of Schizotypal Personality Disorder, *Society for Research in Psychopathology*, Atlanta, GA.

Invited speaker; MRI and ERP Findings in Schizophrenia and Schizophrenia Spectrum Disorders, *Colloquium Series: Psychology Department, Harvard University*, Cambridge, MA.

Invited speaker; Structural, Neurophysiological, and Clinical Indicators of Schizophrenia, *Grand Rounds Presentation, Beth Israel Hospital Psychiatry Grand Rounds*, Boston, MA.

Paper presented on Schizophrenia Disorders: Neurodevelopmental and Onset Vulnerability Factors, *Biological Psychiatry*.

Paper presented on MRI Structural and Electrophysiological/Neuropsychological Functional Correlates of Schizotypal Personality Disorder, 35th Annual Meeting of the American College of Neuropsychopharmacology, San Juan, Puerto Rico.

1997 Invited speaker; Neuroimaging Studies in Schizophrenia and Schizophrenia Spectrum Disorders, *Grand Rounds Presentation at the Massachusetts General Hospital Psychiatry Grand Rounds*, Boston, MA.

Invited speaker; *Workshop on Neuroimaging, Harvard Department of Psychiatry Neuroimaging Day, McLean Hospital*, Belmont, MA.

Paper presented on Temporal P300 Asymmetry in First Episode Schizophrenia, *International Congress of Schizophrenia Research*, Colorado Springs, CO.

Paper presented on schizophrenia: MRI, Electrophysiological and Cellular Data Bearing on Some Current Issues and Controversies, *Biological Psychiatry*, San Diego, CA.

Paper presented on Morphologic and Cognitive Indicators of Schizotypal Personality Disorder, *Biological Psychiatry*, San Diego, CA.

Paper presented on MRI and ERP Abnormalities in First Episode Psychosis, *Biological Psychiatry*, San Diego, CA.

Paper presented on Left Temporal P3 Reductions in Chronic and First Episode Schizophrenia, *Biological Psychiatry*, San Diego, CA.

Paper presented on Abnormal ERP Activity Despite Normal Performance on Homographs in Schizophrenia, *Biological Psychiatry*, San Diego, CA.

Invited Speaker; MRI Findings in Schizophrenia, *Department of Psychiatry, University of North Carolina*, Chapel Hill, NC.

Invited Speaker; Clinical and Temporal Lobe MRI Findings in Schizophrenia, *Department of Psychiatry, Grand Rounds Presentation, University of California*, Davis, CA.

Paper presented on Brain Imaging in Psychiatric Disorders, the XVI World Congress of Neurology, Buenos Aires, Argentina.

- 1998 Invited speaker; MRI as a Window into the Brain, *Neurology Residency Training Program (BWH, MGH, West Roxbury/Brockton VAMC), Department of Neurology, Harvard Medical School.*
- Invited speaker; MRI, ERP Findings in Schizophrenia and Schizophrenia Spectrum Disorders, *Colloquium Series: Psychology Department, Harvard University, Cambridge, MA.*
- Invited speaker, Zubin Memorial Award for Research in Psychopathology; MRI, ERP, and Clinical Indicators of Schizophrenia, *Grand Rounds Presentation, Columbia University College of Physicians and Surgeons, New York State Psychiatric Institute, New York, NY.*
- Invited Speaker; Workshop; Application of Imaging and Image Processing Tools to the Investigation of Schizophrenia. *Medical Image Computing and Computer Assisted Intervention (MICCAI), MIT, Cambridge, MA.*
- 1999 Paper presented on Shape Differences in the Hippocampus in Schizophrenia, *at the 152nd Annual Meeting of the American Psychiatric Association, Washington, DC.*
- Paper presented on progressive MRI volume change in schizophrenia, *at the 152nd Annual Meeting of the American Psychiatric Association, Washington, DC.*
- Paper presented on Caudate Volume in Schizotypal Personality Disorder: An MRI Study in Neuroleptic-Naive Subjects, *at the 152nd Annual Meeting of the American Psychiatric Association, Washington, DC.*
- Invited speaker; MRI Findings in Schizophrenia, *Grand Rounds Presentation, Department of Radiology, Brigham and Women's Hospital, Harvard Medical School, Boston, MA.*
- Invited speaker; MRI Findings in Schizophrenia, *Grand Rounds Presentation, Behavioral Neurology, Brigham and Women's Hospital, Harvard Medical School, Boston, MA.*
- 2000 Invited Speaker; *Career Opportunities in Academia, presentation to PGY-III and IV Residents in the Residency Training Program, Department of Psychiatry, Brockton-VAMC, Harvard Medical School.*
- Invited Speaker; MRI Findings in Schizophrenia and Schizotypal Personality Disorder, *Seminar Series, Residency Training Program, Department of Psychiatry, Brockton-VAMC, Harvard Medical School.*
- Invited Speaker; MR and MR Diffusion Imaging Findings in Schizophrenia, *Memory Disorders Center, Veterans Affairs Medical Center, Boston, MA.*
- Invited Speaker; Diffusion Imaging as a Technique for Evaluating Disconnections in the Brain, *Memory Disorders Center, Veterans Affairs Medical Center, Boston, MA.*
- Paper presented on Reduced Left Heschl's Gyrus Volume in Schizotypal Personality Disorder, *Biological Psychiatry, Chicago, IL.*
- Paper presented on the Uncinate Fasciculus in Schizophrenia: A Diffusion Tensor Study, *at the 153rd Annual Meeting of the American Psychiatric Association, Chicago, IL.*
- Paper presented on White Matter Abnormalities in Schizophrenia, *at the 153rd Annual Meeting of the American Psychiatric Association, Chicago, IL.*
- Paper presented on Schizophrenia: Progressive Prefrontal Gray Matter Changes, *at the 153rd Annual Meeting of the American Psychiatric Association, Chicago, IL.*

Invited Speaker, Neuroimaging and Psychiatry, *Seminar Series, Residency Training Program, Department of Psychiatry, VA Boston Healthcare System, Brockton Division, Harvard Medical School.*

Paper presented on Uncinate fasciculus in schizophrenia: A diffusion tensor study, at the *153rd Annual Meeting of the American Psychiatric Association, Chicago, IL*

Paper presented on the Cingulum Bundle in Schizophrenia Using Diffusion Tensor Imaging. *RSNA 86th Scientific Assembly and Annual Meeting, Chicago, IL.*

2001 Paper presented on Disruption of the Integrity within the Cingulum Bundle in Schizophrenic Subjects: MR Diffusion Tensor Study, at the *VIIIth International Congress of Schizophrenia Research, Whistler's Mountain, British Columbia, Canada.*

Paper presented on Fusiform Gyrus Volume Reduction in First-Episode Schizophrenia, at the *154th Annual Meeting of the American Psychiatric Association, Chicago, IL.*

Paper presented on The Neurobiology of Schizotypal Personality Disorder, at *Biological Psychiatry, New Orleans, LA.*

Invited Speaker: Grand Rounds Presentation, The Neurobiology of Schizotypal Personality Disorder, *Psychopharmacology Lecture Series, Massachusetts Mental Health Center, Department of Psychiatry, Harvard Medical School, Boston, MA.*

2002 Invited Speaker; Grand Rounds Presentation, Neurophysiological, Neuroimaging, Cognitive, and Clinical Aspects of Schizotypal Personality Disorder, *University of Massachusetts, Department of Psychiatry, Worcester, MA.*

Workshop, How Does Studying Schizotypal Personality Disorder Inform Us About Schizophrenia? *Biological Psychiatry, Philadelphia, PA.*

Symposium, Post-Onset Progression of Gray and White Matter Abnormalities and Functional Changes in Schizophrenia. *Biological Psychiatry, Philadelphia, PA.*

Invited Speaker; Grand Rounds Presentation, The Neurobiology of Schizotypal Personality Disorder; *Department of Psychiatry, Tufts University School of Medicine, Boston, MA.*

2003 Invited Speaker; Grand Rounds Presentation, The Neurobiology of Schizotypal Personality Disorder; *Department of Psychiatry, Dartmouth School of Medicine, Hanover, NH.*

Invited Speaker; *Career Opportunities in Academia, presentation to PGY-II and III Residents, Residency Training Program, Department of Psychiatry, Brockton-VAMC, Harvard Medical School.*

2004 Invited Speaker; Grand Rounds Presentation, Cognitive, Event-Related Potential, and MRI Findings in Schizotypal Personality Disorder; *Neuroscience Series, Department of Psychiatry, Neurology, and Neurosurgery, Massachusetts General Hospital, Harvard Medical School, Boston, MA.*

Paper presented on White matter integrity in schizophrenia- DTI and MTR voxel-wise analysis at the *Winter Workshop in Schizophrenia, Davos, Switzerland.*

Paper presented in Symposium, Progressive decrease of superior temporal gyrus volume in first-episode schizophrenia; *2004 International Congress of Biological Psychiatry, February 13, 2004, Sydney, Australia.*

Paper presented in Symposium, P300 ERP and MRI asymmetry in first episode schizophrenia; 2004 *International Congress of Biological Psychiatry*, February 13, 2004, Sydney, Australia.

Paper presented in Symposium, Mismatch negativity; a possible ERP and fMRI index of post onset progression of brain changes in schizophrenia. 2004 *International Congress of Biological Psychiatry*, February 13, 2004, Sydney, Australia.

Paper presented in Symposium, ERP and structural MR correlates of automatic and controlled attention in schizophrenia. 2004 *International Congress of Biological Psychiatry*, February 13, 2004, Sydney, Australia.

Invited Speaker; Schizotypal Personality Disorder; Developmental Neuroscience Course, *Harvard Child Psychiatry Training Program*, presentation to second year residents, Children's Hospital, Harvard Medical School.

Invited Speaker; Grand Rounds Presentation entitled "Schizotypal Personality Disorder," *Braindance Awards for Student Research on Schizophrenia and the Brain*, The Schizophrenia Research Center and the Olin Neuropsychiatry Research Center at The Institute of Living, Hartford, CT, April 7, 2004.

Invited Speaker, Symposium on The Midline as a Developmental Field and Its Relationship to Dymorphogenesis in Psychotic Illness, presentation entitled "Midline Cavum Septi Pellucidi Abnormalities, Hippocampal Shape Abnormalities, and Diffusion Tensor Corpus Callosum Asymmetry Abnormalities in Schizophrenia." *XXIVth CINP Congress* (June 20-24, 2004), Palais des Congres, Porte Maillot, Paris, France, June 23, 2004.

Paper presentation: DTI findings in schizophrenia. *DTI Workshop, New York Academy of Sciences*, New York, NY, August 29, 2004.

Paper presented in Panel Session on Face to Face: Face Processing Health and Schizophrenia, the *43rd Annual Meeting of the American College of Neuropsychopharmacology*, Fusiform Gyrus Volume Reduction and Altered Face Processing in Schizophrenia, December, 2004, San Juan, Puerto Rico.

2005

Paper presented entitled *In Vivo* Neuroimaging Data in Support of Auditory Processing Abnormalities in Schizophrenia, at the Symposium on Top-Down versus Bottom-Up: The Role of

Feedforward and Feedback in Auditory Processing Abnormalities in Schizophrenia, at the *60th Annual Meeting of Biological Psychiatry*, May 19, Atlanta, GA.

Paper presented in Symposia on Understanding Anxiety: Advances in its Neurobiological Basis and Treatment Implications. Paper entitled: Structural and Functional and Neuroimaging Studies of PTSD. *The 8th World Congress of Biological Psychiatry*, June 30, 2005, Vienna, Austria.

Paper presented in Symposia on Bases for Change Detection vs. Controlled Attention: Thresholds of Consciousness in Schizophrenia. Paper entitled: MMN: A Probe for Auditory Cortex Abnormalities in Schizophrenia. *The 8th World Congress of Biological Psychiatry*, July 1, 2005, Vienna, Austria.

Paper presented in Symposia on Neurobiological Mechanisms Underlying Susceptibility to Schizophrenia. Paper entitled: Progressive MRI and ERP Deficits After Schizophrenia Onset. *The 8th World Congress of Biological Psychiatry*, June 30, 2005, Vienna, Austria.

Chair of Symposia on The Application of Diffusion Tensor Magnetic Resonance Imaging to Understand Brain Abnormalities in Schizophrenia. *The 8th World Congress of Biological Psychiatry*, July 2, 2005, Vienna, Austria.

Paper presented in Symposia on The Application of Diffusion Tensor Magnetic Resonance Imaging to Understand Brain Abnormalities in Schizophrenia. Paper entitled: Anatomical Disconnection in Schizophrenia: Evidence from Diffusion Tensor Imaging. *The 8th World Congress of Biological Psychiatry*, July 2, 2005, Vienna, Austria.

Invited speaker, *Iniciativa associada ao VIII Congresso Galaico Português de PsicoPedagogia*, University of Minho, Braga, Portugal, Neurobiology of Schizotypal Personality Disorder, July 5, 2005.

2006

Paper presented at *the 13th Biennial Winter Workshop on Schizophrenia Research*, Davos, Switzerland, as part of a session entitled “What separates brain structure in bipolar disorder from that in schizophrenia. Paper entitled: Neocortical gray matter volume in first episode schizophrenia and first episode affective psychosis: A cross-sectional and longitudinal MRI study. February 4, 2006.

Invited Speaker, Clinical Psychopharmacological Institute, *American Psychiatric Nurses Association*, Paper entitled: Neurobiology of Schizotypal Personality Disorder. June 24, 2006.

Paper presented at *Human Brain Mapping*, Florence, Italy, entitled: Executive attentional network-functional activation and anatomical integrity in schizophrenia, June 11-15, 2006.

Paper presented at *Human Brain Mapping*, Florence, Italy, entitled: Regionally specific orbitofrontal volume deficit and sulcal pattern alteration in schizophrenia and volumetric association with the Iowa Gambling Task, June 11-15, 2006.

Invited Speaker, *International Postgraduate Programme in Life and Health Sciences on Imaging in Neuropsychiatric Research*, University of Minho, Braga, Portugal, Diffusion Tensor Imaging Applied to Schizophrenia: A New Technique for Exploring White Matter Abnormalities, September 12, 2006, Braga, Portugal.

Invited Speaker, *International Postgraduate Programme in Life and Health Sciences on Imaging in Neuropsychiatric Research*, University of Minho, Braga, Portugal, ERP, MRI, DTI, and Cognitive Abnormalities in Schizotypal Personality Disorder, September 12, 2006.

Invited Speaker: “Neurobiology of schizotypal personality disorder, new findings”, Martinos Center for Biomedical Imaging, Department of Psychiatry, Massachusetts General Hospital, November 8, 2006, Boston, MA.

2007

Discussant for “DTI Update,” all hands meeting of the National Alliance for Medical Imaging and Computing, Salt Lake City, Utah, January 11, 2007.

Talk given to Residents in the Longwood Residency Training Program (PGY2) on “Neuroimaging Techniques Applied to Neuropsychiatric Disorders,” March 7, 2007, Boston, MA.

Talk given to Residents in the Longwood Residency Training Program (PGY2) on “Endophenotypic markers of psychiatric disorders: How to define a reasonable one,” March 14, 2007, Boston, MA.

Invited Speaker, “Longitudinal diffusion tensor imaging (DTI) of white matter changes in schizophrenia,” *International Congress of Schizophrenia Research*, Colorado Springs, CO, March 31, 2007.

Chair, Symposium on “Endophenotypic Markers in Schizophrenia,” *International Congress of Schizophrenia Research*, Colorado Springs, CO, March 30, 2007.

Invited speaker, Brigham and Women's Hospital, Biomedical Research Institute, Imaging Program Seminar Series. "Neuroimaging Applications to Psychiatric Disorders," June 5, 2007.

Invited Speaker, "DTI findings in schizophrenia", Department of Psychiatry, University of Toronto School of Medicine, Toronto, Canada, June 19, 2007.

Oral Presentation, "Altered Orbitofrontal Sulcogyral Pattern and Region-Specific Orbitofrontal Volume Deficit in Schizophrenia." Presented at the *37th Annual Meeting of Society for Neuroscience*, November 4, 2007, San Diego, California.

Oral Presentation, "Altered Orbitofrontal Sulco-Gyral Pattern in Schizophrenia." *International Congress on Schizophrenia Research*, March 30, 2007, Colorado Springs, Colorado.

2008

Oral Presentation, "Disease Specific Alteration of Orbitofrontal Sulcogyral Pattern in First Episode Schizophrenia." *1st Schizophrenia International Research Society Conference*, June 23, 2008, Venice, Italy.

Oral Presentation, "Neocortical Gray Matter Volume in First Episode Schizophrenia and First Episode Affective Psychosis: A Cross-sectional and Longitudinal MRI Study." *3rd Annual Meeting of Japanese Society of Schizophrenia Research*, March 14, 2008, Tokyo, Japan.

Oral Presentation, "Altered Orbitofrontal Sulcogyral Pattern and Region-Specific Orbitofrontal Volume Deficit in Schizophrenia." *3rd Annual Meeting of Japanese Society of Schizophrenia Research*, March 14, 2008, Tokyo, Japan.

Oral Presentation, "Orbitofrontal Structural Alterations and Social Disturbance in Schizophrenia." Symposium Presentation at 13th Pacific Rim College of Psychiatrists Scientific Meeting (PRCP), November 2, 2008, Tokyo, Japan.

Invited speaker, "MRI Findings in Schizophrenia," *Program in Biomedical Neuroscience Distinguished Lecture Series*, Department of Pharmacology and Experimental Therapeutics, Boston University School of Medicine, January 18, 2008, Boston, MA.

Talk given to Residents in the *Longwood Residency Training Program in Psychiatry* (PGY2) "Neuroimaging Findings in Schizophrenia," January 23, 2008, Boston, MA.

Invited speaker, "Diffusion Tensor Imaging Findings in Schizophrenia," *Massachusetts Mental Health Center Research Grand Rounds*, Department of Psychiatry, Harvard Medical School, March 18, 2008.

Symposium: "Altered White Matter Communication in Schizophrenia and Bipolar Disorder: A Possible Common Endophenotype? Invited Speaker, "Uncinate Fasciculus and Cingulum bundle findings in First Episode Schizophrenia and First Episode Bipolar Disorder: A Diffusion Tensor Imaging Study." *16th European Congress of Psychiatry*, Nice, France, April 7, 2008.

Plenary Talk, *XI Turku PET Symposium: New Targets in Molecular Imaging*, "Advances in White Matter Imaging," May 27, 2008, Turku, Finland.

Invited speaker, "Diffusion Tensor Imaging in Schizophrenia," *Summer School course in Neuroscience at Harvard University*, Directed by Dr. Dorothy Holinger, July 10, 2008.

Plenary Speaker, "Advances in Diffusion Tensor Imaging in Schizophrenia," presented at the *Brain Imaging Symposium, New Concepts in Structural and Functional Imaging, IBILT-Faculdade de Medicina, Amfiteatro*, Center for Neuroscience and Cell Biology, University of Coimbra, Coimbra, Portugal, July 20, 2008.

Invited Speaker, "DTI Applications to Schizophrenia," Department of Psychology and Radiology, University of Minho, Braga, Portugal, July 21, 2008.

Chair and Invited Speaker, Symposium: Neuroimaging and Psychosis - Current Trends. Invited speaker on "Advances in white matter imaging in schizophrenia." *21st European College of Neuropsychopharmacology Congress* September 1, 2008, Barcelona, Spain.

Invited Speaker, "Advances in MRI and DTI Findings in Schizophrenia," *VA Boston Healthcare System/Harvard Grand Rounds*, Brockton, MA, October 1, 2008.

Invited Speaker, "MRI and DTI Findings in Schizophrenia," *Harvard Longwood Psychiatry Grand Rounds Conference*, Harvard Medical School Department of Psychiatry, October 30, 2008.

2009 Invited Speaker, "Research Careers in Psychiatry." Harvard Longwood Psychiatry Residency Training Program, February 25, 2009.

Invited Speaker, "Reviewing Research in the Area of Neuroimaging Findings in Neuropsychiatric Disorders," Harvard Longwood Psychiatry Residency Training Program, March 4, 2009.

Symposium on "New Advances in Diffusion Magnetic Resonance Imaging and Their Application to Schizophrenia." *World Psychiatric Association International Congress*, "Treatment in Psychiatry: A New Update." April 2, Florence, Italy.

Invited Speaker, Symposium on "Brain Imaging in Psychiatry: Recent Progress and Clinical Implications," "Advances in White Matter Imaging and its Application to Schizophrenia." *World Psychiatric Association International Congress*, "Treatment in Psychiatry: A New Update." April 3, Florence, Italy.

Oral Presentation, "Anterior cingulate and paracingulate abnormalities in schizophrenia." *Society for Neuroscience Meeting*, Chicago, IL, October 17-21, 2009.

Invited Speaker, "DTI Findings in Schizophrenia," School of Pharmacology, University of Rhode Island, Kingston, RI, November 12, 2009.

2010 Invited Speaker, "DTI as a method for understanding psychiatric disorders," PGY II residents, Harvard South Shore Psychiatry Residency Training Program, VA Brockton, Harvard Medical School, February 3, 2010.

Invited Speaker, "White Matter Findings in Schizophrenia and Related Disorders." Psychiatry Genetics and Translational Research Seminar, Department of Psychiatry, Massachusetts General Hospital, Boston, MA, March 9, 2010.

Speaker, External Advisory Board, Clinical Consortium for TBI and PTSD, "Progress in Neuroimaging Acquisition Protocols and Post-Processing Measures for the Clinical Consortium Sites." San Diego, CA, November 18, 2010.

2011 Invited Speaker, "Diagnostic and Prognostic Indicators of Traumatic Brain Injury." Exploring Diagnostic, Therapeutic, and Rehabilitative Strategies in NeuroHealth, TBI, and PTSD. *Center for Integration of Medicine and Innovative Technology (CIMIT)*, Workshop, January 25, 2011.

Invited Speaker. "Neuroimaging applications for understanding psychiatric disorders," PGY II residents, Harvard South Shore Psychiatry Residency Training Program, VA Brockton, Harvard Medical School, March 7, 2011.

Invited Speaker, “In-Process Review of Neuroimaging Techniques and Their Application to the Multi-Site Clinical Consortium on PTSD/TBI.” Presented at the Us Army Medical Research and Materiel Command, Combat Casualty Care Research Program In-Process Scientific Review, Department of the Army, January 31, 2011, Herndon, VA.

Oral presentation, Diagnosis of Diffuse Axonal Injury with Diffusion Tensor Imaging, *3rd Federal Interagency Conference on TBI*, Washington DC, 2011.

Oral presentation, Diffusion Imaging Reveals Two Spatially Separable Mechanisms In Mild TBI. *3rd Federal Interagency Conference on TBI*, Washington, DC, 2011.

Invited Speaker, “White Matter Changes in First Episode Schizophrenia.” Presented as part of a symposium on findings from the CIDAR first episode study of schizophrenia, entitled, “Vulnerability to Progression in Schizophrenia.” *International Congress of Schizophrenia Research*, Colorado Springs, CO, April 7, 2011.

Co-Chair, Poster Symposium on Multi-Modal Findings in Schizophrenia. *International Congress of Schizophrenia Research*, Colorado Springs, CO, April 5, 2011.

Invited Speaker, “On being a Mentor and Being Mentored.” Special course on Moving on Up, Brigham and Women’s Hospital, April 12, 2011.

Chair, Symposium entitled “A Multimodal Imaging Approach to Investigating the Structural Basis of Aberrant Brain Connectivity in Patients with Schizophrenia.” 10th World Congress of the World Federation of Biological Psychiatry, June 1, 2011, Prague, Czech Republic.

Invited Facilitator, Break-Out Session on the Future of Neuroimaging in Psychiatry, Harvard Psychiatry Residents’ Day, Imagining the Future of Psychiatry: Neuroscience to Healthcare Policy, McLean Hospital, November 9, 2011.

2012

Invited Speaker, “Neuroimaging and Psychiatry Disorders”, PGY II Residents, Harvard South Shore Psychiatry Residency Training Program, VA Brockton, Harvard Medical School, January 18, 2012.

Invited Speaker, “Identification of Neuroinflammation in Mild Traumatic Brain Injury Using a Free Water Atlas, 9th World Congress on Brain Injury (IBIA), Edinburgh, Scotland, March 22, 2012.

Endowed Professorship Special Talk, “DTI findings in Schizophrenia and in Mild Traumatic Brain Injury”, University of Minho, Minho, Portugal, April 18, 2012.

Symposium on Advanced Imaging in Psychiatric Diseases: Opportunities and Trends, invited talk on “Advanced Imaging for the Evaluation of Schizophrenia and Related Illnesses”, 50th meeting of the *American Society for Neuroradiology*, New York, New York, April 21, 2012.

Invited Speaker, “Excessive Extracellular Volume Contributes to White Matter Abnormalities in the Early Stages of Schizophrenia”, at the Centennial Celebration of Massachusetts Mental Health Center, Boston, MA, June 15, 2012.

Paper presented, “Estimation of Extracellular Volume from Regularized Multi-Shell Diffusion MRI. *MICCAI*, October 1-5, 2012, Nice, France.

Speaker at the first Conference on Chronic Traumatic Encephalopathy sponsored by the Cleveland Clinic Lou Ruvo Center for Brain Health and Boston University, “Role of Neuroimaging in CTE Detection: MRI, MRS, and Emerging PET Tau Imaging”, October 1, 2012, Las Vegas, Nevada.

Speaker, External Advisory Board, Clinical Consortium for TBI and PTSD, “Progress in Neuroimaging Acquisition Protocols and Post-Processing Measures for the Clinical Consortium Sites.” San Diego, CA, November 28, 2012.

2013 Invited Speaker, “Advanced Imaging in Mild TBI” at the 93rd *New England Roentgen Ray Society*, January 11, 2013, Boston, MA.

Invited Speaker, “Utilizing Advanced Neuroimaging to Provide Insights into Mild Traumatic Brain Injury and Repetitive Brain Trauma: DTI, MRS, and Emerging Pet Tau Imaging.” *The 3rd Annual Traumatic Brain Injury Conference*, March 7, 2013, Washington, DC.

Invited Speaker, “Advances in Neuroimaging and Their Application to Schizophrenia and Mild Traumatic Brain Injury”. Talk given to PGYII Residents in Psychiatry at the South Shore

Residency Training Program in Psychiatry, Harvard Medical School, VA Boston Healthcare System, March 13, 2013.

Invited Talk, “Application of Neuroimaging to Understand Schizophrenia and Mild Traumatic Brain Injury”. Talk given to VISN Chief, Dr. Michael Mayo-Smith, March 13, 2013.

Invited Speaker, “Advanced Neuroimaging Techniques Applied to Schizophrenia, Mild Traumatic Brain Trauma, and Repetitive Brain Trauma”. Neuroscience and Brain Seminar Series, Children’s Hospital, Harvard Medical School, Boston, MA April 18, 2013.

Invited Speaker, “The Role of Neuroimaging in mTBI, Schizophrenia, and CTE: DTI, MRS, and Emerging PET Tau Imaging in CTE. BRAINMAP seminar series, Martinos Center, Charlestown Navy Yard, May 15, 2013.

Invited Speaker, “The role of advanced neuroimaging in mTBI and CTE: DTI, MRS, and Tau Imaging”. Special Lectures of Recent Psychiatry Neuroimaging, Department of Neuropsychiatry, Kansai Medical University, Hotel Agora Osaka, Japan, June 24, 2013.

Chair (Co-Chair Dr. Marek Kubicki), Symposium, “New Developments in White Matter Imaging in Schizophrenia, Towards Understanding Pathology”. 11th World Congress of Biological Psychiatry, June 27, 2013, Kyoto, Japan.

Invited Speaker, “The Role of Advanced Neuroimaging in CTE: DTI, MRS, and Emerging PET Tau Imaging”, Brain Trauma-Related Neurodegeneration Workshop, sponsored by the National Institute of Neurological Disorders and Stroke (NINDS), August 12, 2013.

Speaker, “Perspectives on Challenges of Reproducibility and Variability in Diffusion MRI”, part of workgroup on “Developing Standards for Diffusion Magnetic Resonance Imaging, a Meeting of Experts”, sponsored by the *Institute of Medicine of The National Academies*. August 22, 2013.

Invited talk, “MR and Diffusion Tensor Imaging in Schizophrenia and in Mild Traumatic Brain Injury”, Bouve College of Health Sciences, Northeastern University, December 2, 2013.

Report of Clinical Activities:

1979-1984 Research Fellow in Psychopathology, Psychology Laboratory, Mailman Research Center, McLean Hospital, Belmont MA, Harvard Medical School

1982-1983 Clinical Practicum/Clerkship, Psychology Department, McLean Hospital, Belmont MA, Harvard Medical School

- 1984-1994 Diagnostic evaluations at the Massachusetts Mental Health Center, then VA Boston Healthcare System, Brockton Division, Brockton MA, and McLean Hospital, Belmont, MA
- 1985-1986 Clinical Practicum/Clerkship, Psychology Department, Massachusetts Mental Health Center, Boston, MA, Harvard Medical School.

Other:

- Summer 1995 Consultant for Drs. Jane Murphy and Alexander Leighton; performed SCID interviews for a Psychiatric Epidemiology Study in Atlantic Canada.
- 2001 *2001*: ESI Special Topics in Schizophrenia, ISI Thomson Scientific: Interview with Dr. Shenton. <http://esi-topics.com/schizophrenia/interviews/dr-martha-shenton.html>
- 2003 *2003*: Dr. Shenton's publication entitled, "Amygdala-hippocampal shape differences in schizophrenia: the application of 3D shape models to volumetric MR data", published in *Psychiatry Research*. 2002;1151-2:15-35, and her paper entitled, "Deformable organisms for automatic medical image analysis", published in *Med Image Analysis* 2002:Sept;6(3):251-266, were both selected for publication in the *2004 IMIA Yearbook of Medical Informatics: Towards Clinical Bioinformatics*, an overview of the most excellent, original, and state-of-the-art research in the area of Health and Medical Informatics over the past several years.
- 2007 *December 2007*: Dr. Shenton was featured in *The Scientist*, in a special supplement on schizophrenia. Read [article](#).
- Winter 2007*: Read [article](#) on the advances in schizophrenia research featured in [Brigham and Women's magazine](#).
- 2007*: [<http://www.esi-topics.com/schizophrenia/index.html>] provides information for the decade of the 90's (1981-1999) on schizophrenia research, where they review 19,506 papers, 24,088 authors, 101 countries, 1,139 journals, and 5,514 organizations, and report that Dr. Shenton's 1992 *New England Journal of Medicine* is the 4th most cited paper out of 19,506, and she is the 14th most cited author out of 24,088 in the area of schizophrenia research.
- 2007*: This website also includes an interview with Dr. Shenton for ESI special Topics in Schizophrenia, ISI Thomson Scientific [<http://www.esi-topics.com/sch2007/index.html>]. New information from 1997 to 2007 on schizophrenia research is provided, where ESI reviews 13,989 papers, 26,117 authors, 99 countries, 947 journals, and 6,863 organizations and report that Dr. Shenton is the 8th most cited author out of 13,989 papers in the area of schizophrenia research [<http://www.esi-topics.com/sch2007/authors/b1a.html>].
- 2008 *2008*: Her paper, MRI Findings in Schizophrenia, published in *Schizophrenia Research* in 2001, is also among the top breaking papers listed in ESI [<http://www.esi-topics.com/fbp/comments/october02-MarthaShenton.html>].
- 2008*: In addition, Dr. Marek Kubicki, her close colleague, has an interview with ESI for having paper that is considered Fast Breaking because it is among the top 1% of papers cited over the last two years in the field of schizophrenia research [see <http://sciencewatch.com/dr/fbp/2008/08apr/fbp/08apr/fbKubicki/>].
- 2008*: Dr. Shenton is also a co-author on the 10th most cited PTSD paper in the 1990's in the area of PTSD research, based on ISI Thomson Scientific, website: [<http://esi-topics.com/ptsd/index.html>].
- December 2008*: ScienceWatch lists Harvard University at the top of 20 institutions in Psychiatry and Psychology based on total citations to papers published in Thomson Reuters-indexed Psychiatry and Psychology journals. These institutions are the top 20 out of a pool of 360

institutions comprising the top 1% ranked by total citation count in this field. Dr. Shenton is mentioned as a [highly cited Harvard Author](#).

2010 *October 2010:* An article on how a different MRI technique used in [Dr. Shenton's](#) lab may help in diagnosing football-induced injuries appeared in *the Atlantic*. Read article [here](#).

August 2010: [Dr. Shenton](#) appears on History Channel's Stan Lee's Superhumans - Hammer Head episode where she discusses skull thickness of a man who drives spikes into boards with his head. View [episode](#).

2012 *February 2012:* [Psychiatry Newsletter Update](#) highlights traumatic brain injury studies in the Psychiatry Neuroimaging laboratory including Drs. [Martha Shenton](#), [Ofar Pasternak](#), and [Alex Lin](#).

April 2012: [Dr. Shenton's research paper](#) listed as the [seventh top most downloaded article in 2011](#).

November 2012: [Harvard Medicine News](#) featured Drs. [Martha Shenton](#), [Ross Zafonte](#), and [Joseph Giacino](#) in a piece describing the utility of [DTI](#) in characterization of mild [TBI](#).

November 2012: [Dr. Inga Koerte's](#) and senior author [Dr. Martha Shenton's JAMA paper](#) (see [Brigham & Women's Press Release](#) and [Ludwig-Maximilians-Universität](#)) garnered international attention, as it was the first original research to suggest that the sub-concussive hits experienced by elite soccer players are associated with alterations in white matter. Her work was featured in [TIME Magazine](#), [US News](#), [ABC News](#) (reposted from [MedPage Today \[see video\]](#)), [JAMA](#),

[The Munich Eye](#), [Los Angeles Times](#), [Healthline](#), [ABC7Chicago](#), [Doctors Lounge](#), [The Week Magazine](#), [Harvard Medicine News](#), [Medical Daily](#), and [Elite Daily](#). See also: <http://healthhub.brighamandwomens.org/tag/martha-shenton>

December 2012: Led by first author [Dr. Inga Koerte's](#) and senior author [Dr. Martha Shenton](#), published findings on concussions and white matter integrity in hockey players in the [Journal of Neurosurgery \(full text\)](#). This high impact paper was covered in the [New York Times](#), [SlapShot \(New York Times featurette\)](#), [The Globe and Mail](#), [Vancouver Sun](#), and on [CJAD Talk Radio \(hear interview with Dr. Paul Echlin\)](#).

2013 *January 2013:* Commentary in Alzheimer's Forum: "In Former Footballers, MRI Links Cognitive Problems to Axon Damage": <http://www.alzforum.org/new/detail.asp?id=3375>

January 2013: Commentary in Alzheimer's Forum: comments on the recent study of tau neurofibrillary tangles in retired NFL players were published in [Alzheimer Research News](#).

January 2013: [Latitude News](#) featured [Dr. Inga Koerte](#) and [Dr. Ross Zafonte](#) in an article discussing the impact that brain trauma can have on white matter in the brain. Their research was also featured on [The Brigham and Women's Hospital Health Blog](#).

March 2013: In an interview with [Imaging in Medicine Journal](#), Dr. [Martha Shenton](#) discusses the PNL's role in pioneering the use of advanced MRI techniques in the study of schizophrenia and, more recently, mild Traumatic Brain Injury.

March 2013: In a recent publication in [Science Magazine](#), Dr. [Martha Shenton](#) describes the importance of new-sophisticated MRI techniques that can reveal microscopic damage to axons and brain lesions characteristic of mTBI.

March 2013: Drs. [Martha Shenton](#), [Inga Koerte](#) and [Ross Zafonte](#)'s high impact [JAMA paper](#) on sub-concussive hits experienced by soccer players was highlighted in "[Sueddeutsche Zeitung](#)", a high-profile newspaper in Germany; and in [Neurology Today](#).

April 2013: The BWH Psychiatry Neuroimaging Laboratory was this month's feature story in [BWH Clinical and Research News](#). The story highlights the diverse group of researchers at the PNL that are spearheading the use of state-of-the-art neuroimaging in TBI, schizophrenia and more.

2014

February 2014: PNL Study Finds Changes in Brains of Hockey Players Who Had Concussions A series of recently published papers in the [Journal of Neurosurgery](#) (Click for [Part 1](#), [Part 2](#), and [Part 3](#).) by Drs. [Martha Shenton](#), [Ofer Pasternak](#), [Inga Koerte](#), [Sylvain Bouix](#), [Takeshi Sasaki](#), [Marek Kubicki](#), [Peter Savadjiev](#), [Michael Mayinger](#), [Marc Muehlmann](#) and research assistant [Eli Fredman](#) has garnered international media attention and been featured in the [New York Times](#), [The Globe and Mail](#), [The Sports Network](#), [Fox News](#), and [The Calgary Herald](#).

PART III: BIBLIOGRAPHY

Original Reports: (* = denotes past or present mentee/trainee)

1. Holzman PS, **Shenton ME**, and Solovay MR. Quality of thought disorder in differential diagnosis. *Schizophr Bull* 1986;12(3):360-371. PMID: [3764357](#) [[full text](#)]
2. Solovay MR, **Shenton ME**, *Gasperetti C, Coleman M, *Kestnbaum EJ, Carpenter JT, Holzman PS. Scoring manual for the thought disorder index. *Schizophr Bull* 1986;12(3):483-496. PMID: [3764364](#) [[full text](#)]
3. Solovay MR, **Shenton ME**, Holzman PS. Comparative studies of thought disorder: I. Mania and schizophrenia. *Arch Gen Psychiatry* 1987;44(1):13-20. PMID: [3800579](#)
4. **Shenton ME**, Solovay MR, Holzman PS. Comparative studies of thought disorder: II. Schizoaffective disorder. *Arch Gen Psychiatry* 1987;44(1):21-30. PMID: [3800580](#)
5. Faux SF, **Shenton ME**, McCarley RW, Torello MW, Duffy FH. P200 topographic alterations in schizophrenia: Evidence for left temporal-centroparietal amplitude deficits. *Electroencephalogr and Clin Neurophysiol Suppl* 1987;40:681-687. PMID: [3480194](#)
6. Faux SF, Torello MW, McCarley RW, **Shenton ME**, Duffy FH. P300 topographic alterations in schizophrenia: A replication study. *Electroencephalogr and Clin Neurophysiol Suppl* 1987;40:688-694. PMID: [3480195](#)
7. *Daniels EK, **Shenton ME**, Holzman PS, Benowitz LI, Coleman, M, Levin S, Levine D. Patterns of thought disorder associated with right cortical damage, schizophrenia, and mania. *Am J Psychiatry* 1988;145(8):944-949. PMID: [3394878](#)
8. Faux SF, Torello MW, McCarley RW, **Shenton ME**, Duffy FH. P300 in schizophrenia: Confirmation and statistical validation of temporal region deficit in P300 topography. *Biol Psychiatry* 1988;23(8):776-790. PMID: [3365456](#)
9. Faux SF, **Shenton ME**, McCarley RW, Torello MW, Duffy FH. Differentiation of schizophrenics and normal controls is enhanced by the Goodin subtraction procedure. *Intern J Neuroscience* 1988;39(1-2):117-135. PMID: [3384564](#)
10. **Shenton ME**, Faux SF, McCarley RW, *Ballinger R, Coleman M, Torello MW, Duffy FH. Correlations between abnormal auditory P300 topography and positive symptoms in schizophrenia: A preliminary report. *Biol Psychiatry* 1989;25(6):710-716. PMID: [2923933](#)
11. **Shenton ME**, *Ballinger R, *Marcy B, Faux SF, *Cane M, LeMay M, Cassens G, Coleman M, Duffy FH, McCarley RW. Two Syndromes of schizophrenic psychopathology associated with left vs. right temporal deficits in P300 amplitude: Four case reports. *J Nerv Ment Dis* 1989;177(4):219-225. PMID: [2564883](#)
12. **Shenton ME**, Solovay MR, Holzman PS, Coleman M, Gale HJ. Thought-disorder in the relatives of psychotic patients. *Arch Gen Psychiatry* 1989;46(10):897-901. PMID: [2489936](#)
13. **Shenton ME**, Faux SF, McCarley RW, *Ballinger R, Coleman M, Duffy FH. Clinical correlations of auditory P200 topography and left temporo-central deficits in schizophrenia: A preliminary study. *J Psychiatric Res* 1989;23(1):13-34. PMID: [2754626](#)
14. McCarley RW, Faux SF, **Shenton ME**, LeMay M, *Cane M, *Ballinger R, Duffy FH. CT abnormalities in schizophrenia: A preliminary study of their correlations with P300/P200 electrophysiological features and positive/negative symptoms. *Arch Gen Psychiatry* 1989;46(8):698-708. PMID: [2751404](#)

15. Faux SF, **Shenton ME**, McCarley RW, Nestor PG, *Marcy B, *Ludwig A. Preservation of P300 event-related potential topographic asymmetries in schizophrenia with use of either linked-ears or nose reference sites. *Electroencephalogr and Clin Neurophysiol* 1990;75(5):378-391. PMID: [1692273](#)
16. Nestor PG, Faux SF, McCarley RW, **Shenton ME**, Sands SF. Measurement of visual sustained attention in schizophrenia using signal detection analysis and a newly developed computerized CPT task. *Schizophr Res* 1990;3(5-6):329-332. PMID: [2282338](#)
17. McCarley RW, Faux SF, **Shenton ME**, Nestor PG, Adams J. Event-related potentials in schizophrenia: Their biological and clinical correlates and a new model of schizophrenic pathophysiology. *Schizophr Res* 1991;4(2):209-231. PMID: [2039762](#)
18. **Shenton ME**, Kikinis R, McCarley RW, Metcalf D, Tieman J, Jolesz FA. Application of automated MRI volumetric measurement techniques to the ventricular system in schizophrenics and normals. *Schizophr Res* 1991;5(2):103-113. PMID: [1931803](#)
19. McCarley RW, Faux SF, **Shenton ME**, Nestor PG, *Holinger DP. Is there P300 asymmetry in schizophrenia? *Arch Gen Psychiatry* 1991;48(4):380-383. [Letter to the editor]. PMID: [2009038](#)
20. **Shenton ME**, Holzman PS, Gale HJ, Solovay MR, Coleman M. Distinguishing between content and form of speech – Reply. *Arch Gen Psychiatry* 1991;48:281-282. [Letter to the editor].
21. **Shenton ME**, Kikinis R, Jolesz FA, *Pollak SD, LeMay M, Wible CG, *Hokama H, Martin J, Metcalf D, Coleman M, McCarley RW. Abnormalities of the left temporal-lobe and thought-disorder in schizophrenia – A quantitative magnetic-resonance-imaging study. *N Engl J Med* 1992;327(9):604-612. PMID: [1640954](#) [full text] [ESI Thomson Scientific-rated as 4th most cited paper in schizophrenia, from more than 24,000 authors and 19,000 papers, in the decade of the 1990's (<http://www.esi-topics.com/schizophrenia/index.html>).]
22. **Shenton ME**, Solovay MR, Holzman PS, Gale HJ, Coleman M. Thought disorders ratings distinguish between diagnostic groups- Reply. *Arch Gen Psychiatry* 1992;49:590-590. [Letter to the editor].
23. **Shenton ME**, Kikinis R, McCarley RW. Abnormalities of the left temporal lobe in schizophrenia – Reply to Roth, Pfefferbaum and to Klimke and Knecht. *N Engl J Med* 1992;327(23):1690-1690. [Letter to the editor].
24. Gerig G, Martin J, Kikinis R, Kübler O, **Shenton ME**, Jolesz FA. Unsupervised tissue-type segmentation of 3D dual-echo MR head data. *Image and Vision Computing* 1992;10(6):349-360.
25. Kikinis R, **Shenton ME**, Gerig G, Martin J, Anderson M, Metcalf D, Guttman CRG, McCarley RW, Lorensen W, Cline H, Jolesz FA. Routine quantitative-analysis of brain and cerebrospinal-fluid spaces with MR imaging. *J Mag Res Imaging* 1992;2(6):619-629. PMID: [1446105](#)
26. Nestor PG, Faux SF, McCarley RW, *Penhune V, **Shenton ME**, *Pollak SD, Sands SF. Attentional cues in chronic schizophrenia: Abnormal disengagement of attention. *J Ab Psych* 1992;101(4):682-689. PMID: [1430608](#)
27. *Holinger DP, Faux SF, **Shenton ME**, *Sokol NS, Seidman LH, Green AI, McCarley RW. Reversed temporal region asymmetries of P300 topography in left-handed and right-handed schizophrenic subjects. *Electroencephalogr Clin Neurophysiol* 1992;84(6):532-537. PMID: [1280199](#)
28. Faux SF, McCarley RW, Nestor PG, **Shenton ME**, *Pollak SD, *Penhune V, *Mondrow E, *Marcy B, Peterson A, Horvath T, Davis KL. P300 topographic asymmetries are present in unmedicated schizophrenics. *Electroencephalogr and Clin Neurophysiol* 1993;88(1):32-41. PMID: [7681389](#)

29. McCarley RW, **Shenton ME**, O'Donnell BF, Faux SF, Kikinis R, Nestor PG, Jolesz FA. Auditory P300 abnormalities and left posterior superior temporal gyrus volume reduction in schizophrenia. *Arch Gen Psychiatry* 1993;50(3):190-197. PMID: [8439239](#)
30. McCarley RW, **Shenton ME**, O'Donnell BF, Nestor PG. Uniting Kraepelin and Bleuler – The psychology of schizophrenia and the biology of temporal-lobe abnormalities. *Harv Rev Psychiatry* 1993;1(1):36-56. PMID: [9384826](#)
31. O'Donnell BF, **Shenton ME**, McCarley RW, Faux SF, *Smith RS, *Salisbury DF, Nestor PG, *Pollak SD, Kikinis R, Jolesz FA. The auditory N2 component in schizophrenia – Relationship to MRI temporal-lobe gray-matter and to other ERP abnormalities. *Biol Psychiatry* 1993;34(1-2):26-40. PMID: [8373937](#)
32. **Shenton ME**, O'Donnell BF, Nestor PG, Wible CG, Kikinis R, Faux SF, *Pollak SD, Jolesz FA, McCarley RW. Temporal-lobe abnormalities in a patient with schizophrenia who has word-finding difficulty – Use of high-resolution magnetic-resonance-imaging and auditory P300 event-related potentials. *Harv Rev Psychiatry* 1993;1(2):110-117. PMID: [9384837](#)
33. Coleman MJ, Carpenter JT, Waternaux C, Levy DL, **Shenton ME**, Perry J, Medoff D, Wong H, Monoach D, Meyer P, O'Brian C, Valentino C, Robinson D, Smith M, Makowski D, Holzman PS. The thought disorder index: A reliability study. *Psychological Assessment: A Journal of Consulting and Clinical Psychology* 1993;3(3):336-342.
34. Adams J, Faux SF, Nestor PG, **Shenton ME**, *Marcy B, *Smith RS, McCarley RW. ERP abnormalities during semantic processing in schizophrenia. *Schizophr Res* 1993;10(3):247-257. PMID: [PMC2864521](#)
35. Nestor PG, **Shenton ME**, McCarley RW, *Haimson J, *Smith RS, O'Donnell BF, *Kimble M, Kikinis R, Jolesz FA. Neuropsychological correlates of MRI temporal-lobe abnormalities in schizophrenia. *Am J Psychiatry* 1993;150(12):1849-1855. PMID: [8238641](#)
36. O'Donnell BF, Cohen RA, *Hokama H, Cuffin BN, Lippa C, **Shenton ME**, Drachman DA. Electrical source analysis of auditory ERPs in medial temporal-lobe amnesic syndrome. *Electroencephalogr and Clin Neurophysiol* 1993;87(6):394-402. PMID: [7508372](#)
37. *Levitt J, **Shenton ME**, McCarley RW, Faux SF, *Ludwig AS. Premorbid adjustment in schizophrenia – Implications for psychosocial and ventricular pathology. *Schizophr Res* 1994;12(2):159-168. PMID: [8043526](#)
38. O'Donnell BF, *Hokama H, McCarley RW, *Smith RS, *Salisbury DF, *Mondrow E, Nestor PG, **Shenton ME**. Auditory ERPs to nontarget stimuli in schizophrenia – Relationship to probability, task-demands, and target ERPs. *Intern J Psychophysiol* 1994;17(3):219-231. PMID: [7806466](#)
39. Kikinis R, **Shenton ME**, Gerig G, *Hokama H, *Haimson J, O'Donnell BF, Wible CG, McCarley RW, Jolesz FA. Temporal-lobe sulco-gyral pattern anomalies in schizophrenia – An in-vivo MR 3-dimensional surface rendering study. *Neuroscience Letters* 1994;182(1):7-12. PMID: [7891892](#)
40. McCarley RW, **Shenton ME**, O'Donnell BF, Nestor PG. Neural circuits in schizophrenia. *Arch Gen Psychiatry* 1994;51(7):515-516. [Letter to the Editor]. PMID: [8031223](#)
41. *Salisbury DF, O'Donnell BF, McCarley RW, **Shenton ME**, Benavage A. The N2 event-related potential reflects attention-deficit in schizophrenia. *Biol Psychology* 1994;39(1):1-13. PMID: [7880944](#)
42. Wible CG, **Shenton ME**, *Hokama H, Kikinis R, Jolesz FA, Metcalf D, McCarley RW. Prefrontal cortex and schizophrenia – A quantitative magnetic-resonance-imaging study. *Arch Gen Psychiatry* 1995;52(4):279-288. PMID: [7702444](#)

43. O'Donnell BF, Faux SF, McCarley RW, *Kimble MO, *Salisbury DF, Nestor PG, Kikinis R, Jolesz FA, **Shenton ME**. Increased rate of P300 latency prolongation with age in schizophrenia – Electrophysiological evidence for a neurodegenerative process. *Arch Gen Psychiatry* 1995;52(7):544-549. PMID: [7598630](#)
44. O'Donnell BF, **Shenton ME**, McCarley RW, Faux SF, Kikinis R, Nestor PG, Jolesz FA. Conjoint left asymmetry of auditory P300 voltage and MRI volume of posterior superior temporal gyrus in schizophrenia: A quantitative evaluation. *Electroencephalogr Clin Neurophysiol Suppl* 1995;44:387-397. PMID: [7649048](#)
45. **Shenton ME**, Kikinis R, McCarley RW, Saiviroonporn P, *Hokama HH, Robatino A, Metcalf D, Wible CG, *Portas CM, *Iosifescu DV, *Donnino R, *Goldstein JM, Jolesz FA. Harvard brain atlas: A teaching and visualization tool. *IEEE Biomedical Visualization* 1995;10-17.
46. **Shenton ME**, McCarley RW, Tamminga CA. Cortex, IX: Heschl's gyrus and the planum temporale. *Am J Psychiatry* 1995;152(7):966-996. PMID: [7793465](#)
47. Nestor PG, **Shenton ME**, O'Donnell BF, McCarley RW, Wible C. Association between cognitive deficits and temporal-lobe abnormalities – Reply. *Am J Psychiatry* 1995;152(3):475-476. [Letter to the editor.]
48. *Hokama H, **Shenton ME**, Nestor PG, Kikinis R, *Levitt JJ, Metcalf D, Wible CG, O'Donnell BF, Jolesz FA, McCarley RW. Caudate, putamen, and globus pallidus volume in schizophrenia: A quantitative MRI study. *Psychiatr Res: Neuroimaging* 1995;61(4):209-229. PMID: [8748466](#)
49. Sanders LM, Adams J, Tager-Flusberg H, **Shenton ME**, Coleman M. A comparison of clinical and linguistic indexes of deviance in the verbal discourse of schizophrenics. *Applied Psycholinguistics* 1995;16(3):325-338.
50. O'Donnell BF, Swearer JM, *Smith LT, Nestor PG, **Shenton ME**, McCarley RW. Selective deficits in visual perception and recognition in schizophrenia. *Am J Psychiatry* 1996;153(5):687-692. PMID: [8615416](#)
51. Ettinger GJ, Grimson WEL, Leventon ME, Kikinis R, Gugino V, Cote W, *Karapelou M, Aglio L, **Shenton ME**, *Potts G, Alexander E. Non-invasive functional brain mapping using registered transcranial magnetic stimulation. *IEEE Mathematical Methods in Biomedical Image Analysis* 1996;32-41. [[full text](#)]
52. Näf M, Kübler O, Kikinis R, **Shenton ME**, Székely G. Characterization and recognition of 3D organ shapes in medical image analysis using skeletonization. *IEEE Mathematical Methods in Biomedical Image Analysis* 1996;139-150.
53. Kikinis R, **Shenton ME**, *Iosifescu DV, McCarley RW, Saiviroonporn P, *Hokama HH, Robatino A, Metcalf D, Wible CG, *Portas CM, *Donnino RM, Jolesz FA. A digital brain atlas for surgical planning, model-driven segmentation, and teaching. *IEEE Transactions on Visualization and Computer Graphics* 1996;2(3):232-241. [[full text](#)]
54. *Levitt JJ, O'Donnell BF, McCarley RW, Nestor PG, **Shenton ME**. Correlations of premorbid adjustment in schizophrenia with auditory event-related potential and neuropsychological abnormalities. *Am J Psychiatry* 1996;153(10):1347-1349. PMID: [8831448](#)
55. Gurvits TV, **Shenton ME**, *Hokama H, *Ohta H, Lasko NB, Gilbertson MW, Orr SP, Kikinis R, Jolesz FA, McCarley RW, Pitman RK. Magnetic resonance imaging study of hippocampal volume in chronic, combat-related post-traumatic stress disorder. *Biol Psychiatry* 1996;40(11):1091-1099. PMID: [PMC2910907](#) [**ESI Thomson Scientific-rated as 10th most cited PTSD paper in the 1990's in PTSD research**, (<http://esi-topics.com/ptsd/papers/a1.html>).]
56. *Niznikiewicz MA, O'Donnell BF, Nestor PG, *Smith L, *Law S, *Karapelou M, **Shenton ME**, McCarley RW. ERP assessment of visual and auditory language processing in schizophrenia. *J Ab Psych* 1997;106(1):85-94. PMID: [9103720](#)

57. Nestor PG, *Kimble MO, O'Donnell BF, *Smith L, *Niznikiewicz M, **Shenton ME**, McCarley RW. Aberrant semantic activation in schizophrenia: A neurophysiological study. *Am J Psychiatry* 1997;154(5):640-646. PMID: [9137119](#)
58. Náf M, Székely G, Kikinis R, **Shenton ME**, Kübler O. 3D voronoi skeletons and their usage for the characterization and recognition of 3D organ shape. *Computer Vision and Image Understanding* 1997;66(2):147-161. [[full text](#)]
59. *Iosifescu DV, **Shenton ME**, Warfield SK, Kikinis R, Dengler J, Jolesz FA, McCarley RW. An automated registration algorithm for measuring MRI subcortical brain structures. *NeuroImage* 1997;6(1):13-25. PMID: [9245652](#)
60. Wible CG, **Shenton ME**, *Fischer IA, *Allard JE, Kikinis R, Jolesz FA, *Iosifescu DV, McCarley RW. Parcellation of the human prefrontal cortex using MRI. *Psychiatr Res: Neuroimaging* 1997;76(1):29-40. PMID: [9498307](#)
61. McCarley RW, O'Donnell BF, *Niznikiewicz MA, *Salisbury DF, *Potts GF, *Hirayasu Y, Nestor PG, **Shenton ME**. Update on electrophysiology in schizophrenia. *Intern Rev Psychiatry* 1997;9(4):373-386.
62. O'Donnell BF, Swearer JM, Nestor PG, **Shenton ME**, McCarley RW. Selective deficits in visual perception and recognition in schizophrenia: Reply. *Am J Psychiatry* 1997;154:585-587. [Letter to the Editor].
63. *Salisbury DF, **Shenton ME**, *Sherwood A, *Fischer IA, Yurgelun-Todd D, Tohen M, McCarley RW. First episode schizophrenia psychosis differs from first-episode affective psychosis and controls in P300 amplitude over left temporal lobe. *Arch Gen Psychiatry* 1998;55(2):173-180. PMID: [PMC2730913](#)
64. Nestor PG, **Shenton ME**, Wible CG, *Hokama H, O'Donnell BG, *Law S, McCarley RW. A neuropsychological analysis of schizophrenic thought disorder. *Schizophr Res* 1998;29(3):217-225. PMID: [9516662](#)
65. Nestor PG, *Akdag SJ, O'Donnell BF, *Niznikiewicz M, *Law S, **Shenton ME**, McCarley RW. Word recall in schizophrenia: A connectionist model. *Am J Psychiatry* 1998;155(12):1685-1690. PMID: [9842776](#)
66. *Portas CM, *Goldstein JM, **Shenton ME**, *Hokama HH, Wible CG, *Fischer I, Kikinis R, *Donnino R, Jolesz FA, McCarley RW. Volumetric evaluation of the thalamus in schizophrenic male patients using magnetic resonance imaging. *Biol Psychiatry* 1998;43(9):649-659. PMID: [9582998](#)
67. *Kwon JS, **Shenton ME**, *Hirayasu Y, *Salisbury DF, *Fischer IA, *Dickey CC, Yurgelun-Todd D, Tohen M, Kikinis R, Jolesz FA, McCarley RW. MRI study of cavum septi pellucidi in schizophrenia, affective disorder, and schizotypal personality disorder. *Am J Psychiatry* 1998;155(4):509-515. PMID: [PMC2826366](#)
68. *Anderson JE, O'Donnell BF, McCarley RW, **Shenton ME**. Progressive changes in schizophrenia: Do they exist and what do they mean? *Restor Neurol Neurosci* 1998;12(2-3):175-184. PMID: [12671313](#)
69. *Anderson JE, Umans CM, Halle M, Golland P, Jakab M, McCarley RW, Jolesz FA, **Shenton ME**, Kikinis R. Anatomy browser: Java-based interactive teaching tool for learning human neuroanatomy. *RSNA Electronic Journal* 1998;2:50-97. (Serial online) (<http://ej.rsna.org/ej2/0050-97.fin/index.html>)
70. *Potts GF, Gugino LD, Leventon ME, Grimson WE, Kikinis R, Cote W, Alexander E, *Anderson JE, Ettinger GJ, Aglio LS, **Shenton ME**. Visual hemifield mapping using transcranial magnetic stimulation coregistered with cortical surfaces derived from magnetic resonance images. *J Clin Neurophysiology* 1998;15(4):344-350. PMID: [9736468](#)

71. *Hirayasu Y, **Shenton ME**, *Salisbury DF, *Dickey CC, *Fischer IA, *Mazzoni P, *Kisler T, *Arakaki H, *Kwon JS, *Anderson JE, Yurgelun-Todd D, Tohen M, McCarley RW. Lower left temporal lobe MRI volumes in patients with first-episode schizophrenia compared with psychotic patients with first-episode affective disorder and normal subjects. *Am J Psychiatry* 1998;155(10):1384-1391. PMID: [9766770](#) [full text]
72. *Potts GF, *Hirayasu Y, O'Donnell BF, **Shenton ME**, McCarley RW. High-density recording and topographic analysis of the auditory oddball event-related potential in schizophrenia. *Biol Psychiatry* 1998;44(10):982-989. PMID: [9821562](#)
73. *Hirayasu Y, *Potts GF, O'Donnell BF, *Kwon JS, *Arakaki H, *Akdag SJ, *Levitt JJ, **Shenton ME**, McCarley RW. Auditory mismatch negativity in schizophrenia: Topographic evaluation with a high density recording montage. *Am J Psychiatry* 1998;155(9):1281-1284. PMID: [9734556](#) [full text]
74. Ettinger GJ, Leventon ME, Grimson WE, Kikinis R, Gugino L, Cote W, Sprung L, Aglio L, **Shenton ME**, *Potts G, Hernandez VL, Alexander E. Experimentation with a transcranial magnetic stimulation system for functional brain mapping. *Med Image Analysis* 1998;2(2):133-142. PMID: [10646759](#) [full text]
75. *Salisbury DF, **Shenton ME**, McCarley RW. P300 topography differs in schizophrenia and manic psychosis. *Biol Psychiatry* 1999;45(1):98-106. PMID: [9894581](#)
76. *Kwon JS, McCarley RW, *Hirayasu Y, *Anderson JE, *Fischer IA, Kikinis R, Jolesz FA, **Shenton ME**. Left planum temporale volume reduction in schizophrenia. *Arch Gen Psychiatry* 1999;56(2):142-148. PMID: [10025438](#) [full text]
77. McCarley RW, Wible CG, *Frumin M, *Hirayasu Y, *Levitt JJ, *Fischer IA, **Shenton ME**. MRI anatomy of schizophrenia. *Biological Psychiatry* 1999;45(9):1099-1119. PMID: [PMC2846838](#)
78. *Dickey CC, McCarley RW, Voglmaier MM, *Niznikiewicz MA, Seidman LJ, *Hirayasu Y, *Fischer IA, *Teh EK, *Van Rhoads R, Jakab M, Kikinis R, Jolesz FA, **Shenton ME**. Schizotypal personality disorder and MRI abnormalities of temporal lobe gray matter. *Biol Psychiatry* 1999;45(11):1393-1402. PMID: [PMC2832794](#)
79. *Hirayasu Y, **Shenton ME**, *Salisbury DF, *Kwon JS, Wible CG, *Fischer IA, Yurgelun-Todd D, Zarate C, Kikinis R, Jolesz FA, McCarley RW. Subgenual cingulate cortex volume in first episode psychosis. *Am J Psychiatry* 1999;156(7):1091-1093. PMID: [PMC2845843](#)
80. *Niznikiewicz MA, Voglmaier MM, **Shenton ME**, Seidman LJ, *Dickey CC, *Rhoads, R, *Teh E, McCarley RW. Electrophysiological correlates of language processing in schizotypal personality disorder. *Am J Psychiatry* 1999;156(7):1052-1058. PMID: [PMC2848255](#)
81. *Levitt JJ, McCarley RW, Nestor PG, *Petrescu C, *Donnino R, *Hirayasu Y, Kikinis R, Jolesz FA, **Shenton ME**. Quantitative volumetric MRI study of the cerebellum and vermis in schizophrenia: Clinical and cognitive correlates. *Am J Psychiatry* 1999;156(7):1105-1107. PMID: [PMC2845842](#)
82. O'Donnell BF, McCarley RW, *Potts GF, *Salisbury DF, Nestor PG, *Hirayasu Y, *Niznikiewicz MA, Barnard J, Shen ZJ, Weinstein DM, Bookstein F, **Shenton ME**. Identification of neural circuits underlying P300 abnormalities in schizophrenia. *Psychophysiology* 1999;36(3):388-398. PMID: [PMC2850060](#)
83. *Salisbury DF, O'Donnell BF, Nestor PG, **Shenton ME**, McCarley RW. Multimodal imaging in psychiatry: The electroencephalogram as a complement to other modalities. *CNS Spectrums* 1999;4:44-57. PMID: [17921930](#)
84. *Kwon JS, O'Donnell BF, Wallenstein GV, Greene RW, *Hirayasu Y, Nestor PG, Hasselmo ME, *Potts GF, **Shenton ME**, McCarley RW. Gamma frequency-range abnormalities to auditory stimulation in schizophrenia. *Arch Gen Psychiatry* 1999;56(11):1001-1005. PMID: [PMC2863027](#)

85. *Holinger DP, **Shenton ME**, Wible CG, *Donnino R, Kikinis R, Jolesz FA, McCarley RW. Superior temporal gyrus volume abnormalities and thought disorder in left-handed schizophrenic men. *Am J Psychiatry* 1999;156(11):1730-1735. PMID: [PMC2845841](#)
86. McCarley RW, *Niznikiewicz MA, *Salisbury DF, Nestor PG, O'Donnell BF, *Hirayasu Y, Grunze H, Greene RW, **Shenton ME**. Cognitive dysfunction in schizophrenia: unifying basic research and clinical aspects. *Eur Arch Psychiatry Clin Neurosci* 1999;249(suppl.4):69-82.
87. Golland P, Kikinis R, Halle M, Umans C, Grimson WE, **Shenton ME**, Richolt JA. Anatomy browser: A novel approach to visualization and integration of medical information. *Comput Aided Surg* 1999;4(3):129-143. PMID: [10528270](#)
88. Nestor PG, O'Donnell BF, *Niznikiewicz MA, **Shenton ME**, McCarley RW. Neuromodulation of attention in schizophrenia. *Psychiatric Annals* 1999;29:633-640. [[full text](#)]
89. *Dickey CC, **Shenton ME**, *Hirayasu Y, *Fischer IA, Voglmaier MM, *Niznikiewicz MA, Seidman LJ, *Fraone S, McCarley RW. Large CSF volume not attributable to ventricular volume in schizotypal personality disorder. *Am J Psychiatry* 2000;157(1):48-54. PMID: [PMC2832789](#)
90. *Niznikiewicz MA, *Donnino R, McCarley RW, Nestor PG, *Iosifescu DV, O'Donnell BF, *Levitt JJ, **Shenton ME**. Abnormal angular gyrus asymmetry in schizophrenia. *Am J Psychiatry* 2000;157(3):428-437. PMID: [PMC2846293](#)
91. *Niznikiewicz MA, Voglmaier M, **Shenton ME**, *Dickey CC, Seidman LJ, *Teh E, *Van Rhoads R, McCarley RW. Lateralized P3 deficit in schizotypal personality disorder. *Biol Psychiatry* 2000;48(7):702-705. PMID: [PMC2845845](#)
92. Farmer CM, O'Donnell BF, *Niznikiewicz MA, Voglmaier MM, McCarley RW, **Shenton ME**. Visual perception and working memory in schizotypal personality disorder. *Am J Psychiatry* 2000;157(5):781-788. PMID: [PMC2845849](#)
93. Voglmaier MM, Seidman LJ, *Niznikiewicz MA, *Dickey CC, **Shenton ME**, McCarley RW. Verbal and nonverbal neuropsychological test performance in subjects with schizotypal personality disorder. *Am J Psychiatry* 2000;157(5):787-793. PMID: [PMC2845850](#)
94. *Hirayasu Y, **Shenton ME**, *Salisbury DF, McCarley RW. Hippocampus and superior temporal gyrus volume in first-episode schizophrenia. *Arch Gen Psychiatry* 2000;57(6):618-618. [Letter to the editor]. PMID: [10839342](#)
95. *Hirayasu Y, McCarley RW, *Salisbury DF, *Tanaka S, *Kwon JS, *Frumin M, *Synderman D, Yurgelun-Todd D, Kikinis R, Jolesz FA, **Shenton ME**. Planum temporale and Heschl gyrus volume reduction in schizophrenia – A MRI study of first-episode patients. *Arch Gen Psychiatry* 2000;57(7):692-699. PMID: [PMC2850271](#)
96. *Salisbury DF, O'Donnell BF, McCarley RW, Nestor PG, **Shenton ME**. Event-related potentials elicited during a context-free homograph task in normal versus schizophrenic subjects. *Psychophysiology* 2000;37(4):456-463. PMID: [PMC2646500](#)
97. *Zahajsky J, *Dickey CC, McCarley RW, *Fischer IA, Nestor PG, Kikinis R, **Shenton ME**. A quantitative MR measure of the fornix in schizophrenia. *Schizophr Res* 2001;47(1):87-97. PMID: [PMC2845160](#)
98. **Shenton ME**, *Dickey CC, *Frumin M, McCarley RW. A review of MRI findings in schizophrenia. *Schizophr Res* 2001;49(1-2):1-52. PMID: [PMC2812015](#) [**ESI Thomson Scientific, rated as one of the top 1% of fast breaking papers in the field of schizophrenia research:**(<http://www.esi-topics.com/fbp/comments/october02-MarthaShenton.html>)]

99. McCarley RW, Wible CG, *Frumin M, *Hirayasu Y, *Levitt JJ, **Shenton ME**. Why vote-count reviews don't count. *Biol Psychiatry* 2001;49:161-163. [Letter to the Editor.] [\[full text\]](#)
100. *Hirayasu Y, *Tanaka S, **Shenton ME**, *Salisbury DF, DeSantis MA, *Levitt JJ, Wible CG, Yurgelun-Todd D, Kikinis R, Jolesz FA, McCarley RW. Prefrontal gray matter volume reduction in first episode schizophrenia. *Cereb Cortex* 2001;11(4):374-381. PMID: [11278200](#) [\[full text\]](#)
101. Wible CG, *Kubicki M, Yoo S-S, Kacher DF, *Salisbury DF, Anderson MC, **Shenton ME**, *Hirayasu Y, Kikinis R, Jolesz FA, McCarley RW. A functional magnetic resonance imaging study of auditory mismatch in schizophrenia. *Am J Psychiatry* 2001;158(6):938-943. PMCID: [PMC2845157](#)
102. *Salisbury DF, Rutherford B, **Shenton ME**, McCarley RW. Button-pressing affects P300 amplitude and scalp topography. *Clin Neurophysiology* 2001;112(9):1676-1684. PMCID: [PMC2650488](#)
103. Bonne O, Brandes D, Gilboa A, Gomori J, **Shenton ME**, Pitman RK, Shalev AY. Longitudinal MRI study of hippocampal volume in trauma survivors with PTSD. *Am J Psychiatry* 2001;158(8):1248-1251. PMCID: [PMC2819102](#)
104. Gugino LD, Romero R, Aglio L, *Titone D, Ramirez M, Pascual-Leone A, Grimson E, Weisenfeld N, Kikinis R, **Shenton ME**. Transcranial magnetic stimulation coregistered with MRI: A comparison of a guided versus blind stimulation technique and its effect on compound muscle action potentials. *Clin Neurophysiology* 2001;112(10):1781-1792. PMCID: [PMC2845153](#)
105. Gugino LD, Aglio LS, *Potts G, Grimson WEL, **Shenton ME**, Kikinis R, Alexander E, Gonzalez AA, Romero R, Ettinger GJ, Cote WA, Leventon ME, Black PM. Perioperative use of transcranial magnetic stimulation. *Techniques in Neurosurgery* 2001;7(1):33-51.
106. Nestor PG, Han SD, *Niznikiewicz M, *Salisbury D, *Spencer K, **Shenton ME**, McCarley RW. Semantic disturbance in schizophrenia and its relationship to the cognitive neuroscience of attention. *Biol Psychology* 2001;57:(1-3)23-46. PMCID: [PMC2849104](#)
107. Wible CG, *Anderson J, **Shenton ME**, *Kricun A, *Hirayasu Y, *Tanaka S, *Levitt JJ, O'Donnell BF, Kikinis R, Jolesz FA, McCarley RW. Prefrontal cortex, negative symptoms, and schizophrenia: An MRI study. *Psychiatr Res* 2001;108(2):65-78. PMCID: [PMC2845854](#)
108. *Dickey CC, McCarley RW, **Shenton ME**. The brain in schizotypal personality disorder: A review of structural MRI and CT findings. *Harvard Review of Psychiatry* 2002;10(1):1-15. PMCID: [PMC2854016](#)
109. Nestor PG, O'Donnell BF, McCarley RW, *Niznikiewicz, M, Barnard J, Shen ZJ, Bookstein FL, **Shenton ME**. A new statistical method for testing hypotheses of neuropsychological/MRI relationships in schizophrenia: partial least squares analysis. *Schizophr Res* 2002;53(1-2):57-66. PMCID: [PMC2845169](#)
110. *Salisbury DF, DeSantis MA, **Shenton ME**, McCarley RW. The effect of background noise on P300 to suprathreshold stimuli. *Psychophysiology* 2002;39(1):111-115. PMCID: [PMC2647509](#)
111. Mamata H, Mamata Y, Westin CF, **Shenton ME**, Kikinis R, Jolesz FA, Maier SE. High-resolution line scan diffusion tensor MR imaging of white matter fiber tract anatomy. *Am J Neuroradiol* 2002;23(1):67-75. PMCID: [PMC2845164](#)
112. *Salisbury DF, **Shenton ME**, Nestor PG, McCarley RW. Semantic bias, homograph comprehension, and event-related potentials in schizophrenia. *Clin Neurophysiology* 2002;113:383-395. PMCID: [PMC2650489](#)
113. *Kubicki M, Westin CF, Maier SE, *Frumin M, Nestor PG, *Salisbury DF, Kikinis R, Jolesz FA, McCarley RW, **Shenton ME**. Uncinate fasciculus findings in schizophrenia: A magnetic resonance diffusion tensor imaging study. *Am J Psychiatry* 2002;159(5):813-820. PMCID: [PMC2803760](#)

114. McCarley RW, *Salisbury DF, *Hirayasu Y, Yurgelun-Todd DA, Tohen M, Zarate C, Kikinis R, Jolesz FA, **Shenton ME**. Association between smaller left posterior superior temporal gyrus volume on magnetic resonance imaging and smaller left temporal P300 amplitude in first-episode schizophrenia. *Arch Gen Psychiatry* 2002;59(4):321-331. PMID: [11926932](#) [full text]
115. *Levitt JJ, McCarley RW, *Dickey CC, Voglmaier MM, *Niznikiewicz MA, Seidman LJ, *Hirayasu Y, *Ciszewski AA, Kikinis R, Jolesz FA, **Shenton ME**. MRI study of caudate nucleus volume and its cognitive correlates in neuroleptic-naive patients with schizotypal personality disorder. *Am J Psychiatry* 2002;159(7):1190-1197. PMCID: [PMC2826363](#)
116. **Shenton ME**, Gerig G, McCarley RW, Székely G, Kikinis R. Amygdala-hippocampal shape differences in schizophrenia: The application of 3D shape models to volumetric MR data. *Psychiatry Res: Neuroimaging* 2002;115(1-2):15-35. PMCID: [PMC2824647](#) [Selected as one of the most original and state-of-the art research articles in the area of Health and Medical Informatics in recent years, published in 2004 Yearbook of Medical Informatics: Towards Clinical Bioinformatics, Schattauer, IMIA-International Medical Informatics Association, GmbH, Stuttgart, Germany.]
117. *Frumin M, Golland P, Kikinis R, *Hirayasu Y, *Salisbury DF, Hennen J, *Dickey CC, Anderson M, Jolesz FA, Grimson WEL, McCarley RW, **Shenton ME**. Shape differences in the corpus callosum in first-episode schizophrenia and first-episode psychotic affective disorder. *Am J Psychiatry* 2002;159(5):866-868. PMCID: [PMC2845853](#)
118. *Salisbury DF, **Shenton ME**, Griggs CB, Bonner-Jackson A, McCarley RW. Mismatch negativity and first episode schizophrenia. *Arch Gen Psychiatry* 2002;59(8):686-694. PMID: [12150644](#) [full text]
119. *Lee CU, **Shenton ME**, *Salisbury DF, *Kasai K, *Onitsuka T, *Dickey CC, Yurgelun-Todd D, Kikinis R, Jolesz FA, McCarley RW. Fusiform gyrus volume reduction in first-episode schizophrenia: A magnetic resonance imaging study. *Arch Gen Psychiatry* 2002;59(9):775-781. PMID: [12215076](#) [full text]
120. McNerney T, Hamarneh G, **Shenton M**, Terzopoulos D. Deformable organisms for automatic medical image analysis. *Med Image Analysis* 2002;6(3):251-266. PMCID: [PMC2845173](#) [Selected as one of the most original and state-of-the art research articles in the area of Health and Medical Informatics over the past several years for publication in the 2004 Yearbook of Medical Informatics: Towards Clinical Bioinformatics, Schattauer, IMIA-International Medical Informatics Association, GmbH, Stuttgart, Germany.]
121. *Anderson JE, Wible CG, McCarley RW, Jakab M, *Kasai K, **Shenton ME**. An MRI study of temporal lobe abnormalities and negative symptoms in chronic schizophrenia: An MRI study. *Schizophr Res* 2002;58:123-134. PMCID: [PMC2845171](#)
122. Gilbertson MW, **Shenton ME**, *Ciszewski A, *Kasai K, Lasko NB, Orr SP, Pitman RK. Smaller hippocampal volume predicts pathologic vulnerability to psychological trauma. *Nat Neuroscience* 2002;5(11):1242-1247. PMCID: [PMC2819093](#)
123. *Dickey CC, McCarley RW, Voglmaier MM, *Frumin M, *Niznikiewicz MA, *Hirayasu Y, *Fraone S, Seidman LJ, **Shenton ME**. Smaller left Heschl's gyrus volume in patients with schizotypal personality disorder. *Am J Psychiatry* 2002;159(9):1521-1527. PMCID: [PMC2832788](#)
124. *Niznikiewicz MA, **Shenton ME**, Voglmaier M, Nestor PG, *Dickey CC, *Frumin M, Seidman LJ, *Allen CG, McCarley RW. Semantic dysfunction in women with schizotypal personality disorder. *Am J Psychiatry* 2002;159(10):1767-1774. PMCID: [PMC2845844](#)
125. O'Donnell BF, *Potts GF, Nestor PG, Stylianopoulos KC, **Shenton ME**, McCarley RW. Spatial frequency discrimination in schizophrenia. *J Abnormal Psychology* 2002;111(4):620-625. PMCID: [PMC2848254](#)

126. *Kubicki M, **Shenton ME**, *Salisbury DF, *Hirayasu Y, *Kasai K, Kikinis R, Jolesz FA, McCarley RW. Voxel-based morphometric analysis of gray matter in first episode schizophrenia. *NeuroImage* 2002;17(4):1711-1719. PMID: [PMC2845166](#)
127. *Kubicki M, Westin CF, Maier SE, Mamata H, *Frumin M, *Ersner-Hershfield H, Kikinis R, Jolesz FA, McCarley RW, **Shenton ME**. Diffusion tensor imaging and its application to neuropsychiatric disorders. *Harvard Review of Psychiatry* 2002;10(6):324-336. PMID: [PMC2853779](#)
128. *Kasai K, **Shenton ME**, *Salisbury DF, *Hirayasu Y, *Lee CU, *Ciszewski AA, Yurgelun-Todd D, Kikinis R, Jolesz FA, McCarley RW. Progressive decrease of left superior temporal gyrus gray matter volume in patients with first-episode schizophrenia. *Am J Psychiatry* 2003;160(1):156-164. PMID: [PMC2845847](#)
129. *Onitsuka T, **Shenton ME**, *Kasai K, Nestor PG, *Toner SK, Kikinis R, Jolesz FA, McCarley RW. Fusiform gyrus volume reduction and facial recognition in chronic schizophrenia. *Arch Gen Psychiatry* 2003;60(4):349-355. PMID: [12695311](#) [full text]
130. *Kasai K, **Shenton ME**, *Salisbury DF, *Hirayasu Y, *Onitsuka T, *Spencer MH, Yurgelun-Todd DA, Kikinis R, Jolesz FA, McCarley RW. Progressive decrease of left Heschl gyrus and planum temporale gray matter volume in schizophrenia – A longitudinal study of first-episode patients. *Arch Gen Psychiatry* 2003;60(8):766-775. PMID: [PMC2901861](#)
131. *Spencer KM, Nestor PG, *Niznikiewicz MA, *Salisbury DF, **Shenton ME**, McCarley RW. Abnormal neural synchrony in schizophrenia. *J Neuroscience* 2003;23(19):7407-7411. PMID: [PMC2848257](#)
132. *Dickey CC, McCarley RW, Voglmaier MM, *Niznikiewicz MA, Seidman LJ, *Frumin M, *Toner S, *Demeo S, **Shenton ME**. A MRI study of fusiform gyrus in schizotypal personality disorder. *Schizophr Res* 2003;64(1):35-39. PMID: [PMC2848253](#)
133. *Kasai K, **Shenton ME**, *Salisbury DF, *Onitsuka T, *Toner SK, Yurgelun-Todd D, Kikinis R, Jolesz FA, McCarley RW. Differences and similarities in insular and temporal pole MRI gray matter volume abnormalities in first-episode schizophrenia and affective psychosis. *Arch Gen Psychiatry* 2003;60(11):1069-1077. PMID: [14609882](#) [full text]
134. *Park HJ, *Kubicki M, **Shenton ME**, Guimond A, McCarley RW, Maier SE, Kikinis R, Jolesz FA, Westin CF. Spatial normalization of diffusion tensor MRI using multiple channels. *NeuroImage* 2003;20(4):1995-2009. PMID: [PMC2811885](#)
135. *Kubicki M, Westin CF, Nestor PG, Wible CG, *Frumin M, Maier SE, Kikinis R, Jolesz FA, McCarley RW, **Shenton ME**. Cingulate fasciculus integrity disruption in schizophrenia: A magnetic resonance diffusion tensor imaging study. *Biol Psychiatry* 2003;54:1171-1180.(Erratum in *Biol Psychiatry* 2004;55:661) PMID: [PMC2806222](#)
136. *Kubicki M, McCarley RW, Nestor PG, Huh T, Kikinis R, **Shenton ME**, Wible CG. An fMRI study of semantic processing in men with schizophrenia. *NeuroImage* 2003;20(4):1923-1933. PMID: [PMC2806220](#)
137. *Akdag SJ, Nestor PG, O'Donnell BF, *Niznikiewicz MA, **Shenton ME**, McCarley RW. The startle reflex in schizophrenia: Habituation and personality correlates. *Schizophr Res* 2003;64(2-3):165-173. PMID: [PMC2845846](#)
138. Han SD, Nestor PG, **Shenton ME**, *Niznikiewicz M, Hannah G, McCarley RW. Associative memory in chronic schizophrenia: A computational model. *Schizophr Res* 2003;61(2-3):255-263. PMID: [PMC2849103](#)

139. *Dickey CC, McCarley RW, Voglmaier MM, *Niznikiewicz MA, Seidman LJ, *Demeo S, *Frumin M, **Shenton ME**. An MRI study of superior temporal gyrus volume in women with schizotypal personality disorder. *Am J Psychiatry* 2003;160(12):2198-2201. PMID: [PMC2826718](#)
140. *Wiegand LC, Warfield SK, *Levitt JJ, *Hirayasu Y, *Salisbury DF, Heckers S, *Dickey CC, Kikinis R, Jolesz FA, McCarley RW, **Shenton ME**. Prefrontal cortical thickness in first episode psychosis: A magnetic resonance imaging study. *Biol Psychiatry* 2004;55(2):131-140. PMID: [PMC2794421](#)
141. *Kubicki M, Maier SE, Westin CF, Mamata H, *Ersner-Hersfield H, Estepar R, Kikinis R, Jolesz FA, McCarley RW, **Shenton ME**. Comparison of single-shot echo-planar and line scan protocols for diffusion tensor imaging. *Academic Radiology* 2004;11(2):224-232. PMID: [PMC2793336](#)
142. *Levitt JJ, Westin CF, Nestor PG, Estepar RSJ, *Dickey CC, Voglmaier MM, Seidman LJ, Kikinis R, Jolesz FA, McCarley RW, **Shenton ME**. Shape of caudate nucleus and its cognitive correlates in neuroleptic-naive schizotypal personality disorder. *Biological Psychiatry* 2004;55(2):177-184. PMID: [PMC2793335](#)
143. *May FS, *Chen CQ, Gilbertson MW, **Shenton ME**, Pitman RK. Cavum septum pellucidum in monozygotic twins discordant for combat exposure: Relationship to posttraumatic stress disorder. *Biological Psychiatry* 2004;55(6):656-658. PMID: [PMC2794416](#)
144. *Salisbury DF, Griggs CB, **Shenton ME**, McCarley RW. The NoGo P300 'anteriorization' effect and response inhibition. *Clin Neurophysiology* 2004;115(7):1550-1558. PMID: [PMC2706017](#)
145. *Niznikiewicz MA, Friedman M, **Shenton ME**, Voglmaier M, Nestor PG, *Frumin M, Seidman L, *Sutton J, McCarley RW. Processing sentence context in women with schizotypal personality disorder: An ERP study. *Psychophysiology* 2004;41(3):367-371. PMID: [PMC2794422](#)
146. *Park HJ, Westin CF, *Kubicki M, Maier SE, *Niznikiewicz M, *Baer A, *Frumin M, Kikinis R, Jolesz FA, McCarley RW, **Shenton ME**. White matter hemisphere asymmetries in healthy subjects and in schizophrenia: A diffusion tensor MRI study. *NeuroImage* 2004;23(1):213-223. PMID: [PMC2794419](#) [Featured on the Cover of **NeuroImage**.]
147. *Onitsuka T, **Shenton ME**, *Salisbury DF, *Dickey CC, *Kasai K, *Toner SK, *Frumin M, Kikinis R, Jolesz FA, McCarley RW. Middle and inferior temporal gyrus gray matter volume abnormalities in chronic schizophrenia: An MRI study. *Am J Psychiatry* 2004;161(9):1603-1611. PMID: [PMC2793337](#)
148. *Park HJ, *Kubicki M, Westin CF, Talos IF, *Brun A, Pieper S, Kikinis R, Jolesz FA, McCarley RW, **Shenton ME**. Method for combining information from white matter fiber tracking and gray matter parcellation. *AJNR* 2004;25(8):1318-1324. PMID: [PMC2813857](#)
149. Nestor PG, *Kubicki M, Gurrera RJ, *Niznikiewicz M, *Frumin M, McCarley RW, **Shenton ME**. Neuropsychological correlates of diffusion tensor imaging in schizophrenia. *Neuropsychology* 2004;18(4):629-637. PMID: [PMC2790923](#) [Rated as one of top 50 papers requested in downloads for Neuropsychology.]
150. *Dickey CC, *Salisbury DF, *Nagy AI, *Hirayasu Y, *Lee CU, McCarley RW, **Shenton ME**. Follow-up MRI study of prefrontal volumes in first-episode psychotic patients. *Schizophr Res* 2004;71:349-351. PMID: [PMC2798804](#)
151. *Kasai K, McCarley RW, *Salisbury DF, *Onitsuka T, *Demeo S, Yurgelun-Todd D, Kikinis R, Jolesz FA, **Shenton ME**. Cavum septi pellucidi in first-episode schizophrenic and affective psychosis: An MRI study. *Schizophr Res* 2004;71(1):65-76. PMID: [PMC2811876](#)

152. *Park HJ, *Levitt JJ, **Shenton ME**, *Salisbury DF, *Kubicki M, Kikinis R, Jolesz FA, McCarley RW. An MRI study of spatial probability brain map differences between first-episode schizophrenia and normal controls. *NeuroImage* 2004;22(3):1231-1246. PMID: [PMC2789267](#) [**Featured on the Cover of NeuroImage.**]
153. *Spencer KM, Nestor PG, Perlmutter R, *Niznikiewicz MA, Klump MC, *Frumin M, **Shenton ME**, McCarley RW. Neural synchrony indexes disordered perception and cognition in schizophrenia. *Proc Nat Acad Sci USA* 2004;101(49):17288-17293. PMID: [PMC535363](#)
154. *Brun A, Knutsson H, *Park HJ, **Shenton ME**, Westin CF. Clustering fiber traces using normalized cuts. *Lect Notes Comput Sci* 2004; Sep 2; 3216/2004(3216):368-375. PMID: [PMC3296487](#)
155. Golland P, Grimson WEL, **Shenton ME**, Kikinis R. Detection and analysis of statistical differences in anatomical shape. *Med Image Analysis* 2005;9(1):69-86. PMID: [PMC2768070](#)
156. *Wiegand LC, Warfield SK, *Levitt JJ, *Hirayasu Y, *Salisbury DF, Heckers S, *Bouix S, *Schwartz D, *Spencer M, *Dickey CC, Kikinis R, Jolesz FA, McCarley RW, **Shenton ME**. An *in vivo* MRI study of prefrontal cortical complexity in first-episode psychosis. *Am J Psychiatry* 2005;162(1):65-70. PMID: [PMC2768063](#)
157. Voglmaier MM, Seidman LJ, *Niznikiewicz MA, *Dickey CC, **Shenton ME**, McCarley RW. A Comparative profile analysis of neuropsychological function in men and women with schizotypal personality disorder. *Schizophr Res* 2005;74(1):43-49. PMID: [PMC2772126](#)
158. *Onitsuka T, Nestor PG, Gurrera RJ, **Shenton ME**, *Kasai K, *Frumin M, *Niznikiewicz MA, McCarley RW. Association between reduced extraversion and right posterior fusiform gyrus gray matter reduction in chronic schizophrenia. *Am J Psychiatry* 2005;162(3):599-601. PMID: [PMC2770436](#)
159. Nestor PG, Piech R, *Allen C, *Niznikiewicz M, **Shenton ME**, McCarley RW. Retrieval-induced forgetting in schizophrenia. *Schizophr Res* 2005;75:199-209. PMID: [PMC2772129](#)
160. *Kubicki M, *Park HJ, Westin CF, Nestor PG, Mulkern RV, Maier SE, *Niznikiewicz M, *Connor EE, *Levitt JJ, *Frumin M, Kikinis R, Jolesz FA, McCarley RW, **Shenton ME**. DTI and MTR abnormalities in schizophrenia: Analysis of white matter integrity. *NeuroImage* 2005;26:1109-1118. PMID: [PMC2768051](#)
161. *Nierenberg J, *Salisbury DF, *Levitt JJ, *David EA, McCarley RW, **Shenton ME**. Reduced left angular gyrus volume in first-episode schizophrenia. *Am J Psychiatry* 2005;162:1539-1541. PMID: [PMC2766930](#)
162. *Nakamura M, McCarley RW, *Kubicki M, *Dickey CC, *Niznikiewicz MA, Voglmaier MM, Seidman LJ, Maier SE, Westin CF, Kikinis R, and **Shenton ME**. Fronto-temporal disconnectivity in schizotypal personality disorder: A diffusion tensor imaging study. *Biol Psychiatry* 2005;58(6):468-478. PMID: [PMC2768055](#)
163. *Dickey CC, McCarley RW, *Niznikiewicz MA, Voglmaier MM, Seidman LJ, *Kim S, **Shenton ME**. Clinical, cognitive, and social characteristics of a sample of neuroleptic-naive persons with schizotypal personality disorder. *Schizophr Res* 2005;78:297-308. PMID: [PMC2766931](#)
164. Gurrera RJ, *Dickey CC, *Niznikiewicz MA, Voglmaier MM, **Shenton ME**, McCarley RW. The five-factor model in schizotypal personality disorder. *Schizophr Res* 2005;80:243-251. PMID: [PMC2768048](#)
165. *Kubicki M, Westin C-F, McCarley RW, **Shenton ME**. The application of DTI to investigate white matter abnormalities in schizophrenia. *Ann. N.Y. Acad. Sci.* 2005;1064:134-148. PMID: [PMC2768113](#)
166. Pohl KM, Fisher J, *Levitt JJ, **Shenton ME**, Kikinis R, Grimson WE, Wells WM. A unifying approach to registration, segmentation, and intensity correction. *Med Image Comput Assist Interv* 2005;8(Pt 1):310-318. PMID: [PMC2784666](#)

167. Martin-Fernandez M, *Bouix S, *Ungar L, McCarley RW, **Shenton ME**. Two methods for validating brain tissue classifiers. *Med Image Comput Comput Assist Interv* 2005;8(Pt 1):515-522. PMCID: [PMC2775440](#)
168. *Onitsuka T, *Niznikiewicz MA, *Spencer KM, *Frumin M, *Kuroki N, *Lucia LC, **Shenton ME**, McCarley RW. Functional and structural deficits in brain regions subserving face perception in schizophrenia. *Am J Psychiatry* 2006;163:455-462. PMCID: [PMC2773688](#)
169. Nestor PG, Valdman O, *Niznikiewicz M, *Spencer K, McCarley RW, **Shenton ME**. Word priming in schizophrenia: Associational and semantic influences. *Schizophr Res* 2006;82:139-142. PMCID: [PMC2768044](#)
170. O'Donnell L, *Kubicki M, **Shenton ME**, *Dreusicke MH, Grimson WEL, Westin CF. A method for clustering white matter fiber tracts. *AJNR* 2006;27:1032-1036. PMCID: [PMC2768142](#)
171. *Kuroki N, *Kubicki M, Nestor PG, *Salisbury DF, *Park HJ, *Levitt JJ, *Woolston S, *Frumin M, *Niznikiewicz M, Westin CF, Maier SE, McCarley RW, **Shenton ME**. Fornix integrity and hippocampal volume in male schizophrenic patients. *Biol Psychiatry* 2006;60:22-31. PMCID: [PMC2768597](#)
172. *Koo MS, *Levitt JJ, McCarley RW, Seidman LJ, *Dickey CC, *Niznikiewicz MA, Voglmaier MM, *Zamani P, *Long KL, *Kim SS, **Shenton ME**. Reduction of caudate volume in neuroleptic-naive female subjects with schizotypal personality disorder. *Biol Psychiatry* 2006;60:40-48. PMCID: [PMC2768064](#)
173. *Kuroki N, **Shenton ME**, *Salisbury DF, *Hirayasu Y, *Onitsuka T, *Ersner-Hershfield H, Yurgelun-Todd D, Kikinis R, Jolesz FA, McCarley RW. Middle and inferior temporal gyrus gray matter volume in first-episode schizophrenia: An MRI study. *Am J Psychiatry* 2006;163:2103-2110. PMCID: [PMC2766919](#)
174. Haider H, *Bouix S, *Levitt JJ, McCarley RW, **Shenton ME**, Soul JS. Characterizing the shape of anatomical structures with Poisson's equation. *IEEE Trans on Med Imaging* 2006;25(10):1249-1257. PMCID: [PMC2785042](#)
175. *Levitt JJ, *Chen QCC, *May FS, Gilbertson MW, **Shenton ME**, Pitman RK. Volume of cerebellar vermis in monozygotic twins discordant for combat exposure: Lack of relationship to post-traumatic stress disorder. *Psychiatry Research: Neuroimaging* 2006;148(2-3):143-149. PMCID: [PMC2768053](#)
176. *Koo MS, *Dickey CC, *Park HJ, *Kubicki M, *Ji NY, *Bouix S, Pohl KM, *Levitt JJ, *Nakamura M, **Shenton ME**, McCarley RW. Smaller neocortical gray matter and larger sulcal CSF volumes in neuroleptic-naive females with schizotypal personality disorder. *Arch Gen Psychiatry* 2006;63:1090-1100. PMID: [17015811](#) [full text]
177. Pitman RK, Gilbertson MW, Gurvits TV, *May FS, Lasko NB, Metzger LJ, **Shenton ME**, Yeguda R, Orr SP. Clarifying the origin of biological abnormalities in PTSD through the study of identical twins discordant for combat exposure. *Annals NY Academy Science* 2006;1071:242-254. PMCID: [PMC2770249](#)
178. Styner M, Oguz I, Brechbühler C, Pantazis D. *Levitt JJ, **Shenton ME**, Gerig G. Framework for the statistical shape analysis of brain structures using SPHARM-PDM. *Insight J* 2006;1071:242-250. PMCID: [PMC3062073](#)
179. *Niethammer M, *Bouix S, Westin CF, **Shenton ME**. Fiber bundle estimation and parameterization. *Med Imag Comput Comput Assist Interv* 2006;9(Pt 2):252-259. PMCID: [PMC2773691](#)
180. *Pohl KM, Fisher J, **Shenton M**, McCarley RW, Grimson WE, Kikinis R, Wells LM. Logarithm odds maps for shape representation. *Med Imag Comput Comput Assist Interv* 2006;9(Pt 2):955-963. PMCID: [PMC2994060](#)
181. *Pohl KM, *Bouix S, *Nakamura M, Rohlfing T, McCarley RW, Kikinis R, Grimson WEL, **Shenton ME**, Wells WM. A hierarchical algorithm for MR brain parcellation. *IEEE Trans Med Imaging* 2007;26(9):1201-1212. PMCID: [PMC2768067](#)

182. *Kubicki M, McCarley R, Westin CF, *Park HJ, Maier SE, Kikinis R, Jolesz FA, **Shenton ME**. A review of diffusion tensor imaging studies in schizophrenia. *J Psychiatric Res* 2007;41:15-30. PMCID: [PMC2768134](#) [**ESI Thomson Scientific, rated as one of the top 1% of fast breaking papers in the field of schizophrenia research:** <http://sciencewatch.com/dr/fbp/2008/08apr/fbp/08apr/fbpKubicki/>]
183. *Nakamura M, Nestor PG, McCarley RW, *Levitt J, *Hsu L, *Kawashima T, *Niznikiewicz M, **Shenton ME**. Altered orbitofrontal sulco-gyral pattern in schizophrenia. *Brain* 2007;130:693-707. PMCID: [PMC2768130](#)
184. Nestor PG, *Kubicki M, *Spencer KM, *Niznikiewicz M, McCarley RW, **Shenton ME**. Attentional Networks and cingulum bundle in chronic schizophrenia. *Schizophr Res* 2007;90:308-315. PMCID: [PMC1906862](#)
185. *AhnAllen CG, Nestor PG, McCarley RW, **Shenton ME**. The role of retrieval inhibition in the associative memory impairment in schizophrenia. *Psychiatry Res* 2007;150:43-50. PMCID: [PMC1885480](#)
186. *Dickey CC, McCarley RW, Xu ML, Seidman LJ, Voglmaier MM, *Niznikiewicz MA, *Connor E, **Shenton ME**. MRI Abnormalities of the hippocampus and cavum septi pellucidi in females with schizotypal personality disorder. *Schizophr Res* 2007;89:49-58. PMCID: [PMC2777663](#)
187. Nestor PG, *Onitsuka T, Gurrera RJ, *Niznikiewicz M, *Frumin M, **Shenton ME**, McCarley RW. Dissociable contributions of MRI volume reductions of superior temporal and fusiform gyri to symptoms and neuropsychology in schizophrenia. *Schizophr Res* 2007;91:103-106. PMCID: [PMC2788774](#)
188. Nestor PG, *Kubicki M, *Kuroki N, Gurrera RJ, *Niznikiewicz M, **Shenton ME**, McCarley RW. Episodic memory and neuroimaging of hippocampus and fornix in chronic schizophrenia. *Psychiatry Res: Neuroimaging* 2007;155(1):21-28. PMID: [17395435](#)
189. *Onitsuka T, McCarley RW, *Kuroki N, *Dickey CC, *Kubicki M, *Demeo S, *Frumin M, Kikinis R, Jolesz FA, **Shenton ME**. Occipital lobe gray matter volume in male patients with chronic schizophrenia: A quantitative MRI study. *Schizophr Res* 2007;92:197-206. PPMCID: [PMC2396445](#)
190. *Salisbury DF, *Kuroki N, *Kasai K, **Shenton ME**, McCarley RW. Progressive and interrelated functional and structural evidence for post-onset brain reduction in schizophrenia. *Arch Gen Psychiatry* 2007;64:521-529. PMCID: [PMC2903200](#)
191. Gurrera RJ, *Nakamura M, *Kubicki M, *Dickey CC, *Niznikiewicz MA, Voglmaier MM, Seidman LJ, Maier SE, Westin C-F, McCarley RW, **Shenton ME**. The uncinate fasciculus and extraversion in schizotypal personality disorder: A diffusion tensor imaging study. *Schizophr Res* 2007; 90:360-362. PMCID: [PMC1876710](#)
192. *Bouix S, Martin-Fernandez M, *Ungar L, *Nakamura M, *Koo MS, McCarley RW, **Shenton ME**. On evaluating brain tissue classifiers without a ground truth. *NeuroImage* 2007;36(4):1207–1224. PMCID: [PMC2702211](#)
193. Cates J, Fletcher PT, Styner M, **Shenton M**, Whitaker R. Shape modeling and analysis with entropy-based particle systems. *Inf Process Med Imaging* 2007;20:333-345. PMCID: [PMC2768473](#)
194. *Pohl KM, Fisher J, *Bouix S, **Shenton M**, McCarley RW, Grimson WEL, Kikinis R, Wells WM. Using the logarithm of odds to define a vector space on probabilistic atlases. *Med Image Anal* 2007;11(5):465-477. PMCID: [PMC2423493](#) [**Medical Image Analysis- MICCAI'06 Best Paper Prize (First Prize), 10th International Conference on Medical Image Computing and Computer Assisted Intervention (MICCAI 2007), Brisbane, Australia, October 29-November 2, 2007.**]
195. Gilbertson MW, Williston SK, Paulus LA, Lasko NB, Gurvits TV, **Shenton ME**, Pitman RK, Orr SP. Configural cue performance in identical twins discordant for posttraumatic stress disorder: Theoretical implications for the role of hippocampal function. *Biol Psychiatry* 2007;62(5):513-20. PMCID: [PMC2768050](#)

196. *Nakamura M, *Salisbury DF, *Hirayasu H, *Bouix S, Pohl KM, Yoshida T, *Koo MS, **Shenton ME**, McCarley RW. Neocortical gray matter volume in first-episode schizophrenia and first-episode affective psychosis: A cross-sectional and longitudinal MRI study. *Biol Psychiatry* 2007;62(7):773-83. PMID: [PMC2782514](#)
197. Balci SK, Golland P, **Shenton M**, Wells WM. Free-Form B-spline deformation model for groupwise registration. *Med Image Comput Comput Assist Interv* 2007;10(WS):23-30. PMID: [PMC2836172](#)
198. *Niethammer M, Reuter M, Wolter FE, *Bouix S, Peinecke N, *Koo MS, **Shenton ME**. Global medical shape analysis using the Laplace-Bltrami spectrum. *Med Image Comput Comput Assist Interv* 2007;10(Pt 1):850-857. PMID: [PMC2782516](#)
199. *Niethammer M, *Bouix S, Aja-Fernández S, Westin CF, **Shenton ME**. Outlier rejection for diffusion MRI. PMID: [PMC2788769](#)
200. Sabuncu MR, **Shenton ME**, Golland P. Joint registration and clustering of images. *Med Image Comput Comput Assist Interv* 2007;10(WS):47-54. PMID: [PMC2836173](#)
201. Zollei L, **Shenton ME**, Wells WM, Pohl K. The Impact of Atlas Formation Methods on Atlas-Guided Brain Segmentation. *Med Image Comput Comput Assist Interv* 2007;10:39-46. [[full text](#)]
202. Pohl KM, *Bouix S, **Shenton ME**, Grimson WE, Kikinis R. Automatic Segmentation Using Non-Rigid Registration. *Med Image Comput Comput Assist Interv* 2007;26(9):1201-1212. PMID: [PMC2856350](#)
203. *Kasai K, Yamasue H, Gilbertson MW, **Shenton ME**, Rauch SL, Pitman RK. Evidence for acquired pregenual anterior cingulate gray matter loss from a twin study of combat-related post-traumatic stress disorder. *Biol Psychiatry* 2008;63(6):550-556. PMID: [PMC2752671](#)
204. *Spencer KM, *Niznikiewicz MA, **Shenton ME**, McCarley RW. Sensory-evoked gamma oscillations in chronic schizophrenia. *Biol Psychiatry* 2008;63:744-747. PMID: [PMC2330275](#)
205. Nestor PG, *Kubicki M, *Niznikiewicz M, Gurrera RJ, McCarley RW, **Shenton ME**. Neuropsychological disturbance in schizophrenia: A diffusion tensor imaging study. *Neuropsychology* 2008;22(2):246-254. PMID: [PMC2791789](#)
206. *Rosenberger G, *Kubicki M, Nestor PG, *Connor E, *Bushnell GB, *Markant D, *Niznikiewicz M, Westin CF, Kikinis R, Saykin AJ, McCarley RW, **Shenton ME**. Age-related deficits in fronto-temporal connections in schizophrenia: A diffusion tensor imaging study. *Schizophr Res* 2008;102:181-188. PMID: [PMC2684860](#)
207. *Koo MS, *Levitt JJ, *Salisbury DF, *Nakamura M, **Shenton ME**, McCarley RW. A cross-sectional and longitudinal magnetic resonance imaging study of cingulate gyrus gray matter volume abnormalities in first-episode schizophrenia and first-episode affective psychosis. *Arch Gen Psychiatry* 2008;65(7):746-760. PMID: [PMC2793338](#)
208. *Nakamura M, Nestor PG, Levitt JJ, *Cohen AS, *Kawashima T, **Shenton ME**, McCarley RW. Orbitofrontal volume deficit in schizophrenia and thought disorder. *Brain* 2008;131:180-195. PMID: [PMC2773826](#)
209. McCarley RW, *Nakamura M, **Shenton ME**, *Salisbury DF. Combining ERP and structural MRI information in first episode schizophrenia and bipolar disorder. *Clin EEG and Neuroscience* 2008;39(2):57-60. PMID: [PMC2770258](#)
210. *AhnAllen CG, Nestor PG, **Shenton M**, McCarley RW, *Niznikiewicz MA. Early Nicotine withdrawal and transdermal nicotine effects on neurocognitive performance in schizophrenia. *Schizophr Res* 2008;100:261-269. PMID: [PMC2365510](#)

211. *Spencer KM, *Salisbury DF, **Shenton ME**, McCarley RW. γ -band auditory steady-state responses are impaired in first episode psychosis. *Biol Psychiatry* 2008;64:369-375. PMID: [PMC2579257](#)
212. *Dickey CC, Morocz IA, *Niznikiewicz MA, Voglmaier M, *Toner S, *Khan U, *Dreusicke M, Yoo SS, **Shenton ME**, McCarley RW. Auditory processing abnormalities in schizotypal personality disorder: An fMRI experiment using tones of deviant pitch and duration. *Schizophr Res* 2008;103:26-39. PMID: [PMC3188851](#)
213. Aja-Fernandez S, *Niethammer M, *Kubicki M, **Shenton ME**, Westin CF. Restoration of DWI data using a Rician LMMSE estimator. *IEEE Trans Med Imaging* 2008;21(3):150-156. PMID: [PMC2756835](#)
214. *Sampaio A, Sousa N, *Féernandez M, Vasconcelos C, **Shenton ME**, Gonçalves Ó. MRI assessment of superior temporal gyrus in Williams syndrome. *Cognitive and Behavioural Neurology* 2008;21(3):150-156. PMID: [PMC2770166](#)
215. *Kubicki M, Styner M, *Bouix S, Gerig G, *Markant D, *Smith K, Kikinis R, McCarley RW, **Shenton ME**. Reduced Interhemispheric Connectivity in Schizophrenia-Tractography Based Segmentation of the Corpus Callosum. *Schizophr Res* 2008;106(2-3):125-131. PMID: [PMC2630535](#)
216. Malcolm J, *Rathi Y, **Shenton ME**, Tannenbaum A. Label space: a coupled multi-shape representation. *Med Image Comput Comput Assist Interv* 2008;11(Pt 2):416-424. PMID: [PMC2805911](#)
217. Maddah M, *Kubicki M, Wells WM, Westin CF, Shenton ME, Grimson WE. Findings in schizophrenia by tract-oriented DT-MRI analysis. *Med Image Comput Comput Assist Interv* 2008;11(Pt 1):917-924. PMID: [PMC2770163](#)
218. Sabunchu M, Balci S, **Shenton ME**, Golland P. Discovering modes of an imaging population through mixture modeling. *Med Image Comput Comput Assist Interv* 2008;11(Pt 2):381-389. PMID: [PMC2671151](#)
219. *Lee KU, Yoshida T, *Kubicki M, *Bouix S, Westin CF, Kindlmann G, *Niznikiewicz M, *Cohen A, McCarley RW, **Shenton ME**. Increased diffusivity in superior temporal gyrus in schizophrenia: A diffusion tensor imaging study. *Schizophr Res* 2009;108(1-3):33-40. PMID: [PMC2675036](#)
220. Whitfield-Gabrieli S, Thermenos HW, Milanovic S, Tsuang MT, Farone SV, McCarley RW, **Shenton ME**, Green AF, Nieto-Castanon A, LaViolette P, Wojcik J, Gabrieli JDE, Seidman LJ. Hyperactivity and hyperconnectivity of the default network in schizophrenia and first-degree relatives of persons with schizophrenia. *Proc Nat Acad Sci USA* 2009;105(4):1279-1284. PMID: [PMC2633557](#)
221. *Voineskos AN, O'Donnell LJ, Lobaugh NJ, *Markant D, Ameis SH, *Niethammer M, Mulsant BH, Pollock BG, Kennedy JL, Westin CF, **Shenton ME**. Quantitative Examination of a Novel Clustering Method Using Magnetic Resonance Diffusion Tensor Tractography. *NeuroImage* 2009;45:370-376. PMID: [PMC2646811](#)
222. *Fitzsimmons J, *Kubicki M, *Smith K, *Bushell G, Estepar SJ, Westin CF, Nestor PG, *Niznikiewicz MA, Kikinis R, McCarley RW, **Shenton ME**. Diffusion tractography of the fornix in schizophrenia. *Schizophr Res* 2009;107:39-46. PMID: [PMC2646850](#)
223. *Kawashima T, *Nakamura M, *Bouix S, *Kubicki M, *Salisbury DF, Westin C-F, McCarley RW, **Shenton ME**. Uncinate fasciculus abnormalities in recent onset schizophrenia and affective psychosis: A diffusion tensor imaging study. *Schizophr Res* 2009;110:119-126. PMID: [PMC2749228](#)
224. *Niznikiewicz MA, *Spencer KM, *Dickey D, Voglmaier M, Seidman LJ, **Shenton ME**, McCarley RW. Abnormal pitch mismatch negativity in individuals with schizotypal personality disorder. *Schizophr Res* 2009;110:188-193. PMID: [19327968](#)

225. Malcolm JG, **Shenton ME**, *Rathi Y. Neural tractography using an unscented Kalman filter. *Inf Process Med Imaging* 2009;21:16-138. PMCID: [PMC2768602](#)
226. Yoshida T, McCarley RW, *Nakamura M, *Lee KU, *Koo MS, *Bouix S, *Salisbury DF, Morra L, **Shenton ME**, *Niznikiewicz MA. A prospective longitudinal volumetric MRI study of superior temporal gray matter and amygdala-hippocampal complex in chronic schizophrenia. *Schizophr Res* 2009;113(1):84-94. PMCID: [PMC2776716](#)
227. *Rathi Y, Michailovich O, **Shenton ME**, *Bouix S. Directional functions for orientation distribution estimation. *Med Image Anal* 2009;13(3):432-444. PMCID: [PMC2677112](#)
228. Voglmaier MM, Seidman LJ, *Niznikiewicz MA, *Madan A, *Dickey CC, **Shenton ME**, McCarley RW. Dichotic listening in schizotypal personality disorder: Evidence for gender and laterality effect. *Schizophr Res* 2009;15:290-292. PMID: [19464150](#)
229. Sabuncu MR, Balci SK, **Shenton ME**, Golland P. Image-driven population analysis through mixture modeling. *IEEE Trans Med Imaging* 2009;29:1473-1487. PMCID: [PMC2832589](#)
230. *Levitt JJ, Styner M, *Niethammer M, *Bouix S, *Koo MS, Voglmaier MM, *Dickey CC, *Niznikiewicz MA, Kikinis R, McCarley RW, **Shenton ME**. Shape abnormalities of caudate nucleus in schizotypal personality disorder. *Schizophr Res* 2009;110(1-3):127-139. PMCID: [PMC2756791](#)
231. *Oh JS, *Kubicki M, *Rosenberger G, *Bouix S, *Levitt J, McCarley RW, Westin C-F, **Shenton ME**. Thalamo-frontal white matter alterations in chronic schizophrenia: A quantitative diffusion tractography study. *Human Brain Mapping* 2009;30(11):3812-3825. PMCID: [PMC2767408](#)
232. *Kubicki M, *Niznikiewicz M, *Connor E, *Ungar L, Nestor PG, *Bouix S, *Dreusicke M, Kikinis R, McCarley RW, **Shenton ME**. Relationship Between White Matter Integrity, Attention, and Memory in Schizophrenia: A Diffusion Tensor Imaging Study. *Brain Imaging and Behavior* 2009;3(2):191-201. PMCID: [PMC2885800](#)
233. *Onitsuka T, *Spencer KM, Lucia LC, **Shenton ME**, McCarley RW, *Niznikiewicz MA. Abnormal asymmetry of the face N170 repetition effect in male patients with chronic schizophrenia. *Brain Imaging and Behavior* 2009;3(3):240-5. PMID: [22005988](#)
234. *Savadjiev P, Kindlmann GL, *Bouix S, **Shenton ME**, Westin CF. Local White Matter Geometry Indices from Diffusion Tensor Gradients. *Med Image Comput Comput Assist Interv* 2009;12(Pt 1):345-52. PMCID: [PMC2892818](#) (Received the 2009 MICCAI Young Scientist Award for the best paper: <http://ubimon.doc.ic.ac.uk/MICCAI09/m773.html>).
235. Malcolm JG, **Shenton ME**, *Rathi Y. Two-tensor tractography using a constrained filter. *Med Image Comput Comput Assist Interv* 2009;12(Pt 1):894-902. PMCID: [PMC2893231](#)
236. Malcolm JG, Michailovich O, *Bouix S, Westin C-F, **Shenton ME**, *Rathi Y. A filtered approach to neural tractography using the Watson directional function. *Med Image Anal* 2010;14:58-59. PMID: [19914856](#)
237. *Savadjiev P, Kindlmann GL, *Bouix S, **Shenton ME**, Westin C-F. Local white matter geometry from diffusion tensor gradients. *Neuroimage* 2010;49(4):3175-3186. PMCID: [PMC2818447](#)
238. Nestor PG, *Kubicki M, *Nakamura M, *Niznikiewicz M, McCarley RW, **Shenton ME**. Comparing prefrontal gray and white matter contributions to intelligence and decision making in schizophrenia and healthy controls. *Neuropsychology* 2010;24:121-129. PMCID: [PMC2814796](#)
239. *Rathi Y, Malcolm J, *Bouix S, Tannenbaum A, **Shenton ME**. Affine registration of label maps in label space. *J Computing* 2010;2(4):1-11. [[full text](#)]

240. *Voineskos AN, Lobaugh NJ, *Bouix S, Rajji T, Miranda D, Kennedy JL, Mulsant BH, Pollock BG, **Shenton ME**. Diffusion tensor tractography findings in schizophrenia across the adult lifespan. *Brain* 2010;133(Pt5):1494-1504. PMCID: [PMC2859148](#)
241. *Sampaio A, Sousa N, *Féernandez M, Vasconelos C, **Shenton ME**, Gonçalves ÓF. Williams syndrome and memory: A neuroanatomical and cognitive approach. *J Autism and Developmental Disorders* 2010;40(7):870-877. PMID: [20101451](#)
242. *Whitford TJ, *Kubicki M, *Schneiderman JS, O'Donnell L, *King R, *Alvarado JL, *Khan U, *Markant D, Nestor PG, *Niznikiewicz M, McCarley RW, Westin C-F, **Shenton ME**. Corpus callosum abnormalities and their association with psychotic symptoms in patients with schizophrenia. *Biological Psychiatry* 2010;68(1):70-77. PMCID: [PMC2900500](#) [**Featured on the Cover of Biological Psychiatry.**]
243. *Rathi Y, Malcolm J, Michailovich O, Westin C-F, **Shenton ME**, *Bouix S. Tensor-kernels for simultaneous fiber model estimation and tractography. *Magn Reson Med* 2010;64(1):138-148. PMCID: [PMC3043656](#)
244. Malcolm J, **Shenton ME**, *Rathi Y. Filtered multi-tensor tractography. *IEEE Trans Med Imaging* 2010;29(9):1664-1675. PMCID: [PMC3045040](#)
245. *Nguyen AD, **Shenton ME**, *Levitt JJ. Olfactory dysfunction in schizophrenia: A review of neuroanatomy and psychophysiological measurements. *Harvard Review of Psychiatry* 2010;5:279-292. PMID: [20825265](#)
246. *Kikinis Z, Fallon JH, *Niznikiewicz M, Nestor PG, *Davidson C, *Bobrow L, *Pelavin P, Fischl B, Yenaki A, McCarley RW, Kikinis R, *Kubicki M, **Shenton ME**. Gray matter volume reduction in rostral middle frontal gyrus in patients with chronic schizophrenia. *Schizophr Res* 2010;123:153-159. PMCID: [PMC2975427](#)
247. *Dickey CC, Morocz IA, Minney D, *Niznikiewicz M, Volgmaier M, Panych LP, *Khan U, *Zacks R, *Terry D, **Shenton ME**, McCarley RW. Factors in sensory processing of prosody in schizotypal personality disorder: An fMRI experiment. *Schizophr Res* 2010;121(1-3):75-89. PMCID: [PMC2905482](#)
248. *Levitt JJ, *Kubicki M, Nestor PG, *Ersner-Herschfeld H, Westin C-F, *Alvarado J, Kikinis R, Jolesz FA, McCarley RW, **Shenton ME**. A diffusion tensor imaging study of the anterior limb of the internal capsule in schizophrenia. *Psychiatry Res: Neuroimaging* 2010;184(3):143-150. PMID: [21055906](#)
249. *Savadjiev P, *Rathi Y, Malcolm JG, **Shenton ME**, Westin CF. A geometry-based particle filtering approach to white matter tractography. *Med Image Comput Comput Assist Interv* 2010;13(Pt 1):233-240. PMCID: [PMC3081616](#)
250. *Rathi Y, Malcolm J, Michailovich O, Goldstein J, Seidman L, McCarley RW, Westin CF, **Shenton ME**. Biomarkers for identifying first-episode schizophrenia patients using diffusion weighted imaging. *Med Image Comput Comput Assist Interv* 2010;13(Pt 1):657-665. PMCID: [PMC3091029](#)
251. *Whitford TJ, *Kubicki M, Ghorashi S, *Schneiderman JS, *Hawley KJ, McCarley RW, **Shenton ME**+, *Spencer KM+. Predicting inter-hemispheric transfer time from the diffusion properties of the corpus callosum in healthy individuals and schizophrenia patients: A combined ERP and DTI study. *NeuroImage* 2011;54(3):2318-2329. (+equal last authorship.) PMCID: [PMC3006645](#)
252. *Spencer KM, Nestor PG, Valdman O, *Niznikiewicz MA, **Shenton ME**, McCarley RW. Enhanced facilitation of spatial attention in schizophrenia. *Neuropsychol* 2011;25:76-85. PMCID: [PMC3017629](#)
253. *Kubicki M, *Alvarado JL, Westin C-F, Tate DF, *Markant D, *Terry DP, *Whitford TJ, *De Siebenthal J, *Bouix S, McCarley R, Kikinis R, **Shenton ME**. Stochastic tractography study of inferior frontal gyrus anatomical connectivity in schizophrenia. *NeuroImage* 2011;55:1657-1664. PMCID: [PMC3073419](#)

254. Melonakos ED, **Shenton ME**, *Rathi Y, *Terry D, *Bouix S, *Kubicki M. Voxel-based morphometry (VBM) studies of schizophrenia – Can white matter changes be reliably detected with VBM? *Psychiatry Res: Neuroimaging* 2011;193(2):65-70. PMCID: [PMC3382976](#)
255. *Rathi R, *Kubicki M, *Bouix S, Westin C-F, *Goldstein J, Seidman LJ, Mesholam-Gately R, McCarley RW, **Shenton ME**. Statistical analysis of fiber bundles using multi-tensor tractography: Application to first-episode schizophrenia. *Magn Res Imaging* 2011;29(4):507-15. PMCID: [PMC3078978](#)
256. *Whitford TJ, *Savadjiev P, *Kubicki M, O'Donnell LJ, *Terry DP, *Bouix S, Westin C-F, *Schneiderman S, *Bobrow L, *Rausch AC, *Niznikiewicz M, Nestor PG, Pantelis C, Wood SJ, McCarley RW, **Shenton ME**. Fiber geometry in the corpus callosum in schizophrenia: Evidence for transcallosal misconnection. *Schizophr Res* 2011;Oct;132(1):69-74. PMCID: [PMC3172336](#)
257. *Choi H, *Kubicki M, *Whitford T, *Alvarado JL, *Terry DP, *Niznikiewicz M, McCarley RW, *Kwon JS, **Shenton ME**. Diffusion tensor imaging of anterior commissural fibers in patients with schizophrenia. *Schizophr Res* 2011;130:78-85. PMID: [21561738](#)
258. Uehara-Aoyama K, *Nakamura M, *Asami T, Yoshida T, Hayano F, *Roppongi T, Fujiwara A, Inoue T, **Shenton ME**, *Hirayasu Y. Sexually dimorphic distribution of orbitofrontal sulcogyral pattern in schizophrenia. *Psychiatry Clin Neurosc* 2011;65(5):483-489. PMID: [21851457](#)
259. *Wasserman D, *Rathi Y, *Bouix S, *Kubicki M, Kikinis R, **Shenton M**, Westin CF. White matter bundle registration and population analysis based on Gaussian processes. *Inf Process Med Imaging* 2011;22:320-332. PMCID: [PMC3140022](#)
260. *Dickey CC, Panych LP, Voglmaier MM, *Niznikiewicz MA, *Terry DP, Murphy C, *Zacks R, **Shenton ME**, McCarley RW. Facial emotion recognition and facial affect display in schizotypal personality disorder. *Schizophr Res* 2011;131:242-249. PMCID: [PMC3159849](#)
261. Gavett BE, Cantu RC, **Shenton M**, Lin AP, McKee AC, Stern RA. Clinical appraisal of chronic traumatic encephalopathy: Current perspectives and future directions. *Current Opinion in Neurology* 2011;24:525-531. PMID: [22045219](#)
262. Koerte I, *Pelavin P, Kirmess B, Fuchs T, Berweck S, Lauberder RP, Borggraefe I, Schroeder AS, Denekó A, Rummeny C, Reiser M, *Kubicki M, **Shenton M**, Ertl-Wagner B, Heinen F. Anisotropy of transcallosal motor fibers indicates functional impairment in children with periventricular leukomalacia. *Dev Med Child Neurol* 2011;53(2):179-186. PMCID: [PMC3057566](#)
263. Rathi Y, Michailovich O, Setsompop K, *Bouix S, **Shenton ME**, Westin CF. Sparse multi-shell diffusion imaging. *Med Image Comput Comput Assisted Interv* 2011;14(Pt 2):58-65. PMID: [21995013](#)
264. *Nguyen AD, *Pelavin PE, **Shenton ME**, *Chilakamarri P, McCarley RW, Nestor PG, *Levitt JJ. Olfactory sulcal depth and olfactory bulb in patients with schizophrenia: An MRI study. *Brain Imaging Behavior*; 2011;(4):252-61. PMID: [21728040](#)
265. Capitão L, *Sampaio A, Sampaio C, Vasconcelos C, Fernández M, Garayzábal E, **Shenton ME**, Gonçalves OF. MRI amygdala volume in Williams syndrome. *Res Dev Dis* 2011;32(6):2767-2772. PMID: [21752593](#)
266. *Whitford TJ, Mathalon DH, **Shenton ME**, Roach BJ, Bammer R, Adcock RA, *Bouix S, *Kubicki M, *De Siebenthal J, *Rausch AC, *Schneiderman JS, Ford JM. Electrophysiological and diffusion tensor imaging evidence of delayed corollary discharges in patients with schizophrenia. *Psychol Med* 2011;41(5):959-969. PMID: [20663254](#)
267. Xu H, Haroutunian V, Bartzokis G, **Shenton ME**. Oligodendrocytes and schizophrenia (editorial). *Schizophr Res Treatment* 2011;2011:249768. PMCID:[PMC3420671](#)

268. *Whitford TJ, *Kubicki M, **Shenton ME**. Diffusion tensor imaging, structural connectivity, and schizophrenia. *Schizophr Res Treatment* Epub 2011 Jul 17. PMID:[PMC3420716](#)
269. *Voineskos AN, Rajji TK, Lobaugh NJ, Miranda D, **Shenton ME**, Kennedy JL, Pollock BG, Mulsant BH. Age-related decline in white matter tract integrity and cognitive performance: A DTI tractography and structural equation modeling study. *Neurobiol Aging* 2012;33(1):21-34. PMID: [PMC2945445](#)
270. Gooding DC, Coleman MJ, Simone RA, **Shenton ME**, Levy DL, Erlenmeyer-Kimling L. Thought disorder in high-risk offspring of schizophrenic patients: Findings from the New York High-Risk Project. *Schizophr Bull* 2012;(38)2:263-271. PMID: [PMC3283153](#)
271. Mulert C, Kirsch V, *Whitford TJ, *Alvarado J, *Pelavin P, McCarley RW, *Kubicki M, *Salisbury D, **Shenton ME**. Hearing voices: A role of interhemispheric auditory connectivity? *The World Journal of Biological Psychiatry* 2012;(2):153-158. PMID: [21623667](#)
272. *Asami T, *Bouix S, *Whitford TJ, **Shenton ME**, *Salisbury DF, McCarley RW. Longitudinal loss of gray matter volume in patients with first-episode schizophrenia: DARTEL automated analysis and ROI validation. *NeuroImage* 2012;59(2):986-996. PMID: [PMC3230661](#)
273. *Whitford TJ, Ford JM, Mathalon DH, *Kubicki M, **Shenton ME**. Schizophrenia, myelination, conduction delays and corollary discharges: A hypothesis. *Schizophr Bull* 2012;38(3):486-495. PMID: [PMC3329979](#)
274. *Levitt JJ, *Alvarado JL, Nestor PG, *Rosow L, *Pelavin PE, McCarley RW, Kubicki M, **Shenton ME**. Fractional anisotropy and radial diffusivity: Diffusion measures of white matter abnormalities in the anterior limb of the internal capsule in schizophrenia. *Schizophr Res* 2012; 136(1-3):55-62. PMID: [22019073](#)
275. *Whitford TJ, Wood SJ, Yung A, Cocchi L, Berger G, **Shenton ME**, *Kubicki M, Phillips L, Velakoulis D, Yolken RH, Pantelis C, McGorry P, Amminger GP. Structural abnormalities in the cuneus associated with Herpes Simplex Virus (type 1) infection in people at ultra high risk of developing psychosis. *Schizophr Res* 2012;135(1-3):175-180. PMID: [PMC3405258](#)
276. *Oh JS, Jang JH, Jung WH, Kang DH, Choi JS, Choi CH, *Kubicki M, **Shenton ME**, Kwon JS. Reduced fronto-callosal fiber integrity in unmedicated OCD patients: A diffusion tractography study. *Hum Brain Mapp* 2012;33(10):2441-2452. PMID: [21922600](#)
277. *Rosenberger G, Nestor P, *Oh JS, *Levitt JJ, *Kindleman G, *Bouix S, *Fitzsimmons J, Niznikiewicz M, Westin C-F, Kikinis R, McCarley RW, **Shenton ME**, *Kubicki M. Anterior Limb of the Internal Capsule in Schizophrenia: A Diffusion Tensor Tractography Study. *Brain Imaging Beh* 2012;6(3):417-425. PMID: [22415192](#)
278. Musen G, Jacobson AM, Bolo NR, Simonson DC, **Shenton ME**, McCartney RL, Flores VL, *Hoogenboom WS. Resting state brain functional connectivity is altered in type 2 diabetes. *Diabetes* 2012;61(9):2375-2379. PMID: [PMC3425418](#)
279. **Shenton ME**, Hamoda HM, Schneiderman JS, Bouix S, Pasternak O, Rathi Y, Vu M-A, Purohit MP, Helmer K, Koerte I, Lin AP, Westin C-F, Kikinis R, Kubicki M, Stern RA, Zafonte R. A review of magnetic resonance imaging and diffusion tensor imaging findings in mild traumatic brain injury. *Brain Imaging and Behavior* 2012;6(2):137-192. **(Most Downloaded Article for this Journal)** PMID: [22438191](#)
280. Tate DF, **Shenton ME**, Bigler ED. Introduction to the brain imaging and behavior special edition on neuroimaging findings in mild traumatic brain injury. *Brain Imaging and Behavior* 2012;6(2):103-107. PMID: [22706729](#)

281. Baugh CM, Stamm JM, Riley DO, Gavett BE, **Shenton ME**, Lin A, Nowinski CJ, Cantu RC, McKee AC, Stern RA. Chronic traumatic encephalopathy: neurodegeneration following repetitive concussive and subconcussive brain trauma. *Brain Imaging and Behavior* 2012;6(2):244-254. PMID: [22552850](#)
282. *Kikinis Z, *Asami T, *Bouix S, Finn CT, *Ballinger T, Tworog-Dube E, Kucherlapati R, Kikinis R, **Shenton ME**. Reduced fractional anisotropy and axial diffusivity in white matter in 22q11.2 deletion syndrome: A pilot study. *Schizophr Res* 2012;141(1):35-39. PMCID: [PMC3462006](#)
283. Francis AN, Seidman LJ, Jabbar GA, Meshulam-Gately R, Thermenos HW, Juelich R, Proal A, **Shenton M**, *Kubicki M, Mathew I, Keshavan M, DeLisi LE. Alterations in brain structures underlying language function in young adults at high familial risk for schizophrenia. *Schizophr Res* 2012;141(1):65-71. PMCID: [PMC3466598](#)
284. Gao Y, Kikinis R, Bouix S, Shenton M, Tannenbaum A. A 3D interactive multi-object segmentation tool using local robust statistics driven active contours. *Med Image Anal* 2012;16:1216-1227. PMCID: [PMC3443290](#)
285. *Pasternak O, Westin C-F, *Bouix S, Seidman LS, *Goldstein JM, Woo T-U, Petryshen TL, Meshulam-Kately RI, McCarley RW, Kikinis R, **Shenton ME**, *Kubicki M. Excessive extracellular volume reveals a neurodegenerative pattern in schizophrenia onset. *J Neurosci* 2012;32(48):17365-17372. PMID: [23197727](#) (**Figure featured in this week in the journal.**)
286. *Koerte IK, Ertl-Wagner B, Reiser M, Zafonte R, **Shenton ME**. White matter integrity in the brains of professional soccer players without a symptomatic concussion. *JAMA* 2012;308(18):1859-1861. PMID: [23150002](#)
287. *+Koerte IK, +Kaufman D, Hartl E, *Bouix S, *Pasternak O, *Kubicki M, Rauscher A, Li DK, Dadachanji SB, Tauton JA, Forwell LA, Johnson AM, Echlin PS, **Shenton ME**. A prospective study of physician-observed concussion during a varsity university hockey season: White matter integrity in ice hockey players. Part 3 of 4. *Neurosurgery Focus (JNS)* 2012;33(6):E3. (+Denotes equal first authorship.) PMID: [23199426](#) [[full text](#)]
288. *Hoogenboom WS, Perlis RH, Smoller JW, Zeng-Treiterler Q, Gainer VS, Murphy SN, Churchill SE, Kohane IS, **Shenton ME**, *Iosifescu DV. Limbic system white matter microstructure and long-term treatment outcome in major depressive disorder: A diffusion tensor imaging study using legacy data. *World J Biol Psychiatry* [Epub 2012 Apr 30]. PMID: [22540406](#)
289. *Pasternak O, **Shenton ME**, Westin CF. Estimation of extracellular volume from regularized multi-shell diffusion MRI. *Med Image Comput Comput Assist Interv.* 2012;15(Pt2):305-312. PMID: [23286062](#)
290. Makris N, Preti MG, *Asami T, *Pelavin P, Campbell B, Papadimitriou GM, Kaiser J, Baselli G, Westin C-F, **Shenton ME**, *Kubicki M. Human middle longitudinal fascicle: Variations in patterns of anatomical connections. *Brain Struct Funct* 2013 Jul; 218(4):951-968.PMCID: [PMC3500586](#) [Available on 2014/7/1]
291. *Voineskos AN, Felsky D, Kovacevic N, Tiwari AK, Zaj C, Chakraarty MM, Lobaugh NL, **Shenton ME**, Rajji TK, Miranda D, Pollack BG, Mulsant BH, McIntos AR, Kennedy JL. Oligodendrocyte genes, white matter tract integrity, and cognition in schizophrenia. *Cerebral Cortex* 2013 Sep 23(9):2044-2057. PMID: [22772651](#)
292. Nestor PG, *Nakamura M, *Niznikiewicz M, Thompson E, *Levitt JJ, Chaote V, **Shenton ME**, McCarley RW. In search of the functional neuroanatomy of sociality: MRI subdivisions of orbital frontal cortex and social cognition. *Social Cognitive and Affective Neuroscience* 2013;8(4):460-467. PMID: [22345366](#)
293. *+Sampaio A, *+Bouix S, Sousa N, Vasconcelos C, Fernández M, **Shenton ME**, Gonçalves OF. Morphometry of corpus callosum in Williams syndrome: Shape as an index of neural development. *Brain Struct Funct* 2013;218(3):711-720. (+Denotes equal first authorship.) PMID:[22648762](#)
294. *Lee SH, *Kubicki M, *Asami T, Seidman LJ, *Goldstein JM, Meshulam-Gately RI, McCarley RW, **Shenton ME**. Extensive White Matter Abnormalities in Patients with First-Episode Schizophrenia: A Diffusion Tensor Imaging (DTI) Study. *Schizophr Res* 2013;143(2-3):231-238. PMID: [23290268](#)

295. Nestor PG, *Kubicki M, *Nakamura M, *Niznikiewicz M, *Levitt JJ, **Shenton ME**, McCarley RW. Neuropsychological variability, symptoms, and brain imaging in chronic schizophrenia. *Brain Imaging and Behavior* 2013;7(1):68-76. PMID: [23011383](#)
296. *Asami T, *Whitford TJ, *Bouix S, *Dickey CC, *Niznikiewicz M, **Shenton ME**, Voglmaier MM, McCarley RW. Globally and locally reduced MRI gray matter volumes in neuroleptic-naïve men with schizotypal personality disorder: association with negative symptoms. *JAMA Psychiatry* 2013;70(4):361-372. PMID: [23389420](#)
297. *Asami T, *Saito Y, *Whitford TJ, Makris N, *Niznikiewicz M, McCarley RW, **Shenton ME**, *Kubicki M. Abnormalities of middle longitudinal fascicle and disorganization in patients with schizophrenia. *Schizophr Res* 2013;143(2-3):253-259. PMID: [23290607](#)
298. *Quan M, *Lee S-H, *Kubicki M, *Kikinis Z, *Rathi Y, Seidman LJ, Meshulam-Gately R, *Goldstein JM, McCarley RW, +**Shenton ME**, *+Levitt JJ. White matter tract abnormalities between rostral middle frontal gyrus, inferior frontal gyrus and striatum in first-episode schizophrenia. *Schizophr Res* 2013;145(1-3):1-10. (+Denotes equal last authorship.) PMID: [23415471](#)
299. *Roma-Nava F, *Hoogenboom WS, *Pelavin P, *Alvarado JL, *Bobrow LH, McMaster FP, Keshavan M, McCarley RW, **Shenton ME**. Pituitary volume in schizophrenia spectrum disorders. *Schizophr Res* 2013;146(1-3):301-307. PMID: [23522905](#)
300. *Araki T, *Niznikiewicz M, *Kawashima T, Nestor PG, **Shenton ME**, McCarley RW. Disruption of function-structure coupling in brain regions sub-serving self monitoring in schizophrenia. *Schizophr Res* 2013;146(1-3):336-343. PMID: [23507356](#)
301. Hoogenboom WS, Perlis RH, Smoller JW, Zeng-Treitler Q, Gainer VS, Murphy SN, Churchill SE, Kohane I, **Shenton ME**, *Iosifescu DV. Feasibility of studying brain morphology in major depressive disorder with structural magnetic resonance imaging and clinical data from the electronic medical record: A pilot study. *Psychiatr Res: Neuroimaging* 2013;211(3):202-213. PMID: [23149041](#)
302. *Savadjiev P, *Whitford TJ, Hough ME, Von Hohenberg C, *Bouix S, Westin C-F, **Shenton ME**, Crow TJ, James AC, *Kubicki M. Sexually dimorphic white matter geometry abnormalities in adolescent onset schizophrenia. *Cerebral Cortex* [Epub 2013 Jan 10]. PMID: [23307635](#)
303. *Clemm von Hohenberg C, Schocke MF, *Wigand MC, Nachbauer W, Guttmann CRG, *Kubicki M, **Shenton ME**, Boesch, Egger K. Radial diffusivity in the cerebellar peduncles correlates with clinical severity in Friedreich ataxia. *Neurol Sci* 2013;34(8):1459-1462. PMID: [23640016](#)
304. *+Bouix S, *+Pasternak O, *Rathi Y, *Pelavin PE, Zafonte R, **Shenton ME**. Increased gray matter diffusion anisotropy in patients with persistent post-concussive symptoms following mild traumatic brain injury. *PLoS ONE* 2013;8(6):e66205. (+Denotes that authors contributed equally to this work.)
305. *Clemm von Hohenberg C, *Wigand MC, *Kubicki M, Leicht G, Giegling I, Karch S, Hartmann AM, Konte B, Friedl M, Ballinger T, Eckbo R, *Bouix S, Jäger L, **Shenton ME**, Rujescu D and Mulert C, CNTNAP2 polymorphisms and structural brain connectivity: A diffusion-tensor imaging study. *J Psychiatr Res* 2013;47(10):1349-1356.
306. *Levitt JJ, *Rosow LK, Nestor PG, *Pelavin PE, *Swisher TM, McCarley RW, **Shenton ME**. A volumetric MRI study of limbic, associative and sensorimotor striatal subregions in schizophrenia. *Schizophr Res* 2013;145(1-3):11-19.
307. *Kubicki M, **Shenton ME**, Maciejewski PK, *Pelavin PE, *Hawley KJ, *Ballinger T, *Swisher T, Jabbar GA, Thermenos HW, Keshavan MS, Seidman LJ, DeLisi LE. Decreased axial diffusivity within language connections: A possible biomarker of schizophrenia risk. *Schizophr Res* 2013;148(1-3):67-73.

308. Makris N, Preti MG, *Wasserman D, *Rathi Y, Papadimitriou CM, Dickerson BC, **Shenton ME**, *Kubicki M. Human middle longitudinal fascicle: Segregation and behavioral-clinical implications of two distinct fiber connections linking temporal pole and superior temporal gyrus with the angular gyrus or superior parietal lobule using multi-tensor tractography. *Brain Imaging and Behavior* 2013;7(3):335-352.
309. Gao Y, *Bouix S, **Shenton M**, Tannenbaum A. Sparse texture active contour. *IEEE Trans Image Process* 2013;10:3866-3878.
310. +*Egger K, +*Clemm von Hohenberg C, Schocke MF, Guttman CRG. *Wassermann D, *Wigand MC, Nachbauer W, Kremser C, Sturm B, Scheiber-Mojdehkar B, *Kubicki M, **Shenton ME**, Boesch S. White matter changes in patients with Friedreich ataxia after treatment with erythropoietin. *J of Neuroimaging* 2013;000:1-5 DOI:10.1111/jon.12050. (+denotes equal first authorship.)
311. Kikinis Z, Makris N, Finn CT, Bouix S, Lucia D, Coleman MJ, Tworog-Dube E, Kikinis R, Kucherlapati R, **Shenton ME**, Kubicki M. Genetic contributions to changes of fiber tracts of ventral visual stream in 22q11.2 deletion syndrome. *Brain Imaging Behav* 2013;7(3):316-325.
312. *Clemm von Hohenberg C, *Pasternak O, *Kubicki M, *Ballinger T, *Vu M-A, *Swisher T, *Green K, *Giwerc M, *Dahlben B, *Goldstein JM, Woo T-U, Petryshen TL, Mesholam-Gately RI, Woodberry KA, Thermenos HW, Mulert C, McCarley RW, Seidman LJ, **Shenton ME**. White matter microstructure in individuals at clinical high risk of psychosis: A whole-brain diffusion tensor imaging study. *Schizophr Bull* (In Press).
313. Thermenos HW, Whitfield-Gabrieli S, Seidman LJ, Kuperberg G, Juelich RJ, Divatia S, Riley C, Jabbar GA, **Shenton M**, *Kubicki M, Manschreck T, Keshavan M, Delisi LE. Altered language network activity in young people at familial high-risk for schizophrenia. *Schizophr Res* (In Press).
314. Francis AN, Seidman LJ, Tandon N, **Shenton ME**, Thermenos HW, Mesholam-Gately RI, Va Eist LT, Tuschen-Caffier B, DeLisi LE, Keshavan MS. Reduced Subicular Subdivisions of the Hippocampal Formation and Verbal Declarative Memory Impairments in Young Relatives at Risk for Schizophrenia. *Schizophr Res* (In Press).
315. *Otani T, *Bouix S, *Hosokawa T, *Saito Y, *Eckbo R, *Ballinger T, *Rausch A, Melonakos E, McCarley RW, **Shenton ME**, *Kubicki M. Prefrontal cortex volume deficit in schizophrenia: A new look using 3T MRI with manual parcellation. *Schizophr Res* (In Press).
316. *Hoogenbaum W, Marder T, Flores V, Huisman S, Eaton H, *Schneiderman J, Bolo N, Simonson D, Jacobson A, *Kubicki M, **Shenton M**, Musen G. Cerebral white matter integrity and resting-state functional connectivity in middle-aged patients with type 2 diabetes. *Diabetes* (In Press).
317. Del Re E, Bergen SE, Mesholam-Gately R, *Niznikiewicz M, Goldstein JM, Woo T-U, **Shenton ME**, Seidman L, McCarley RW, Petryshen TL. Analysis of schizophrenia-related genes and electrophysiological measures reveals ZNF804A association with amplitude of P300b elicited by novel sounds. *Translational Psychiatry* (In Press).
318. *Wigand M, *Kubicki M, *Clemm von Hohenberg C, Leicht G, Karch S, *Eckbo R, *Pelavin PE, *Hawley K, Miller M, Rujescu D, *Bouix S, **Shenton ME**, Mulert C. The interhemispheric auditory pathway and its meaning for auditory hallucinations in chronic schizophrenia. *Human Brain Mapping* (Submitted).
319. Perlstein MD, Antshel KM, Chohan MR, Coman IL, Fremont WP, Gnirke MR, *Kikinis Z, Middleton FA, Radoeva PD, **Shenton ME**, Kates WR. White matter abnormalities in 22q11.2 deletion syndrome: Preliminary association with the NOGO-66 receptor gene and symptoms of psychosis. *Schizophr Res* (In Press).
320. *Rathi Y, *Pasternak O, *Savadjiev P, Michailovich O, *Bouix S, *Kubicki M, Westin C-F, **Shenton ME**. Gray matter alterations in early aging: A diffusion magnetic resonance imaging study. *Human Brain Mapping* (In Press).
321. *Pasternak O, *Koerte I, *Bouix S, *Fredman E, *Sasaki T, Mayinger M, Helmer KG, Johnson AM, Holmes JD, Forwell LA, Skopelja E, **Shenton ME**+, Echlin P+. Microstructural white matter alterations in acutely concussed ice hockey players, Part 1: a longitudinal free-water study. *J Neurosurg* (In Press). (+denotes dual last authorship)

322. *Sasaki T, *Pasternak O, Mayinger M, Muelmann M, *Savadjiev P, *Bouix S, *Kubicki M, *Fredman E, *Dahlben B, Helmer K, Johnson AM, Holmes JD, Forwell LA, Skopelja E, **Shenton ME**, Echlin P+, *Koerte IK+. Changes in white matter microstructure in ice hockey players with a history of concussion: A diffusion tensor imaging study, Part 2: a diffusion tensor imaging study. *J Neurosurg* (In Press). (+denotes dual last authorship)
323. Helmer KG, *Pasternak O, *Fredman E, Preciado R, *Koerte I, *Sasaki T, Mayinger M, Johnson A, Holmes J, Forwell L, Skopelja E, **Shenton ME**+, Echlin P+. Susceptibility-weighted imaging study in male and female ice hockey players over a single season, Part 3. Clinical article. *J Neurosurg* (In Press). (+denotes dual last authorship)
324. Ng TSC+, Lin AP+, *Koerte IK, *Pasternak O, Liao H, Merugumala S, *Bouix S, **Shenton ME**. Neuroimaging in repetitive brain trauma. *Alzheimer's Research and Therapy*. (In Press). (+denotes dual first authorship) DOI is 10.1186/alzrt239
325. *Whitford TJ, *Lee S-W, *Oh JS, de Luis-Garcia R, *Savadjiev P, *Alvarado JL, Westin C-F, *Niznkiewicz M, Nestor PG, McCarley RW, *Kubicki M, **Shenton ME**. Localized abnormalities in cingulum bundle in patients with schizophrenia: A diffusion tensor tractography study. (Submitted)

Proceedings of Meetings:

1. Longabaugh RH, Fowler DR, Stout RL, Kriebel GW, **Shenton ME**, Gabrilowitz M. A classificatory system for identifying problem indicators. In: Ryback R, Longabaugh RH, Fowler DR (eds): *The Problem-Oriented Record in Psychiatry and Mental Health Care*. New York, Grune & Stratton Inc, 1981:219-227.
2. Longabaugh RH, Fowler DR, Stout RL, Kriebel GW, **Shenton ME**, Gabrilowitz M: A dictionary for classifying treatment interventions. In: Ryback R, Longabaugh RH, Fowler DR (eds.): *The Problem-Oriented Record in Psychiatry and Mental Health Care*. New York, Grune & Stratton Inc, 1981:229-237.
3. McCarley RW, Torello M, **Shenton ME**. The topography of P300 and spectral energy in schizophrenics and normals. In: Shagass C, Josiassen RC, Bridger WH, Weiss KJ, Stoff D, Simpson GM, (ed.). *Biological Psychiatry. Proceedings, IVth World Congress of Psychiatry*. Elsevier, 1985:389-391.
4. Faux SF, Torello M, McCarley RW, **Shenton M**, Duffy FH. Altered P200 topography in schizophrenia. In: Rohrbaugh, JW, Johnson Jr., R, and Parasuraman R, (eds): *Eighth International Conference on Event-Related Potentials of the Brain (EPIC VIII): Research Reports*. Stanford, CA, 1986:84-86.
5. Faux SF, **Shenton ME**, McCarley RW, Torello M, Duffy FH. Altered P200 topography in schizophrenia. In: Rohrbaugh, JW, Johnson Jr., R, and Parasuraman R, (eds.): *Eighth International Conference on Event-Related Potentials of the (EPIC VIII): Research Reports*. Stanford, CA, 1986:81-83.
6. Adams J, Faux SF, McCarley RW, *Marcy B, **Shenton ME**. The N400 and language processing in schizophrenia. *Proceedings of the Ninth International Conference on Event Related Potentials of the Brain (EPIC IX Congress)*. 1989:12-13.
7. Faux SF, Nestor PG, McCarley RW, **Shenton ME**, Horvath T, Davis K. P300 asymmetries in unmedicated schizophrenics. In: Brunia CHM, Gaillard AWK, Kok (eds.): *Ninth International Conference on Event-Related Potentials of the Brain (EPIC IX): Research Reports*. Tilberg: Tilberg University Press, Vol. II, 1990:209-212
8. McCarley RW, Faux SF, **Shenton ME**, Nestor PG. P300 asymmetries in schizophrenia: Robustness of topography under linked-ears or nose references. In: Brunia CHM, Gaillard AWK, Kok (eds.) *Ninth International Conference on Event-Related Potentials of the Brain (EPIC IX): Research Reports*. Tilberg: Tilberg University Press, Volume II, 1990:224-226.

9. Gerig G, Martin J, Kikinis R, Kübler O, **Shenton ME**, Jolesz FA. Automating segmentation of dual-echo MR head data. *Lecture Notes in Computer Science* 1991;511:175-187. [[Abstract](#)]
10. O'Donnell BF, **Shenton ME**, McCarley RW, Faux SF, Kikinis R, Nestor PG, Jolesz FA. Conjoint left asymmetry of auditory P300 voltage and MRI volume of posterior superior temporal gyrus in schizophrenia: A quantitative evaluation. In: Karmos G, Molnar M, Csepe V, Czigler I, Desmedt JE (eds.) *Perspectives of Event-Related Potentials Research (EEG Suppl. 44)*. Elsevier Science B.V., 1995:387-394.
11. Hirayasu A, *Hokama HH, Ogura C, *Hirayasu Y, *Arakaki H, Matsuo K, Asato N, Nakamoto H, Yamamoto K, McCarley RW, **Shenton ME**, Kikinis R. Relationship between P300 abnormality and superior temporal gyrus reduction in first-onset schizophrenia: A preliminary study. In: Ogura C, Koga Y, Shimokochi M (eds.) *Recent Advances in Event-Related Brain Potential Research*. Elsevier Science B.V., 1996:968-971.
12. *Niznikiewicz MA, Seidman LF, *Dickey CC, *Solinger J, **ME**, McCarley RW. N400 abnormalities during sentence processing in schizotypal and schizophrenic subjects. In: Ogura C, Koga Y, Shimokochi M (eds.) *Recent Advances in Event-Related Brain Potential Research*. Elsevier Science B.V., 1996:1004-1008.
13. O'Donnell BF, *Ohta H, McCarley RW, *Hokama HH, Wible CG, *Law S, Nestor PG, Kikinis R, Jolesz FA, **Shenton ME**. The auditory P3a and P3b ERP components in schizophrenia: Relationship to frontal and temporal lobe MRI volumes. In: Ogura C, Koga Y, Shimokochi M (eds.) *Recent Advances in Event-Related Brain Potential Research*. Elsevier Science B.V., 1996:30-35.
14. Ettinger GJ, Leventon ME, Grimson WEL, Kikinis R, Gugino V, Cote W, Sprung L, Aglio L, **Shenton ME**, *Potts G, Alexander E. Experimentation with a Transactions cranial Magnetic Stimulation System for Functional Brain. *Proceedings of CVR MED* 1997:477-486.
15. Golland P, Kikinis R, Umans C, Halle, M, **Shenton ME**, Richolt JM. Anatomy browser: A framework for integration of medical information. *Med Image Comput Comput Asst Interv* 1998;720-731. (In: *Lecture Notes in Computer Science*, Eds. Wells WM, Colchester A, and Delp S, Springer-Verlag, 1998.)
16. *Potts GF, Wible CG, **Shenton ME**, Weinstein DM, *Fisher I, Leventon ME, Gugino LD, McCarley RW. Localization of visual cortex with coregistered functional magnetic resonance imaging, bioelectrically modeled cortical visual evoked potential, and transcranial magnetic stimulation induced visual suppression. *J of Cognitive Neuroscience* (Suppl.), p.42, 1998.
17. Golland P, Grimson WEL, **Shenton ME**, Kikinis R. Small sampling size learning for shape analysis of anatomical structures. *Med Image Comput Comput Asst Interv* 2000;1935:72-78. [[full text](#)]
18. Golland P, Kikinis R, Halle M, Umans C, Grimson WEL, **Shenton ME**, Richolt JA. Anatomy Browser: A Novel Approach to Visualization and Integration of Medical Information. *Yearbook of Medical Informatics 2001*, Eds. R. Haux and C. Kulikowski, 414-428, Schattauer, Germany, 2001.
19. Golland P, Grimson WEL, **Shenton ME**, Kikinis R. Deformation analysis for shape based classification. *IPMI* 2001;517-530. [[full text](#)]
20. O'Donnell L, Westin CF, Grimson WEL, Ruiz-Alzola J, **Shenton ME**, Kikinis R. Phase-based user-steered image segmentation. *Med Image Comput Comput Asst Interv* 2001;1022-1030. [[full text](#)]
21. Ferrant M, Cuisenaire O, Macq BM, Thiran J-P, **Shenton ME**, Kikinis R, Warfield SK. Surface based atlas matching of the brain using deformable surfaces and volumetric finite elements. *Med Image Comput Comput Asst Interv* 2001;2208:1352-1353. [[full text](#)]
22. Gerig G, Styner M, **Shenton ME**, Lieberman JA. Shape versus size: Improved understanding of the morphology of brain structures. *Med Image Comput Comput Asst Interv* 2001;2208:24-32. [[full text](#)]

23. Rexilius R, Warfield SK, Guttman CRG, Wei X, Benson R, Wolfson L, **Shenton ME**, Handels H, Kikinis R. A novel nonrigid registration algorithm and applications. *Med Image Comput Comput Asst Interv* 2001;2208:923-931. [[full text](#)]
24. Timoner SJ, Golland P, Kikinis R, **Shenton ME**, Grimson WEL, Wells WM III. Performance issues in shape classification. *Med Image Comput Comput Asst Interv* 2002;2488:355-362. [[full text](#)]
25. Golland P, Fischl B, Spiridon M, Kanwisher N, Buckner RL, **Shenton ME**, Kikinis R, Dale AM, Grimson WEL. Discriminative analysis for image-based studies. *Med Image Comput Comput Asst Interv* 2002;2488:508-515. [[full text](#)]
26. Pohl KM, Wells WM III, Guimond A, *Kasai K, **Shenton ME**, Kikinis R, Grimson WEL, Warfield SK. Incorporating non-rigid registration into expectation maximization algorithm to segment MR images. *Med Image Comput Comput Asst Interv* 2002;2488:564-572. [[full text](#)]
27. Liu Y, Teverovskiy L, Carmichael O, Kikinis R, **Shenton ME**, Carter CC, Stenger VA, Davis S, Aizenstien H, Becker JT, Lopes OL, Meltzer CC. Discriminative MR image feature analysis for automatic schizophrenia and Alzheimer's disease classification. *Med Image Comput Comput Asst Interv* 2004;3217:393-401. [[full text](#)]
28. *Bouix S, *Ungar L, *Dickey CC, McCarley RW, **Shenton ME**. Evaluating Automatic Brain Tissue Classifiers. *Med Image Comput Comput Asst Interv* 2004;3217:1038-1039. [[full text](#)]
29. *Brun A, Knutsson H, *Park HJ, **Shenton M**, Westin CF. Clustering fiber traces using normalized cuts. *Med Image Comput Comput Asst Interv* 2004;3217:368-375. PMID: [PMC3296487](#)
30. Haidar H, *Bouix S, *Levitt J, McCarley RW, **Shenton ME**, Soul JS. An Elliptic PDE Approach for shape characterization. In *Proceedings of The 26th Annual International Conference of the IEEE Engineering in Medicine and Biology Society*, Sep 2004, San Francisco, USA. PMID: [PMC2791903](#)
31. Haidar H, *Bouix S, *Levitt JJ, *Dickey C, McCarley RW, **Shenton ME**, Soul JS. Characterizing the shape of anatomical structures with Poisson's equation. *Med Image Comput Comput Asst Interv* 2004;3217:266-273. [[full text](#)]
32. *Park H, **Shenton ME**, Westin CF. An analysis tool for quantification of Diffusion Tensor MRI. *Med Image Comput Comput Asst Interv* 2004;3217:1089-1090. [[full text](#)]
33. *Niethammer M, Estepar RSJ, *Bouix S, **Shenton ME**, Westin CF. On Diffusion Tensor Estimation. *IEEE Engineering in Medicine and Biology Society* 2006;2622-2625. PMID: [PMC2791793](#)
34. Styner M, Oguz I, Xu S, Brechbuhler C, Pantazis D, *Levitt J, **Shenton M**, Gerig G. Framework for the statistical shape analysis of brain structures using SPHARM-PDM. *Med Image Comput Comput Asst Interv* 2006;1071:242-25. [[full text](#)]
35. San Jose Estepar R, Kubicki M, **Shenton M**, Westin CF. A kernel-based approach for user-guided fiber bundling using diffusion tensor data. *Conf Proc IEEE Eng Med Biol Soc* 2006;1:2626-2629. PMID: [PMC2768065](#)
36. Nain D, Styner M, *Niethammer M, *Levitt JJ, **Shenton ME**, Gerig G, Bobick A, Tannenbaum A. Statistical shape analysis of brain structures using spherical wavelets. *IEEE Symposium on Biomedical Imaging, ISBI* 2007;4:209-212. PMID: [PMC2771415](#)
37. *Rathi Y, Michailovich O, *Bouix S, **Shenton ME**. Directional Functions for Orientation Distribution Estimation. In: *International Symposium on Biomedical Imaging* 2008;927-930. [[Abstract](#)]

38. *Rathi Y, Dambreville S, *Niethammer M, Malcolm J, *Levitt JJ, **Shenton ME**, Tannenbaum A. Segmenting images analytically in shape space. In: *SPIE Conference on Medical Imaging 2008*; Volume 6914. [[Abstract](#)]
39. *Rathi Y, Michailovich O, *Bouix S, **Shenton ME**. Orientation Distribution Estimation for Q-Ball Imaging. In: *IEEE Workshop on Tensor Processing in Computer Vision*. CVPR, 2008. [[full text](#)]
40. Michailovich O, *Rathi Y, **Shenton ME**. On approximation of orientation distributions by means of spherical ridgelets. In: *International Symposium on Biomedical Imaging 2008*;939–942. [[Abstract](#)]
41. *Spencer KM, *Niznikiewicz MA, Nestor PG, **Shenton ME**, McCarley RW. Left auditory cortex gamma synchronization and auditory hallucination symptoms in schizophrenia. *BMC Neurosci* 2009;10:85. PMID: [PMC2719648](#)
42. Malcolm JG, **Shenton ME**, *Rathi Y. Two-tensor tractography using a constrained filter. *Med Image Comput Comput Assist Interv* 2009;12(Pt1):894-902. PMID: [PMC2893231](#) (Oral presentation.)
43. Malcolm J, **Shenton ME**, *Rathi Y. Neural Tractography Using An Unscented Kalman Filter. In: *Information Processing in Medical Imaging (IPMI)*, 2009. PMID: [PMC2768602](#) (Oral presentation.)
44. Malcolm J, **Shenton ME**, *Rathi Y. Filtered Tractography: Validation on a Physical Phantom. In: *Workshop on Diffusion Modeling and Fiber Cup*. MICCAI, 2009. [[full text](#)]
45. Malcolm J, **Shenton ME**, *Rathi Y. The Effect of Local Fiber Model on Population Studies. In: *Workshop on Diffusion Modeling and Fiber Cup*. MICCAI, 2009. [[full text](#)]
46. *Rathi Y, Malcolm JG, *Bouix S, Kindlmann G, Westin C-F, *Kubicki M, **Shenton ME**. Mixture Model for estimating fiber ODF and multi-directional Tractography. In: *International Society For Magnetic Resonance in Medicine Scientific Meeting* 2009;17:3548. [[full text](#)] [[PowerPoint](#)]
47. *Rathi Y, Malcolm J, *Bouix S, Westin C-F, **Shenton ME**. Disease Classification: A probabilistic Approach. In: *International Symposium on Biomedical Imaging 2010*;1345-1348. [[full text](#)]
48. *Rathi Y, Malcolm J, Michailovich O, McCarley R, Westin CF, **Shenton ME**. Biomarkers for identifying first episode schizophrenia patients using diffusion weighted imaging. *Med Image Comput Comput Asst Interv* 2010;13(Pt1):657-665. PMID: [PMC3091029](#)
49. *Rathi Y, Malcolm JG, *Bouix S, Westin C-F, **Shenton ME**. False Positive Detection using Filtered Tractography. In: *International Society For Magnetic Resonance in Medicine Scientific Meeting* 2010;18:4019. [[full text](#)]
50. *Ng HP, *Kubicki M, Malcolm J, *Rathi Y, *Pelavin P, McCarley RW, **Shenton ME**. Diffusion two-tensor tractography study on inter-hemispheric connection between bilateral Heschl gyrus in schizophrenia. In: *International Society For Magnetic Resonance in Medicine Scientific Meeting*. 2010;18:2430. [[full text](#)]
51. *Wasserman D, *Rathi Y, *Bouix S, *Kubicki M, Kikinis R, **Shenton ME**, Westin C-F. White matter bundle registration and population analysis based on Gaussian processes. *Inf Processing in Med Imaging, 22nd International Conference IPMI*, Kloster Irsee, Germany, July 3-8, 2011;22:320-32. PMID: [PMC3140022](#)
52. Baumgartner C, Michailovich O, *Pasternak O, *Bouix S, *Levitt J, **Shenton ME**, Westin C0F, Rathi Y. A unified tractography framework for comparing diffusion models in clinical scans. In: *Workshop on Computational Diffusion MRI (CDMRI)*, 2012.

53. Pasternak O, Bouix S, Rathi Y, Branch C, Westin C-F, **Shenton ME**, Lipton M. Identification of Mild Traumatic Brain Injuries by Comparison of Free-Water Corrected z-Distributions, *Proceeding of the 21th International Society for Magnetic Resonance in Medicine meeting (ISMRM)*, Salt-Lake City, UT, 2013.
54. Pasternak O, Bouix S, Rathi Y, Branch CA, Westin C-F, **Shenton ME**, Lipton M. Characterization of Diffusion MRI Abnormalities using a Joint Distribution Normative Atlas, *International Society for Magnetic Resonance in Medicine Workshop on Diffusion as a Probe of Neural Tissue Microstructure*, Croatia. 2013
55. *Wasserman D, Makris N, *Rathi Y, **Shenton M**, Kikinis R, *Kubicki M, Westin C-F. On describing human white matter anatomy: The white matter query language. *Med Image Comput Comput Assist Interv* 2013 (accepted).

Reviews, Chapters, Books, and Other Publications:

1. **Shenton ME**. The problem and treatment code. *Problem Systems and Treatment* 1978;1:2 (published quarterly by Butler Hospital).
2. **Shenton ME**, Longabaugh R. Coding Manual for the Butler Hospital code for psychiatric problems and treatments. *JSAS Catalog of Selected Documents in Psychology* 1981;11:(MS# 2209).
3. Holzman PS, Solovay MR, **Shenton ME**. Thought disorder specificity in functional psychoses. In: Alpert M, (ed.): *Controversies in Schizophrenia: Change and Constancies*. New York: New York, Guilford Press, 1985:228-250.
4. *Cane MB, Faux SF, **Shenton ME**, McCarley RW, Duffy FH. Temporal region alterations in P300 topography in schizophrenia: An introduction to Brain Electrical Activity Mapping (BEAM). *Resident and Staff Physician*. 1987;33(1):110-121. [[Abstract](#)]
5. Gerig G, Martin J, Kikinis R, Kübler O, **Shenton ME**, Jolesz FA. Automating Segmentation of dual-echo MR head data. In: Colchester ACF, and Hawkes DJ (eds.) *Lecture Notes in Computer Science Series*. Heidelberg: Verlag-Springer press, 1991. [[Abstract](#)]
6. **Shenton ME**, Kikinis R. Spotlight: 1992 recipients use satellite technology to study brain abnormalities in schizophrenia. *The Decade of the Brain: The National Alliance for the Mentally Ill*. 1994;5(1): Spring, 1994.
7. **Shenton ME**. Temporal lobe structural abnormalities in schizophrenia: A selective review and presentation of new MR findings. In: Levy D, Matthysee S, Benes F, Kagan J (eds.) *Psychopathology: The Evolving Science of Mental Disorders*. Cambridge University Press 1996:51-99. [[Cambridge Books Online](#)]
8. **Shenton ME**, Wible CG, McCarley RW. MRI studies in schizophrenia. In: Krishnan KRR, Doraiswamy PM (Eds.) *Brain Imaging in Clinical Psychiatry*. Marcel Dekker, Inc. 1997:297-380.
9. Wible CG, **Shenton ME**, McCarley RW. Neuroanatomy of the limbic system and the planum temporale. In: Krishnan KRR, Doraiswamy PM (Eds.) *Brain Imaging in Clinical Psychiatry*. Marcel Dekker, Inc. 1997:63-101
10. Gugino LD, *Potts GF, Aglio LS, Alexander E, Grimson WEL, Kikinis R, **Shenton M**, Black PM, Ettinger GJ, Cote WA, Leventon M, Sprung LJ. Localization of eloquent cortex using transcranial magnetic stimulation. In: Alexander III E and Maciunas RJ (Eds.). *Advanced Neurosurgical Navigation*. New York: Thieme Press, 1998:163-199.
11. **Shenton ME**, *Frumin M, McCarley RW, Maier SE, Westin CF, *Fischer IA, *Dickey C, Kikinis R. Morphometric Magnetic Resonance Imaging studies: Findings in Schizophrenia. In: Dougherty DD, Rauch SL (Eds.). *Psychiatric Neuroimaging Research: Contemporary Strategies*. American Psychiatric Association, 2001;1-60.

12. Maier S, **Shenton ME**, Jolesz FA. Diffusion MRI explores new indications. *Diagnostic Imaging, Advanced MR Supplement* 2001;December:2-6. [[full text](#)]
13. *Niznikiewicz MA, *Kubicki M, **Shenton ME**. Recent structural and functional imaging findings in schizophrenia. *Current Opin Psychiatry* 2003;16(2):123-147. [[full text](#)]
14. **Shenton ME**. Diffusion tensor imaging: An innovative technique to study white matter pathology in schizophrenia. (Tele-Lecture) *The Journal of Psychotic Disorders* 2004;8:10-12.
15. *Kubicki M, McCarley RW, **Shenton ME**. Evidence for white matter abnormalities in schizophrenia. *Current Opin Psychiatry* 2005;18:121-134. [PMC2768599](#)
16. **Shenton ME**. Schizophrenia: A complex disorder that has stymied research efforts to uncover its origin. *Harvard Health Policy Review* 2005;6(2):46-53. [[full text](#)]
17. Finn CT, Funke B, *Kikinis Z, **Shenton M**, Schiripo T. Frontiers in Biological Psychiatry. Exploring the Relationship Among Genes, Brain Development, and the Emergence of Psychopathology. In: *Psychiatric Manifestations of Velocardiofacial Syndrome*. Arlington, VA: American Psychiatric Publishing, Inc; 2007.
18. McCarley RW, *Nakamura M, **Shenton ME**, *Salisbury DF. Combining ERP and structural MRI information in first episode schizophrenia and bipolar disorder. *Clin EEG Neurosci* 2008;39(2):57-60. PMID: [PMC2770258](#)
19. *Kubicki M, **Shenton ME**. DTI and Its Application to Schizophrenia and Related Disorders. In: *Imaging Brain Pathways – Diffusion MRI: from Quantitative Measurement to In-Vivo Neuroanatomy*. Editors: H. Johansen-Berg and T. Behrens, Elsevier Publishers; 2009:251-270.
20. **Shenton ME**, *Kubicki M. Structural Brain Imaging in Schizophrenia. In: *Kaplan and Sadock's Comprehensive Textbook of Psychiatry* (Ninth edition): Edited by Benjamin J. Sadock, M.D., Virginia A. Sadock, M.D., and Pedro Ruiz, M.D., Lippincott Williams, and Wilkins; 2009:1494-150.
21. **Shenton ME**, *Whitford TJ, *Kubicki M. Structural neuroimaging in schizophrenia: From methods to insights to treatments. *Dialogues in Clinical Neuroscience* 2010;12(3):269-332. PMID: [PMC3181976](#)
22. **Shenton ME** and Turetsky BI (Editors). *Understanding Neuropsychiatric Disorders: Insights from Neuroimaging*. Cambridge University Press; 2011.
23. *Whitford TJ, *Kubicki M, **Shenton ME**. Neuroanatomical underpinnings of schizophrenia: A review of structural and diffusion imaging findings in schizophrenia. In: *Neuroimaging Psychiatric Disorders* (Eds.: M.E. Shenton and B.I. Turetsky), Cambridge University Press; 2011, 1-29.
24. *Whitford TJ, *Kubicki M, **Shenton ME**. Diffusion tensor imaging, structural connectivity and schizophrenia. *US Radiology* (In Press)
25. *Pasternak O, Fritzsche K, Baumgartner C, **Shenton ME**, *Rathi Y, Westin C-F. The estimation of free-water corrected diffusion tensors. In: *Visualization and Processing of Tensors and Higher Order Descriptions for Multi-Valued Data*. Eds. C-F Westin, A Vilanova, B Burgeth, Springer, Berlin (In Press).
26. **Shenton ME**. Interview: Understanding Schizophrenia and traumatic brain injury using MRI. *Imaging Med* 2013;5(2):111-118.
27. **Shenton ME**. Comment on Small et al. paper entitled “PET scanning of brain Tau in retired national football league players: Preliminary findings presented in Am J Geriatric Psychiatry 2013;21:138e144. In *Alzheimer Research Forum*, January 23, 2013 www.alzform.org/pap/annotation.asp?powID=142265

28. *Fitzsimmons J, *Kubicki M, Shenton ME. Review of functional and anatomical brain connectivity findings in schizophrenia. *Curr Opin Psychiatry* 2013;26(2):172-187. PMID: [23324948](https://pubmed.ncbi.nlm.nih.gov/23324948/)
29. *Kubicki M, Westin C-F, *Pasternak O, **Shenton ME**. Diffusion tensor imaging and its application to schizophrenia and related disorders. In: *Diffusion MRI: From Quantitative Measures to In-Vivo Neuroanatomy*, Editors: H. Johansen-Berg and T.E.J. Behrens, 2nd Edition, Elsevier Publishers, Academic Press; 2014:317-334.

Thesis:

Doctoral Dissertation entitled, “Thought Disorder in Psychotic Patients and Their Families”, presented in partial fulfillment of the doctoral requirements, Department of Psychology, Harvard University (1984). Dissertation Advisor: Professor Philip Holzman, Ester and Sidney Rabb Professor of Psychology. Dissertation Committee Members: Professors Philip Holzman, Brendan Maher, Steve Matthysee, David McClelland, and James Stellar

Nonprint Materials:

The Anatomy Browser is a JAVA-based interactive teaching tool for learning human neuroanatomy. It enables the user to manipulate three-dimensional (3D) neuroanatomical models (derived from MR images) interactively on personal computers without specialized rendering hardware. The user can view models of the brain from several angles and can select structures to be annotated by name. The Anatomy Browser includes a hierarchical list of structures that can be expanded or collapsed in order to control the level of detail displayed. Currently there are more than 100 labeled neuroanatomical structures. The Anatomy Browser also enables the user to remove structures in order to view hidden structures and to control the level of opacity of selected structures. Additionally, the browser provides a cross-reference between the 3D model and three different cross-sections of the original MR image (i.e., sagittal, coronal, and axial). These interactive features, along with the browser’s accessibility on the World Wide Web (<http://splweb.bwh.harvard.edu:8000/pages/java.html>), make it a valuable tool for teaching neuroanatomy. Other applications, based on the labeled neuroanatomical models, include: neurosurgical planning, and the automatic identification and delineation of neuroanatomical structures in new MR scans using warping techniques which use the list of structures as the template for warping the same structures in new MR scans.

Abstracts:

- A1. McCarley RW, Torello M, **Shenton M**, Duffy F. The P300 and spectral topography in schizophrenics and normals. *International J of Neuroscience* 1987;32(102):446-447.
- A2. O'Donnell BF, **Shenton ME**, McCarley RW, *Pollak SD, Faux SF, Nestor PG, *Smith RS. P3 and TDI scores in families of schizophrenics. *American Psychiatric Association New Research Abstracts* 1991.
- A3. **Shenton ME**, Kikinis R, McCarley RW, Anderson M, *Pollak SD, Metcalf D, Hanlon W, Jolesz FA. Computer-assisted volumetric measurements of MR brain images in schizophrenia. *Schizophr Res* 1991;4(3):413-413.
- A4. *Chou IH, **Shenton ME**, Benes F, Wible CG, Kikinis R, Jolesz FA, McCarley RW. A magnetic resonance imaging study of the cingulate gyrus in schizophrenia. *Biol Psychiatry* 1993;33(6A):A123-A123.
- A5. *Chou I, **Shenton ME**, Benes F, Kikinis R, Jolesz FA, McCarley RW. Cingulate gyrus and schizophrenia. *American Psychiatric Association New Abstracts* 1993:130.
- A6. *Niznikiewicz M, O'Donnell BF, McCarley RW, *Smith L, *Hokama H, *Salisbury D, *Kimble M, **Shenton ME**. Habituation in auditory P3-amplitude and alpha-power in normal and schizophrenic subjects. *Biol Psychiatry* 1993;33(6A):A118-A118.
- A7. O'Donnell BF, *Kimble M, McCarley RW, *Salisbury DF, Nestor PG, **Shenton ME**. Aging, chronicity, and auditory event-related potential abnormalities in schizophrenia. *Biol Psychiatry* 1993;33(6A):A118-A118.

- A8. Nestor PG, **Shenton M**, O'Donnell B, McCarley RW, *Haimson J, *Kimble M. Converging evidence for a left temporal-lobe dysfunction in schizophrenia. *Biol Psychiatry* 1993;33(6A):A119-A119.
- A9. Wible CG, **Shenton ME**, *Hokama H, Kikinis R, Jolesz FA, McCarley RW. A magnetic-resonance-imaging study of the prefrontal cortex in schizophrenia. *Biol Psychiatry* 1993;33(6A):A123-A123.
- A10. **Shenton M**, Kikinis R, Wible CG, *Hokama H, Jolesz FA, McCarley RW. Alterations in left temporal and temporal-lobe gyral pattern in schizophrenia. *Biol Psychiatry* 1993;33(6A):A123-A123.
- A11. Wible CG, **Shenton ME**, Oshio K, Kikinis R, Jolesz FA, McCarley RW. High-resolution MR-imaging of the hippocampal region in schizophrenia: A new methodology with preliminary results. *Biol Psychiatry* 1994;35(9):722S-723S.
- A12. *Levitt JJ, O'Donnell BF, Nestor PG, **Shenton ME**, McCarley RW. EP and neuropsychological correlates of premorbid adjustment in schizophrenia. *Biol Psychiatry* 1994;35(9):617S-617S.
- A13. O'Donnell BF, **Shenton ME**, McCarley RW, Faux SF, *Kimble M, *Salisbury DF, Kikinis R, Jolesz FA. MRI and ERP evidence for a neurodegenerative course in schizophrenia. *Biol Psychiatry* 1994;35(9):704S-704S.
- A14. *Hokama H, **Shenton ME**, Kikinis R, Jolesz FA, McCarley RW. Basal ganglia volume in schizophrenia – An MR study. *Biol Psychiatry* 1994;35(9):721S-721S.
- A15. **Shenton ME**, *Hokama H, Kikinis R, *Ballard R, *Holinger DP, Galaburda A, Jolesz FA, McCarley RW. Use of 3D MR surface renderings for measuring planum temporale. *Biol Psychiatry* 1994;35(9):721S-721S.
- A16. **Shenton ME**, *Hokama H, Kikinis R, Wible CG, Jolesz FA, McCarley RW. Atlas of the human brain from MR data – A new teaching and research resource. *Biol Psychiatry* 1994;35(9):721S-721S.
- A17. Nestor PG, **Shenton ME**, Wible CG, *Kimble M, *Smith L, Kikinis R, McCarley RW. Neuropsychological correlates of MRI measures in schizophrenia. *Biol Psychiatry* 1994;35(9):722S-722S.
- A18. Wible CG, **Shenton ME**, *Hokama H, Kikinis R, Jolesz FA, McCarley RW. Relationships between temporal and frontal brain volume in schizophrenics. *Biol Psychiatry* 1994;35(9):722S-722S.
- A19. *Dickey CC, Voglmaier MM, **Shenton ME**, Seidman LJ, *Salisbury DF, *Niznikiewicz M, *Sollinger J, Kikinis R, Jolesz FA, McCarley (sic) RW. Schizotypal disorder – Cognitive, behavioral, and neuropathological indicators. *Biol Psychiatry* 1995;37(9):597S-597S.
- A20. *Salisbury DF, **Shenton ME**, McCarley RW, Yurgelun-Todd DA, Tohen M, Sherwood AR. P3 topography differs in schizophrenia-like and mania-like first episode psychosis. *Biol Psychiatry* 1995;37(9):626S-626S.
- A21. *Ohta H, O'Donnell BF, McCarley RW, *Hokama H, Wible CG, **Shenton ME**, *Law SE, *Karapelou ME, Nestor PG, Jolesz FA, Kikinis R. An ERP study of the auditory P3A and P3B components in schizophrenia. *Biol Psychiatry* 1995;37(9):630S-631S.
- A22. O'Donnell BF, Swearer JM, McCarley RW, *Smith LT, **Shenton ME**, Nestor PG. Selective deficits in visual-perception and recognition in schizophrenia. *Biol Psychiatry* 1995;37(9):631S-631S.
- A23. *Salisbury DF, **Shenton ME**, McCarley RW, Yurgelun-Todd DA, Tohen M, Sherwood AR, *Fischer IA, Chase EA. Abnormal P3 topography in 1st-episode schizophrenia-like psychosis. *Psychophysiology* 1995;32:S66-S66(Suppl.).
- A24. Wible CG, **Shenton ME**, Kikinis R, Jolesz FA, McCarley RW. Prefrontal subdivisions, temporal-lobe, and schizophrenia – An MRI study. *Biol Psychiatry* 1995;37(9):683S-683S.

- A25. Coleman MJ, **Shenton ME**, Shapiro BM, Erlenmeyer-Kimling L. Thought-disorder profiles in offspring of schizophrenic parents in the New-York High-Risk Project. *Schizophr Res* 1995;15(1-2):8-8.
- A26. Nestor PG, **Shenton ME**, Wible C, *Hokama H, O'Donnell BF, *Law S, *Karapelou M, Kikinis R, Jolesz FA, McCarley RW. Schizophrenia thought MRI correlates. *Schizophr Res* 1995;15(1-2):91-91.
- A27. **Shenton ME**, *Hokama HH, Kikinis R, *Dickey C, Lorensen WE, *Ballard M (sic), *Holinger D, Galaburda A, Jolesz FA, McCarley RW. A 3D MRI study of the planum temporale in schizophrenia. *Schizophr Res* 1995;15(1-2):98-98.
- A28. Wible CG, **Shenton ME**, *Hokama H, Kikinis R, Jolesz F, McCarley RW. Prefrontal cortex and schizophrenia – A volumetric study of discrete portions of prefrontal cortex using high-resolution MRI. *Schizophr Res* 1995;15(1-2):103-104.
- A29. *Salisbury DF, **Shenton ME**, McCarley RW, Yurgelun-Todd DA, Tohen M. Asymmetrical P3 topography in first episode schizophrenia-like psychosis. *Schizophr Res* 1995;15(1-2):184-185.
- A30. *Salisbury DF, *Fischer IA, **Shenton ME**, Sherwood AR, *Mazzoni P, McCarley RW. Midline P3 amplitude interactions in schizophrenia and mania. *Psychophysiology* 1996;33:S72-S72 (Suppl.).
- A31. McCarley RW, **Shenton ME**, O'Donnell BF, *Dickey CC, Greene RW. Schizophrenic disorders: Neurodevelopmental and onset vulnerability factors. *Biol Psychiatry* 1996;39(7):9S-9S.
- A32. *Hirayasu H, **Shenton ME**, *Dickey CC, *Salisbury DF, *Fischer IA, Sherwood AR, Yurgelun-Todd DA, Tohen M, McCarley RW. Brain CSF volume in patients with first-episode psychosis. *Biol Psychiatry* 1996;39(7):69S-69S.
- A33. Wible CF, **Shenton ME**, Kikinis R, Jolesz F, McCarley RW. Schizophrenic symptoms and specific regions of prefrontal cortex. *Biol Psychiatry* 1996;39(7):150S-150S.
- A34. Voglmaier MM, **Shenton ME**, McCarley RW, Seidman LJ, *Salisbury D, *Sollinger J. Thought disorder index (TDI) in schizotypal personality disorder. *Biol Psychiatry* 1996;39(7):166S-166S.
- A35. *Potts GF, O'Donnell B, **Shenton ME**, *Allard J, McCarley RW. Auditory and visual high density ERP studies in schizophrenia. *Biol Psychiatry* 1996;39(7):230S-230S.
- A36. *Niznikiewicz MA, Nestor PG, O'Donnell BF, *Allard JE, **Shenton ME**, McCarley RW. Working memory as a factor in language dysfunction in schizophrenia. *Biol Psychiatry* 1996;39(7):240S-240S.
- A37. *Dickey CC, **Shenton ME**, *Hirayasu Y, *Niznikiewicz M, *Fischer I, *Rhoads R, Voglmaier MM, Seidman L, McCarley RW. Schizotypal personality disorder: A MRI analysis of the whole brain. *Biol Psychiatry* 1996;39(7):346S-346S.
- A38. *Levitt JJ, *Donnino R, **Shenton ME**, Kikinis R, Jolesz FA, McCarley RW. A quantitative volumetric MRI study of the brainstem and cerebellum in schizophrenia. *Biol Psychiatry* 1996;39(7):475S-475S.
- A39. *Donnino R, **Shenton ME**, *Iosifescu D, *Hirokazu O (sic), Wible CG, Kikinis R, Jolesz FA, McCarley RW. The parietal lobes in schizophrenia: A quantitative MR study. *Biol Psychiatry* 1996;39(7):476S-476S.
- A40. *Iosifescu DV, **Shenton ME**, Kikinis R, Dengler J, Warfield SK, McCarley RW. Automated measurement of subcortical brain MR structures in schizophrenia. *Biol Psychiatry* 1996;39(7):477S-477S.
- A41. *Salisbury DF, **Shenton ME**, McCarley RW, Sherwood AR, *Fischer IA. Reduced long-latency positive activity in schizophrenia on a homograph task. *Biol Psychiatry* 1996;39(7):522S-522S.

- A42. *Niznikiewicz MA, Nestor PG, O'Donnell BF, Seidman L, *Dickey CC, *Allard JE, *Rhoades R, McCarley RW, **Shenton ME**. ERPs as a probe of language processing difficulties in schizophrenia spectrum disorders. *Biol Psychiatry* 1996;39(7):524S-524S.
- A43. *Iosifescu DV, **Shenton ME**, Kikinis R, Warfield SK, Dengler J, McCarley RW. Elastically matching an MR-imaging brain atlas onto a new MR image of the brain. *Radiology* 1996;197:450-450 (Suppl.)
- A44. Berezovskaya AL, *Salisbury DF, **Shenton ME**, *Fischer IA, *Mazzoni P, McCarley RW. Relative alpha power abnormalities in schizophrenia and manic psychosis. Fifth Annual Research Day, Harvard Medical School. Sponsored by the Mysell Committee, Consolidated Department of Psychiatry, March 12, 1997.
- A45. Wible CG, **Shenton ME**, Kikinis R, Jolesz FA, McCarley RW. A method for separately measuring the volume of the hippocampus and amygdala using MRI. Poster presented at the Fourth Annual Meeting of the *Cognitive Neuroscience Society*. March 23-25, Boston, MA, 1997.
- A46. Seidman LJ, Voglmaier MM, *Niznikiewicz M, *Dickey CC, *Sollinger J, *Rhoades R, **Shenton ME**, McCarley RW. Delayed and object alternation deficits in schizotypal personality disorder. *Schizophr Res* 1997;24:(1-2):125S-125S.
- A47. Wible CG, **Shenton ME**, Kikinis R, Jolesz FA, McCarley RW. A new non-landmark based method for measuring amygdala and hippocampal volumes using MRI. Poster presented at *Biol Psychiatry* 1997;41:43S-43S.
- A48. McCarley RW, **Shenton M**, Greene R, O'Donnell B, Nestor P, Wible C, *Salisbury D, *Niznikiewicz M, *Hirayasu Y, *Dickey C, *Kwon JS, Tohen M, Yurgelun-Todd D, *Holinger D, Kikinis R, Jolesz F. Schizophrenia: MRI, electrophysiological, and cellular data bearing on some current issues and controversies. *Biol Psychiatry* 1997;41:17S-17S.
- A49. *Dickey CC, **Shenton ME**, Voglmaier M, *Hirayasu Y, *Niznikiewicz M, Seidman L, *Fischer I, *Teh E, *Kisler T, *Rhoades R, *Sollinger J, McCarley RW. Morphologic and cognitive indicators of schizotypal personality disorder. *Biol Psychiatry* 1997;41:25S-25S.
- A50. *Levitt JJ, *Donnino R, **Shenton ME**, Kikinis R, Jolesz FA, McCarley RW. An MRI study of brainstem, cerebellar and vermian structures in schizophrenia. *Biol Psychiatry* 1997;41:34S-34S.
- A51. Nestor PG, Barnard J, O'Donnell BF, **Shenton ME**, Kikinis R, Jolesz FA, Shen Z, Bookstein FL, McCarley RW. Partial least squares analysis of MRI and neuropsychological measures in schizophrenia. *Biol Psychiatry* 1997;41:51S-51S.
- A52. *Hirayasu Y, **Shenton ME**, *Salisbury DF, *Fischer IA, *Dickey CC, *Kisler T, *Arakaki H, Yurgelun-Todd DA, Tohen M, McCarley RW. MRI and ERP abnormalities in first episode psychosis. *Biol Psychiatry* 1997;41:205S-205S.
- A53. *Salisbury DF, **Shenton ME**, Yurgelun-Todd D, Tohen M, McCarley RW. Left temporal P3 reductions in chronic and first episode schizophrenia. *Biol Psychiatry* 1997;41:224S-224S.
- A54. *Salisbury DF, **Shenton ME**, *Fischer IA, *Mazzoni P, McCarley RW. Abnormal ERP activity despite normal performance to homographs in schizophrenia. *Biol Psychiatry* 1997;41:279S-279S.
- A55. Voglmaier MM, Seidman LJ, *Salisbury D, **Shenton M**, *Dickey C, *Niznikiewicz M, *Sollinger J, *Rhoades R, *Teh E, McCarley RW. Verbal skill deficits in schizotypal personality disorder. *Biol Psychiatry* 1997;41:S351-S351.
- A56. *Dickey CC, Voglmaier MM, **Shenton ME**, *Niznikiewicz M, Seidman LJ, *Fischer IA, Teh E, *Rhoades RA, McCarley RW. MRI and cognitive correlates in schizotypal personality disorder. *Schizophr Res* 1997;24(1-2):143-143.

- A57. *Hirayasu Y, **Shenton ME**, *Salisbury DF, *Fischer IA, *Dickey CD, *Arakaki H, Yurgelun-Todd DA, Tohen M, McCarley RW. MRI and ERP abnormalities in first episode schizophrenia and affective disorder. *Schizophr Res* 1997;24(1-2):148-148.
- A58. *Kwon JS, **Shenton ME**, *Hirayasu Y, *Fischer IA, McCarley RW. The MRI study of cavum septi pellucii in schizophrenia and affective disorder. *Schizophr Res* 1997;24(1-2):150-150.
- A59. *Niznikiewicz M, Voglmaier M, Seidman L, **Shenton M**, *Dickey C, *Rhoads R, *Teh E, McCarley RW. Event-related potential and cognitive evidence for similar language impairments in schizophrenia and schizotypal personality disorder. *Schizophr Res* 1997;24(1-2):235-236.
- A60. *Salisbury DF, Sherwood AR, **Shenton ME**, *Fischer IA, Yurgelun-Todd DA, Tohen M, McCarley RW. Temporal P300 asymmetry in first episode schizophrenia. *Schizophr Res* 1997;24(1-2):237-237.
- A61. *Salisbury DF, *Fischer IA, **Shenton ME**, Sherwood AR, *Mazzoni P, McCarley RW. Temporal P300 asymmetry in schizophrenia vs. manic psychosis and controls. *Schizophr Res* 1997;24(1-2):237-237.
- A62. *Frumin M, *Hirayasu Y, Golland P, *Salisbury DF, *Fisher IA, Kikinis R, Jolesz FA, McCarley RW, **Shenton ME**. Post-acquisition brain realignment and resampling. *Sixth Annual Research Day, Harvard Medical School*. Sponsored by the Mysell Committee, Consolidated Department of Psychiatry, April 22, 1998.
- A63. Voglmaier MM, Seidman LJ, *Niznikiewicz M, *Dickey CC, **Shenton ME**, *Teh E, McCarley RW. Gender differences in cognitive function in schizotypal personality. *American Psychiatric Association New Research Abstracts* 1998:192.
- A64. Voglmaier MM, Seidman LJ, *Niznikiewicz M, *Dickey CC, **Shenton ME**, *Teh E, McCarley RW. Sex differences in cognitive function in schizotypal personality disorder. *Biol Psychiatry* 1998;43:115S-115S.
- A65. *Potts GF, Weinstein DM, O'Donnell BF, **Shenton ME**, Johnson CR, McCarley RW. Bioelectric modeling of the P300 in schizophrenia. *Biol Psychiatry* 1998;43:119S-119S.
- A66. *Potts GF, **Shenton ME**, Wible CG, Weinstein DM, Leventon ME, Gonzalez A, *Fischer IA, *Kisler T, Gugino L, Kikinis R, McCarley RW. Coregistration of ERP, fMRI, and TMS in a finite-element volume conductivity head model constructed from the structural MRI. Poster presented at the *XIIth International Conference on Event-Related Potentials of the Brain (EPIC XII)*, July 20, 1998, Cambridge, MA.
- A67. *Teh E, *Niznikiewicz M, Voglmaier M, Seidman L, *Dickey C, **Shenton ME**, McCarley RW. Abnormal lexical processes in schizotypy indexed by event-related potentials. Poster presented at the *XIIth International Conference on Event-Related Potentials of the Brain (EPIC XII)*, July 23, 1998, Cambridge, MA.
- A68. *Fischer IA, **Shenton ME**, McCarley RW, Harper M, *Salisbury DF. Abstraction ability and P300 in chronic and first episode psychotic patients. Poster presented at the *XIIth International Conference on Event-Related Potentials of the Brain (EPIC XII)*, July 23, 1998, Cambridge, MA.
- A69. Rutherford BR, **Shenton ME**, McCarley RW, *Fischer IA, *Salisbury DF. Response mode affects P300 topography. Poster presented at the *XIIth International Conference on Event-Related Potentials of the Brain (EPIC XII)*, July 23, 1998, Cambridge, MA.
- A70. Wible CG, *Potts GF, Weinstein DM, Kacher D, Wells W, Sperling R, Cavanaugh G, Yoo SS, **Shenton ME**, *Fischer IA, Leventon ME, Gugino LD, Kikinis R, Jolesz FA, McCarley RW. Co-registration and comparison of functional localization using results from functional MRI (fMRI) transcranial magnetic stimulation (TMS), and ERP with bioelectrically modeled source localization. Poster presented at the *Society for Neuroscience*, November 4, 1998, Los Angeles, CA.

- A71. *Potts GF, Wible CG, **Shenton ME**, Weinstein DM, *Fischer IA, Leventon ME, Gugino LD, McCarley RW. Localization of visual cortex with coregistered functional magnetic resonance imaging, bioelectronically modeled cortical visual evoked potential, and transcranial magnetic stimulation induced visual suppression. *J Cognitive Neuroscience* 1998;(Suppl.):42-42.
- A72. *Levitt JJ, *Donnino R, **Shenton ME**, *Petrescu C, Nestor PG, Kikinis R, Jolesz FA, McCarley RW. Posterior fossa structure in schizophrenia: A quantitative volumetric MRI study. *Biol Psychiatry* 1998;43:72S-72S.
- A73. Wible CG, **Shenton ME**, Kikinis R, Jolesz FA, McCarley RW. Prefrontal cortex volume in chronic schizophrenia: An MRI replication study. *Biol Psychiatry* 1998;43:87S-87S.
- A74. *Dickey CC, **Shenton ME**, Voglmaier MM, *Niznikiewicz MA, Seidman LJ, *Teh E, *Kisler T, *Fischer I, *Hirayasu Y, McCarley RW. Males and females with schizotypal personality disorder. *Biol Psychiatry* 1998;43:172S-172S.
- A75. *Hirayasu Y, **Shenton ME**, *Salisbury DF, Wible CG, *Fischer IA, *Kisler T, *Kwon JS, *Dickey CC, Yurgelun-Todd DA, Tohen M, McCarley RW. Subgenual prefrontal cortex reduction in first episode affective psychosis. *Biol Psychiatry* 1998;43:323S-323S.
- A76. *Hirayasu Y, **Shenton ME**, *Salisbury DF, *Fischer IA, *Kisler T, *Kwon JS, *Dickey CC, Yurgelun-Todd DA, Tohen M, McCarley RW. Superior temporal gyrus change over time in first episode schizophrenia. *Biol Psychiatry* 1998;43:387S-387S.
- A77. *Niznikiewicz MA, **Shenton ME**, Voglmaier M, Seidman L, *Dickey C, *DeLong ES, McCarley RW. Language processing as indexed by the N400 in schizotypal personality disorder in females. *Biol Psychiatry* 1998;43:395S-395S.
- A78. *Potts GF, Weinstein DM, O'Donnell BF, **Shenton ME**, Johnson CR, McCarley RW. Bioelectric modeling of the P300 in schizophrenia. *Biol Psychiatry* 1998;43:396S-396S.
- A79. Nestor PG, *Akdag SJ, O'Donnell BF, *Niznikiewicz M, *Law S, **Shenton ME**, McCarley RW. Word recall in schizophrenia: A connectionist model. *Biol Psychiatry* 1998;43:400S-400S.
- A80. *Salisbury DF, *Fischer IA, **Shenton ME**, *Mazzoni P, McCarley RW. Evidence for a selective bias towards strong associates in schizophrenic language. *Biol Psychiatry* 1998;43:407S-407S.
- A81. *Salisbury DF, *Mazzoni P, McCarley RW, *Fischer IA, Tohen M, Yurgelun-Todd DA, **Shenton ME**. P300 asymmetry persists at retest in first psychotic episode schizophrenia. *Biol Psychiatry* 1998;43:408S-408S.
- A82. **Shenton ME**, *Hirayasu Y, *Salisbury DF, *Dickey CC, *Kwon JS, *Niznikiewicz MM, Wible CG, Nestor PG, McCarley RW. Clinical and structural abnormalities in schizophrenia. *Schizophr Res* 1998;29(1-2):82-82.
- A83. Voglmaier MM, Seidman LJ, *Niznikiewicz M, *Dickey CC, **Shenton ME**, McCarley RW. Schizotypal personality disorder: Language and gender. *American Psychiatric Association New Research Abstracts* 1999;128.
- A84. Voglmaier MM, Seidman LJ, *Niznikiewicz M, *Dickey CC, **Shenton ME**, McCarley RW. Language skills in men and women with schizotypal personality disorder. *Biol Psychiatry* 1999;45:31S-31S.
- A85. DeSantis MA, **Shenton ME**, McCarley RW, *Salisbury DF. Background noise affects P300 in first episode psychosis and controls. *Biol Psychiatry* 1999;45:38S-38S.
- A86. Wible CC, *Potts GF, Weinstein DM, Kacher D, Wells W, Sperling R, Cavanaugh G, Yoo SS, *Fischer IA, Leventon ME, Gugino LD, Kikinis R, Jolesz FA, McCarley RW, **Shenton ME**. Localization of motor function

using results from functional MRI (fMRI), transcranial magnetic stimulation (TMS), and ERP with bioelectrically modeled source localization. *Biol Psychiatry* 1999;45:131S-131.

- A87. *Fraone SK, **Shenton ME**, *Dickey CC, *Hirayasu Y, *Niznikiewicz MA, Voglmaier MM, Seidman LJ, *Sutton J, *Frumin M, McCarley RW. Trend toward reduced Heschl's gyrus volume in SPD. *Seventh Annual Research Day, Harvard Medical School*. Sponsored by the Mysell Committee, Consolidated Department of Psychiatry, April 1999.
- A88. Huh TJ, Nestor PG, *Kimble M, **Shenton ME**. Dissociation of working memory in schizophrenia. Poster presented at the *Fourteenth Annual Meeting of the Society for Research in Psychopathology*, November 18, 1999, Montreal, Québec, Canada.
- A89. *Potts GF, Weinstein DM, Gugino LG, Gonzalez A, Wible C, McCarley RW, Tucker DM, Kikinis R, **Shenton ME**. Localizing the functional central sulcus with 128 channel motor and somatosensory evoked potentials in an MRI derived finite-element head model. *J of Cognitive Neuroscience* 1999;94-94 (Supl.)
- A90. McCarley RW, *Salisbury DF, *Hirayasu Y, Wible C, **Shenton ME**. Conjoint structural MRI and ERP studies in schizophrenia: Evidence for a "hot spot" of dominant hemisphere abnormalities that is present at onset and also progresses. *Psychophysiology* 1999;36:S13-S13.
- A91. *Niznikiewicz M, Voglmaier M, **Shenton M**, *Dickey C, Seidman L, *Teh KK, *Sutton J, McCarley RW. Differential lexical processing in normal and schizotypal individuals. *Psychophysiology* 1999;36:S86-S86.
- A92. *Salisbury DF, **Shenton ME**, Tohen M, Zarate C, McCarley RW. P300 topography during the early course of psychosis. *Psychophysiology* 1999;36:S100-S100.
- A93. *Niznikiewicz MA, Nester PG, O'Donnell BF, Voglmaier M, **Shenton ME**. N400 and schizophrenia spectrum disorders. *International J Psychophysiology* 1999;33(1):54-54.
- A94. McCarley RW, *Hirayasu Y, O'Donnell BF, *Niznikiewicz MA, *Potts GF, *Kwon JS, Gainski JL, *Anderson JE, **Shenton ME**. Neurophysiological and structural MRI studies in schizophrenia. *International J Psychophysiology* 1999;33(1):58-58.
- A95. *Potts GF, **Shenton ME**, Wible CG, Weinstein DM, Leventon ME, Gonzalez AA, *Fischer IA, *Kisler T, Gugino LD, Kikinis R, McCarley RW. Coregistration of ERP, fMRI, and TMS in a finite-element volume conductivity head model constructed from the structural MRI. *International J Psychophysiology* 1999;33(1):103-103.
- A96. *Niznikiewicz MA, **Shenton M**, Voglmaier M, Seidman L, *Dickey C, *Teh E, *DeLong S, McCarley RW. N400 amplitude indexes language abnormality in female schizotypy. *International J Psychophysiology* 1999;33(1):182-182.
- A97. *Teh E, *Niznikiewicz M, Voglmaier (sic) M, Seidman L, *Dickey C, **Shenton ME**, McCarley RW. Abnormal lexical processes in schizotypy indexed by event-related potentials. *International J Psychophysiology* 1999;33(1):183-183.
- A98. *Fischer IA, **Shenton ME**, McCarley RW, Harper M, *Salisbury DF. Abstraction ability and P300 in chronic and in first episode psychotic patients. *International J of Psychophysiology* 1999;33(1):187-187.
- A99. Rutherford BR, **Shenton ME**, McCarley RW, *Fischer IA, *Salisbury DF. Response mode affects P300 topography. *International J Psychopharmacology* 1999;33(1):188-188.
- A100. *Salisbury DF, **Shenton ME**, McCarley RW. Association strength bias in schizophrenia. *International J Psychophysiology* 1999;33(1):191-191.

- A101. **Shenton ME**, *Salisbury DF, McCarley RW. P300 asymmetry is present longitudinally from schizophrenia onset. *International J Psychophysiology* 1999;33(1):192-192.
- A102. *Kwon JS, O'Donnell BF, Wallenstein GV, Greene RW, *Hirayasu Y, Nestor PG, Hasselmo ME, *Potts GF, **Shenton ME**, Gainski JL, McCarley RW. Gamma range amplitude and phase abnormalities to auditory stimulation in schizophrenia. *International J Psychophysiology* 1999;33(1):198-198.
- A103. *Salisbury DF, Farrell D, **Shenton ME**, *Fischer IA, Zarate C, McCarley RW. Mismatch negativity is reduced in chronic but not first episode schizophrenia. *Biol Psychiatry* 1999;45(8):25S-26S.
- A104. **Shenton ME**, Gerig G, McCarley RW, Szekeley G, Kikinis R. Morphometric hippocampal shape differences in schizophrenia. *Biol Psychiatry* 1999;45(8):117S-117S.
- A105. *Hirayasu Y, **Shenton ME**, *Salisbury DF, *Frumin M, *Fischer IA, Farrell D, Yurgelun-Todd DA, Zarate C, McCarley RW. Progressive change in posterior superior temporal gyrus in schizophrenia. *Biol Psychiatry* 1999;45(8):378S-378S.
- A106. *Dickey CC, **Shenton ME**, *Hirayasu Y, Voglmaier MM, *Niznikiewicz MA, Seidman LJ, *Frumin M, *Fraone S, *Fischer IA, *Sutton J, *Teh E, McCarley RW. *Biol Psychiatry* 1999;45(8):118S-118S.
- A107. *Levitt JJ, **Shenton ME**, *Dickey CC, Kikinis R, Jolesz FA, McCarley RW. An MRI study of caudate volume in unmedicated schizotypal personality disorder. *Biol Psychiatry* 1999;45(8):131S-131S.
- A108. *Frumin M, Golland P, McCarley RW, *Hirayasu Y, *Salisbury DF, *Fischer IA, Kikinis R, **Shenton ME**. Shape difference in the corpus callosum in first episode psychosis. *Biol Psychiatry* 1999;45(8):132S-132S.
- A109. *Niznikiewicz M, **Shenton ME**, Voglmaier M, Seidman L, *Dickey C, *Teh E, McCarley RW. Abnormal activation in lexical networks in schizotypy indexed by evoked potentials. *Biol Psychiatry* 1999;45(8):132S-132S.
- A110. O'Donnell BF, McCarley RW, *Potts GF, *Salisbury DF, Nestor PG, *Hirayasu Y, *Niznikiewicz MA, Barnard J, Shen ZJ, Weinstein DM, Bookstein FL, **Shenton ME**. Identification of neural circuits underlying P300 abnormalities in schizophrenia. *Psychophysiology* 1999;36(3):388-398.
- A111. *Dickey CC, **Shenton ME**, *Hirayasu Y, Voglmaier MM, *Niznikiewicz MA, Seidman LJ, *Frumin M, *Fraone S, *Fischer IA, *Sutton J, *Teh E, McCarley RW. CSF volume differences in schizotypal personality disorder. *Schizophr Res* 1999;36(1-3):195-195.
- A112. *Frumin M, Golland P, McCarley RW, *Hirayasu Y, *Salisbury DF, *Fischer IA, Kikinis R, **Shenton ME**. Deformation of shape of the corpus callosum in first-episode schizophrenia and affective disorder. *Schizophr Res* 1999;36(1-3):197-197.
- A113. *Kwon JS, McCarley RW, *Hirayasu Y, *Anderson JE, Kikinis R, Jolesz FA, **Shenton ME**. Volume reduction of left planum temporale in chronic schizophrenic patients. *Schizophr Res* 1999;36(1-3):202-202.
- A114. McCarley RW, *Hirayasu Y, *Salisbury DF, *Fischer IA, Yurgelun-Todd DA, Tohen M, **Shenton ME**. Left posterior superior temporal gyrus: Progressive gray matter volume reduction in schizophrenia. *Schizophr Res* 1999;36(1-3):204-205.
- A115. **Shenton ME**, Gerig G, McCarley RW, Szekeley G, Kikinis R. Hippocampal shape differences in schizophrenia. *Schizophr Res* 1999;36(1-3):210-210.
- A116. McCarley RW, *Kwon JS, O'Donnell BF, Wallenstein GV, Greene RW, Hasselmo ME, *Hirayasu Y, Nestor PG, **Shenton ME**. Gamma frequency amplitude and phase abnormalities to auditory stimulation in schizophrenia. *Schizophr Res* 1999;36(1-3):255-256.

- A117. *Niznikiewicz MA, **Shenton M**, *Dickey CC, Voglmaier MM, Seidman LJ, *Teh E, *Rhoads R, McCarley RW. Auditory P3 deficit in schizotypal personality disorder. *Schizophr Res* 1999;36(1-3):257-257.
- A118. *Salisbury DF, **Shenton ME**, *Fischer IA, *Mazzoni P, Farrell DC, Tohen M, Zarate C, McCarley RW. Longitudinal study of P300 topography in first-episode schizophrenia. *Schizophr Res* 1999;36(1-3):258-258.
- A119. *Dickey CC, **Shenton ME**, *Fraone S, *Niznikiewicz MA, Voglmaier MM, Seidman LJ, *Hirayasu Y, *Kwon JS, *Fischer IA, *Anderson J, *Frumin M, McCarley RW. Reduced left Heschl's gyrus volume in schizotypal personality disorder. *Biol Psychiatry* 2000;47(8):44S-44S.
- A120. Voglmaier MM, Seidman LJ, *Niznikiewicz M, *Dickey CC, **Shenton ME**, *Sutton J, McCarley RW. Thought disorder and language in schizotypal personality disorder. *Biol Psychiatry* 2000;47(8):69S-69S.
- A121. *Salisbury DF, Rutherford B, **Shenton ME**, McCarley RW. Does response mode affect detection of P300 asymmetry in schizophrenia? *Biol Psychiatry* 2000;47(8):80S-80S.
- A122. *Hirayasu Y, **Shenton ME**, *Tanaka S, *Salisbury DF, *Nagy A, *Dickey CC, *Kricun A, Yurgelun-Todd DA, Zarate C, McCarley RW. Specificity of reduced cortical gray matter to first episode schizophrenic psychosis. *Biol Psychiatry* 2000;47(8):341S-341S.
- A123. McCarley RW, *Dickey CC, *Niznikiewicz MA, Seidman L, Voglmaier MM, *Salisbury DF, *Sutton J, **Shenton ME**. Structural MR imaging findings in schizotypal personality disorder. *Biol Psychiatry* 2000;47(8):394S-394S.
- A124. *Levitt JJ, McCarley RW, *Ciszewski A, *Dickey CC, Kikinis R, Jolesz FA, **Shenton ME**. Caudate and ventricular volume in unmedicated schizotypal personality disorder. *Biol Psychiatry* 2000;47(8):452S-452S.
- A125. McCarley RW, *Kwon JS, O'Donnell BF, Wallenstein GV, Greene RW, *Hirayasu Y, Nestor PG, Hassel ME, **Shenton ME**. Gamma frequency auditory processing abnormalities in schizophrenia. *Biol Psychiatry* 2000;47(8):569S-569S.
- A126. *Salisbury DF, Rutherford B, **Shenton ME**, McCarley RW. Does response mode affect detection of P300 asymmetry in schizophrenia? *Biol Psychiatry* 2000;47:24S-24S.
- A127. *Frumin M, Westin CF, Maier SE, *Kubicki M, McCarley RW, Mamata H, *Teh E, **Shenton ME**. White matter abnormalities in schizophrenia. *Eighth Annual Research Day, Harvard Medical School*. Sponsored by the Mysell Committee, Consolidated Department of Psychiatry, April 5, 2000.
- A128. *Kubicki M, Westin CF, Maier SE, McCarley RW, Mamata H, *Frumin M, Wible CG, *Teh E, Kikinis R, Jolesz FA, **Shenton ME**. Uncinate fasciculus in schizophrenics: A diffusion tensor study. *Eighth Annual Research Day, Harvard Medical School*. Sponsored by the Mysell Committee, Consolidated Department of Psychiatry, Boston 2000.
- A129. *Kricun AA, *Kubicki M, Yoo SS, Kacher D, *Salisbury DF, *Hirayasu Y, **Shenton ME**, McCarley RW, Wible CG. Early auditory processing deficits in schizophrenics: an fMRI study. *Eighth Annual Research Day, Harvard Medical School*. Sponsored by the Mysell Committee, Consolidated Department of Psychiatry, April 5, 2000.
- A130. *Nagy A, *Lee CU, *Kricun AA, *Dickey CC, *Salisbury DF, **Shenton ME**, McCarley RW. Schizophrenia: Progressive prefrontal gray matter changes. *Eighth Annual Research Day, Harvard Medical School*. Sponsored by the Mysell Committee, Consolidated Department of Psychiatry, April 5, 2000.
- A131. *Frumin M, Westin CF, McCarley RW, Maier S, Mamata H, *Kubicki M, **Shenton ME**. Presentation; White matter abnormalities in schizophrenia. *American Psychiatric Association New Research Abstracts* 2000:84.
- A132. Gurrera RJ, *Niznikiewicz M, Berman E, Nestor P, *Allen C, **Shenton ME**, *Dodd C. Auditory P3 and personality traits in schizophrenia. *American Psychiatric Association New Research Abstracts* 2000:161.

- A133. *Nagy AI, *Lee CU, **Shenton ME**, *Salisbury DF, *Kricun AA, *Dickey CC, McCarley RW. Presentation; Schizophrenia: Progressive prefrontal gray matter changes. *American Psychiatric Association New Research Abstracts* 2000:83.
- A134. *Kubicki M, Westin CF., McCarley R.W., Kikinis R. Jolesz F.A., Maier S., Mamata H., **Shenton ME**. Cingulum bundle in schizophrenics-Diffusion tensor study. *RSNA 86th Scientific Assembly and Annual Meeting*, Chicago, 2000. *Radiology* 2000;217:402.
- A135. *Frumin M, Westin CF, McCarley RW, *Kubicki M, *The E, *Allen C, **Shenton ME**. Using diffusion tensor imaging to examine the corpus callosum in schizophrenia. *The 39th Annual Meeting of the American College of Neuropsychopharmacology*, December 14, 2000, Jan Juan, Puerto
- A136. *Niznikiewicz M, *Spencer KM, **Shenton ME**, Voglmaier M, Seidman L, *Dickey C, *Frumin M, *Sutton J, Friedman M, McCarley RW. Early priming effects in schizotypal personality disorder as demonstrated with spatiotemporal principal components analysis. *Psychophysiology* 2000;37:S75-S75.
- A137. *Salisbury DF, Rutherford B, **Shenton ME**, McCarley RW. Button pressing reduces P300 and changes its topography. *Psychophysiology* 2000;(37):S850S85.
- A138. *Frumin M, Westin CF, Maier S, McCarley RW, *Kubicki M, *Teh E, **Shenton ME**. Corpus callosum abnormalities in schizophrenia as measured by diffusion imaging. *Schizophr Res* 2001;49(Suppl.):154-154.
- A139. *Kubicki M, Westin CF, Maier S, Mamata H, *Frumin M, Jolesz FA, McCarley RW, **Shenton ME**. Frontotemporal white matter connections in schizophrenia, a diffusion tensor MR study. *ASNR 39th Annual Meeting*, 21-27 April 2001, Boston, MA
- A140. **Shenton ME**, *Kubicki M, Westin CF, Maier S, *Frumin M, Mamata H, McCarley RW. Disruption of the integrity within the cingulum bundle in schizophrenic subjects: MR diffusion tensor study. *Schizophr Res*2001;49(Suppl.):166-166.
- A142. Voglmaier MM, Seidman LJ, *Niznikiewicz MA, *Dickey CC, **Shenton ME**, McCarley RW. Schizotypal personality disorder: Cognition, language, and thought disorder. *Biol Psychiatry* 2001;49:271S-271S.
- A143. McCarley RW, *Kubicki M, *David E, *Salisbury D, **Shenton ME**. Voxel based morphometry analysis of gray matter in first episode schizophrenia. *Annual Meeting of American Psychiatric Association, New Research Abstracts*; 2001:89.
- A144. *Kubicki M, **Shenton ME**, *David E, *Frumin M, *Salisbury D, *Hirayasu Y, McCarley RW. A comparison of voxel-based morphometry (VBM) with region-of-interest (ROI) analysis of gray matter in control and first episode schizophrenia subjects. *Biol. Psychiatry*, 2001;49:125S-125S.
- A145. *Kubicki M, Westin CF, Maier S, *Frumin M, McCarley RW, **Shenton ME**. Integrity of the Limbic System in Schizophrenic Subjects- Cingulum Bundle MR Diffusion Tensor Study. *Biol. Psychiatry*, 2001;49:125S-125S.
- A146. *Kubicki M, Westin CF, Maier S, Mamata H, *Frumin M, *The E, McCarley RW, **Shenton ME**. Diminished asymmetry within frontal-temporal connections in schizophrenics, a diffusion tensor study. *Schizophr Res* 2001; (Suppl);9:159-159.
- A147. Griggs CB, **Shenton ME**, McCarley RW, *Salisbury DF. Neuropsychological correlates of subordinate homograph disambiguation. *Psychophysiology* 2001;38(Suppl.):S45-S45.
- A148. McCarley RW, Wible C, *Salisbury D, *Niznikiewicz M, *Hirayasu Y, *Spencer K, **Shenton M**. Linking brain function and structure in schizophrenia: Structural MRI, fMRI and ERP data on auditory mismatch negativity and P300. *International J Psychophysiology* 2001;41(3):204-204.

- A149. *Dickey CC, McCarley RW, Voglmaier MM, *Niznikiewicz MA, Seidman LJ, *Frumin M, **Shenton ME**. MRI measures of prefrontal gray and white matter in males and females diagnosed with schizotypal personality disorder. *Schizophr Res* 2001;49(1-2):153-153.
- A150. McCarley RW, *Dickey CC, *Fraone S, *Niznikiewicz MA, *Hirayasu Y, Volgmaier MM, **Shenton ME**. Reduced left Heschl's gyrus volume in schizophrenia spectrum disorder using structural MRI. *Schizophr Res* 2001;49(1-2):160-161.
- A151. *Kasai K, **Shenton ME**, *Salisbury DF, *Lee CU, *Dickey CC, Yurgelun-Todd D, McCarley RW. Fusiform gyrus volume reduction in first-episode schizophrenia. *Biol Psychiatry* 2001;49(8):64S-64S.
- A152. *Levitt JJ, McCarley RW, *Ciszewski A, *Salisbury DF, Kikinis R, Jolesz FA, **Shenton ME**. An MRI study of caudate nucleus and lateral ventricle volume in first episode schizophrenia. *Biol Psychiatry* 2001;49(8):203S-203S.
- A153. *Niznikiewicz MA, *Spencer K, **Shenton ME**, Voglmaier M, Seidman L, *Dickey C, *Frumin M, *Friedman M, McCarley RW. Semantic overactivation present early in schizotypal personality disorder: Evidence from principal components analysis. *Biol Psychiatry* 2001;49(8):228S-228S.
- A154. *Dickey C, McCarley RW, Voglmaier M, *Niznikiewicz M, *Frumin M, Seidman L, **Shenton ME**. Neurobiology of schizotypal personality disorder. *Biol Psychiatry* 2001;49(8):244S-244S.
- A155. *Dickey CC, **Shenton ME**, Voglmaier MM, *Niznikiewicz MA, Seidman LJ, *Frumin M, *Fraone S, Ahn S, *Madan A, McCarley RW. Prefrontal cortex in schizotypal personality disorder males and females. *Biol Psychiatry* 2001;49(8):336S-336S.
- A156. Voglmaier MM, Seidman LJ, *Niznikiewicz MA, *Dickey CC, **Shenton ME**, McCarley RW. Schizotypal personality disorder: Cognition, language, and thought disorder. *Biol Psychiatry* 2001;49(8):271S-271S.
- A157. *Salisbury DF, Bonner-Jackson A, Griggs CB, **Shenton ME**, McCarley RW. Mismatch negativity in schizophrenia: Does MMN amplitude decline with disease duration? *Biol Psychiatry* 2001;49(8):296S-296S.
- A158. *Frumin M, Westin CF, McCarley RW, *Kubicki M, *Teh E, *Allen C, Maier SE, **Shenton ME**. White matter abnormalities in schizophrenia using diffusion tensor imaging: A study of the corpus callosum. *Biol Psychiatry* 2001;49(8):337S-337S.
- A159. *Niznikiewicz M, Han SD, Nestor P, *Dodd C, **Shenton M**, McCarley RW. When word-level and paragraph-level collide. *International J Psychophysiology* 2001;41(3):228S-228S.
- A160. *Kubicki M, *Fitchorov T, Westin CF, *Frumin M, *Ersner-Hersfield H, Jolesz FA, McCarley RW, **Shenton ME**. White matter abnormalities in schizophrenia: Evidence from diffusion tensor and myelin saturation techniques. *Biol Psychiatry* 2002;51(8):169S-169S.
- A161. *Frumin M, Westin CF, Maier S, *Kubicki M, Kikinis R, Jolesz FA, McCarley RW, **Shenton ME**. A diffusion tensor imaging study of the corpus callosum in schizophrenia. *Biol Psychiatry* 2002;51(8):139S-139S.
- A162. Voglmaier MM, Seidman LJ, *Madan A, *Niznikiewicz MA, *Dickey CC, **Shenton ME**, McCarley RW. Dichotic sentence identification and semantic facilitation in schizotypal personality Disorder. *Biol Psychiatry* 2002;51(8):64S-64S.
- A163. *Onitsuka T, **Shenton ME**, *Kasai K, Nestor PG, McCarley RW. Fusiform gyrus volume reduction and facial recognition in chronic schizophrenia. *Biol Psychiatry* 2002;51(8):75S-75S.

- A164. *Levitt JJ, McCarley RW, Westin CF, Estepar RS, Kikinis R, Jolesz FA, **Shenton ME**. An MRI of the shape of the caudate nucleus in schizotypal personality disorder. Poster presentation at *The 41st Annual Meeting of the American College of Neuropsychopharmacology*, December 2002, Jan Juan, Puerto.
- A165. *Salisbury D, **Shenton ME**, McCarley RW. Reduction of MMN in the first few years of schizophrenia. *Psychophysiology* 2002;39:S73-S73.
- A166. *Kubicki M, Westin CF, Maier S, *Frumin M, Nestor P, *Salisbury D, Kikinis R, Jolesz F, McCarley RW, **Shenton ME**. Uncinate fasciculus findings in schizophrenia: A magnetic resonance diffusion tensor imaging study. *Schizophr Res* 2002;53(3):88-88.
- A167. *Kubicki M, **Shenton ME**, *Salisbury DF, Hirayasu Y, McCarley RW. Voxel-based morphometric analysis of gray matter in first episode schizophrenia. *Schizophr Res* 2002;53(3):96-96.
- A168. McCarley RW, **Shenton ME**, *Kasai K, *Hirayasu Y, *Salisbury DF. Progression of gray matter loss after first-episode in schizophrenia but not in bipolar psychosis. *Biol Psychiatry* 2002;51(8):31S-31S.
- A169. *Salisbury DF, **Shenton ME**, McCarley RW. Age and chronicity effects on P300 amplitude in schizophrenia and psychotic mania. *Biol Psychiatry* 2002;51(8):133S-133S.
- A170. *Dickey CC, McCarley RW, Voglmaier M, *Niznikiewicz M, *Toner S, *Demeo S, Seidman L, *Frumin M, **Shenton ME**. Structural MRI study of fusiform gyrus gray matter in schizotypal personality disorder. *Biol Psychiatry* 2002;51(8):164S-164S.
- A171. *Levitt JJ, McCarley RW, *Ersner-Hershfield H, *Salisbury DF, Kikinis R, Jolesz FA, **Shenton ME**. An MRI study of caudate nucleus and lateral ventricle volume in first episode schizophrenia and affective psychosis. *Biol Psychiatry* 2002;51(8):175S-175S.
- A172. *Ersner-Hershfield H, *Levitt JJ, McCarley RW, *Kubicki M, Westin CF, Kikinis R, Jolesz F, **Shenton ME**. An MRI diffusion tensor imaging study of the anterior limb of the internal capsule. *Eleventh Annual Research Day, Harvard Medical School. Sponsored by the Mysell Committee, Consolidated Department of Psychiatry*, Boston 2003.
- A173. *Kubicki M, Westin CF, *Frumin M, *Ersner-Hershfield H, Jolesz F, McCarley RW, **Shenton ME**. DTI and MTR Abnormalities in Schizophrenia- Voxel Wise Analysis of White Matter Integrity. *Schizophr Res (Suppl.)* 2003;60:199-199.
- A174. *Park HJ, Westin CF, *Brun A., *Kubicki M, McCarley RW, and **Shenton ME**. A method for hemispheric asymmetry of white matters using diffusion tensor MRI. *Human Brain Mapping* 2003, New York, USA, In: *Neuroimage*, 2003;S:918.
- A175. *Schwartz DP, *Dickey CC, Panych LP, **Shenton ME**, Yoo S-S, *Toner SK, Wible CG, Jolesz F, Kikinis R, McCarley RW. fMRI Activation of the Superior Temporal Gyrus in Schizotypal Personality Disorder. *Eleventh Annual Research Day, Harvard Medical School. Sponsored by the Mysell Committee, Department of Psychiatry*, March 19, 2003.
- A176. *Onitsuka T, *Niznikiewicz MA, **Shenton ME**, Nestor PG, *Lucia LC, McCarley RW. Schizophrenia is associated with deficits in the neural network for face processing. *Eleventh Annual Research Day, Harvard Medical School. Sponsored by the Mysell Committee, Department of Psychiatry*, March 19, 2003.
- A177. *Ersner-Hershfield H, *Levitt JJ, McCarley RW, *Kubicki M, Westin CF, Kikinis R, Jolesz FA, **Shenton ME**. An MRI diffusion tensor imaging study of the anterior limb of the internal capsule. *Eleventh Annual Research Day, Harvard Medical School. Sponsored by the Mysell Committee, Department of Psychiatry*, March 19, 2003.

- A178. *Park, HJ, **Shenton ME**, *Kubicki M, McCarley RW. Statistical probability atlas map of first episode schizophrenia, Eleventh Annual Research Day, Harvard Medical School. Sponsored by the Mysell Committee, Department of Psychiatry, March 19, 2003.
- A179. *Wiegand LC, Warfield SK, *Levitt JJ, *Hirayasu Y, *Salisbury DF, Heckers S, Kikinis R, Jolesz FA, McCarley RW, **Shenton ME**. Prefrontal Cortical Thickness in Schizophrenia: An MRI Study. Eleventh Annual Research Day, Harvard Medical School. Sponsored by the Mysell Committee, Department of Psychiatry, March 19, 2003.
- A180. *Demeo S, *Dickey CC, **Shenton ME**, *Frumin M, *Niznikiewicz MA, Voglmaier M, Seidman LJ, *Madan A, McCarley RW. Superior Temporal Gyrus in Females with Schizotypal Personality Disorder: A Quantitative MRI Study. Eleventh Annual Research Day, Harvard Medical School. Sponsored by the Mysell Committee, Department of Psychiatry, March 19, 2003.
- A181. *Allen CG, Nestor PG, McCarley RW, **Shenton ME**. Retrieval induced forgetting assessing associative memory in schizophrenia. *Schizophr Res* 2003;60(1):121-121 Suppl.
- A182. Nestor PG, *Kubicki M, **Shenton ME**, *Allen CG, *Niznikiewicz MA, McCarley RW. Diffusion tensor imaging correlates of learning and memory in chronic schizophrenia. *Schizophr Res* 2003;60(Suppl.):150-151.
- A183. *Dickey C, McCarley RW, Voglmaier M, *Niznikiewicz M, Seidman LJ, *Demeo SS, *Ersner-Hershfield H, *Schwartz DP, *Frumin M, **Shenton ME**. Odd speech and the superior temporal gyrus in females with schizotypal personality disorder: A MRI study. *Schizophr Res* 2003;60(Suppl.):193-193.
- A184. *Kubicki M, Westin CF, *Frumin M, *Ersner-Hershfield H, Jolesz FA, McCarley RW, **Shenton ME**. DTI and MTR abnormalities in schizophrenia- voxel wise analysis of white matter integrity. *Schizophr Res* 2003;60(Suppl):199-199.
- A185. *Niznikiewicz MA, Hun SD, Nestor PG, *Dodd C, **Shenton ME**, McCarley RW. Processing of word-level and paragraph-level information in schizotypy. *Schizophr Res* 2003;60(Suppl.):256-257.
- A186. *Salisbury DF, *Kasai K, **Shenton ME**, McCarley RW. Mismatch negativity amplitude and Heschl's gyrus volume in first-episode schizophrenia. *Schizophr Res* 2003;60(Suppl.):259-259.
- A187. *Park HJ, **Shenton ME**, *Kubicki M, McCarley RW. Spatial distribution of temporal lobe subregions in first episode schizophrenia: Statistical probability atlas approach. *Human Brain Mapping* 2003, New York, June 21.
- A188. *Park HJ, Westin CF, *Kubicki M, *Brun A, McCarley RW, **Shenton ME**. A method for hemispheric asymmetry of white matter using diffusion tensor MRI. *Human Brain Mapping* 2003, New York, June 21.
- A189. *Kubicki M, *Park HJ, Westin CF, Mulkern R, *Frumin M, *Connor E, Jolesz FA, McCarley RW, **Shenton ME**. White matter integrity in schizophrenia – A DTI and MTR voxel based analysis. *The 42nd Annual Meeting of the American College of Neuropsychopharmacology*, December 8, 2003, Jan Juan, Puerto.
- A190. *Levitt JJ, McCarley RW, Westin CF, Nestor P.G., Estepar R.S.J., Kikinis R., Jolesz F.A., **Shenton ME**. Shape of the caudate nucleus in schizotypal personality disorder: an MRI study. Paper presented at the *Society of Biological Psychiatry Annual Meeting*, May 15-May 17, 2003, San Francisco, CA. *Biol Psychiatry* 2003;53(8):327S-327S.
- A191. *Levitt, JJ, McCarley RW, Westin CF, Nestor PG, Kikinis R, Jolesz FA, **Shenton ME**. Caudate Nucleus in Schizotypal Personality Disorder: An MRI Shape Study. Paper presented at the *American Psychiatric Association Meeting*, May 17-May 22, 2003, San Francisco, CA.

- A192. *Levitt JJ, McCarley RW, *Ersner-Hershfield H, *Kubicki M, Westin CF, Kikinis R, Jolesz FA, **Shenton ME**. Fiber Disorder in Schizophrenia: A DTI study of thalamo-cortical connections. Paper presented at the *American College of Neuropsychopharmacology Meeting*, December 7-11, 2003, San Juan, Puerto Rico.
- A193. McCarley RW, *Salisbury D, Wible C, **Shenton ME**. Matching the mismatch in EEG, fMRI and structural MRI data. *Biol Psychiatry* 2003;53(8):18S-18S.
- A194. *Onitsuka T, **Shenton ME**, *Dickey CC, *Kuroki N, Nestor PG, McCarley RW. Middle and inferior temporal gyrus gray matter volume abnormalities in chronic schizophrenia: An MRI study. *Biol Psychiatry* 2003;53(8):332S-332S.
- A195. *Salisbury DF, *Kasai K, **Shenton ME**, McCarley RW. Mismatch negativity and Heschl's gyrus gray matter volume longitudinally in first-episode schizophrenia. *Biol Psychiatry* 2003;53(8):250S-250S.
- A196. *Niznikiewicz MA, *Onitsuka T, **Shenton ME**, *Frumin M, McCarley RW. N400 correlations with brain structures in schizophrenia. *Biol Psychiatry* 2003;53(8):144S-144S.
- A197. *Kubicki M, *Park HJ, Westin CF, Mulkern R, *Frumin M, *Connor E, Jolesz FA, McCarley RW, **Shenton ME**. White Matter Integrity in Schizophrenia- DTI and MTR Voxel-Wise Analysis. *Winter Workshop in Schizophrenia*, Davos, Switzerland, 2004.
- A198. *Kuroki N, *Kubicki M, Nestor PG, McCarley RW, *Park HJ, *Levitt JJ, *Woolston S, *Frumin M, *Niznikiewicz M, Westin CF, Maier SE, **Shenton ME**. Fornix integrity and hippocampal volume in schizophrenia. *Biol Psychiatry* 2004;55:72S-73S.
- A199. *Levitt JJ, *Ersner-Hershfield H, *Kubicki M, Westin CF, Kikinis R, Jolesz FA, McCarley RW, **Shenton ME**. An MR-DTI study of thalamo-cortical connections in schizophrenia. *Biol Psychiatry* 2004;55:126S-126S.
- A200. *Nakamura M, McCarley RW, Maier SE, *Dickey CC, *Kubicki M, Westin CF, *Kuroki N, *Niznikiewicz MA, Seidman LJ, Voglmaier MM, *Connor EE, *Kim SS, **Shenton ME**. Diffusion tensor imaging in schizotypal personality disorder. *Biol Psychiatry* 2004;55:237S-237S.
- A201. *Connor EE, *Ungar LP, *Kubicki M, Nestor PG, Jolesz FA, Kikinis R, McCarley RW, **Shenton ME**. Cingulum Bundle Integrity and Cognitive Inhibition in Schizophrenia. *Twelfth Annual Research Day, Harvard Medical School. Sponsored by the Mysell Committee, Department of Psychiatry, Boston 2004.*
- A202. *Kuroki N, *Kubicki M, Nestor PG, McCarley RW, *Park HJ, *Levitt JJ, *Woolston S, *Frumin M, *Niznikiewicz M, Westin CF, Maier SE, **Shenton ME**. Fornix and Hippocampus in Schizophrenia: A Diffusion Tensor Imaging and Structural MRI Study. *Twelfth Annual Research Day, Harvard Medical School. Sponsored by the Mysell Committee, Department of Psychiatry, Boston, 2004.*
- A203. *Ungar LP, *Connor EE, *Kubicki M, Nestor PG, *Niznikiewicz M, McCarley RW, **Shenton ME**. Stroop and Conflict Monitoring in Healthy Subjects: Evidence from DTI and fMRI. *Twelfth Annual Research Day, Harvard Medical School. Sponsored by the Mysell Committee, Department of Psychiatry, Boston, 2004.*
- A204. *Woolston S, *Levitt, JJ, *Kuroki N, *Frumin M, Kikinis R, Jolesz FA, McCarley RW, **Shenton ME**. An MRI study of the ventromedial striatum in schizophrenia. *Twelfth Annual Research Day, Harvard Medical School. Sponsored by the Mysell Committee, Department of Psychiatry, March 24, 2004.*
- A205. *Levitt JJ, *Ersner-Hershfield H, *Kubicki M, Westin CF, Kikinis R, Jolesz FA, McCarley RW, **Shenton ME**. An MR-DTI study of thalamo-cortical connections in schizophrenia. Paper accepted for presentation at the *Society of Biological Psychiatry Annual Meeting*, April 29-May 1, 2004, New York, New York.

- A206. *Spencer K, *Kubicki M, *Niznikiewicz MA, Nestor PG, *Frumin M, **Shenton ME**, McCarley RW. Neural synchrony in top-down attentional control: Functional and structural correlates. *Cognitive Neuroscience Society Abstracts*, 2004:S159.
- A207. *Spencer KM, Nestor PG, *Niznikiewicz MA, Valdman O, **Shenton ME**, McCarley RW. Hyperpriming of attention shifting in schizophrenia: experiment and simulation. *International Journal of Psychophysiology*, 2004;54:20.
- A208. *Allen CG, Nestor PG, McCarley RW, **Shenton ME**. Associative memory patterns differ in schizophrenia: A retrieval-induced forgetting paradigm. *The 112th Convention of the American Psychological Association*, July 28, 2004.
- A209. *Koo M, *Levitt JJ, McCarley RW, Seidman LJ, *Dickey CC, *Niznikiewicz MA, Voglmaier MM, *Zamani P, *Long KR, *Kim SS, **Shenton ME**. Caudate nucleus volume and its clinical and cognitive correlates in female neuroleptic - naive patients with schizotypal personality disorder. *The 34th Annual Meeting of the Society for Neuroscience*, San Diego, CA, October 27, 2004.
- A210. *Dickey CC, McCarley RW, Voglmaier M, *Rose K, *Niznikiewicz MA, *Demeo S, Seidman LJ, **Shenton ME**. Areas of the Paralimbic Belt in Schizotypal Personality Disorder: A Pilot MRI Study. *Biol Psychiatry* 2004;55:20S-20S.
- A211. *Kasai K, Gilbertson MW, **Shenton ME**, Yamasue H, Lasko NB, Orr SP, Pitman RK. Determining structural brain abnormalities predicting vulnerability to psychological trauma. *Biol Psychiatry* 2004;55:228S-228S.
- A212. McCarley RW, **Shenton ME**, *Kasai K, *Kuroki N. Progression of STG gray matter volume decrease in first-episode schizophrenia but not in first episode mania. *Biol Psychiatry* 2004;55:73S-73S.
- A213. *Salisbury, DF, *Kuroki N, *Kasai K, **Shenton ME**, McCarley RW. Mismatch negativity as an index of peri-onset cortical reduction in schizophrenia. *Biol Psychiatry* 2004;55:221S-222S.
- A214. *Spencer KM, Perlmuter R, Klump M, *Niznikiewicz MA, Nestor PG, *Frumin M, **Shenton ME**, McCarley RW. Gamma-band EEG synchrony and hallucinations in schizophrenia. *Biol Psychiatry* 2004;55:207S-207S.
- A215. *Koo M, *Levitt JJ, McCarley RW, Seidman LJ, *Dickey CC, *Niznikiewicz MA, Voglmaier MM, *Zamani P, *Long KR, *Kim SS, **Shenton ME**. Caudate nucleus volume and its clinical and cognitive correlates in female neuroleptic - naive patients with schizotypal personality disorder. Paper presented at the *Society for Neuroscience*, October 22-October 26, 2004, Washington, DC.
- A216. Levitt JJ, McCarley RW, *Ersner-Hershfield H, *Kubicki M, Westin CF, Kikinis R, Jolesz FA, **Shenton ME**. Fiber Disorder in Schizophrenia: A DTI study of thalamo-cortical connections. Paper presented at the *American College of Neuropsychopharmacology Meeting*, December 7-11, 2003, San Juan, Puerto Rico.
- A217. *Dickey CC, **Shenton ME**, Seidman LJ, *Connor E, Voglmaier M, *Niznikiewicz M, *Dreusicke M, McCarley RW. Simple auditory processing in schizotypal personality disorder. Poster presented at the *43rd Annual Meeting of the American College of Neuropsychopharmacology*, December, 2004, San Juan, Puerto Rico. *Neuropsychopharmacology* 2004;29:S79-S79.
- A218. *Kubicki M, *Park HJ, Westin CF, Mulkern R, Maier S, *Niznikiewicz M, *Connor E, *Levitt J, *Frumin M, Kikinis R, Jolesz FA, McCarley RW, **Shenton ME**. DTI and MTR abnormalities in schizophrenia: Analysis of white matter integrity. Poster presented at the *43rd Annual Meeting of the American College of Neuropsychopharmacology*, December, 2004, San Juan, Puerto Rico. *Neuropsychopharmacology* 2004;29:S167-S167.
- A219. *Spencer KM, Nestor PG, Perlmuter R, *Niznikiewicz MA, Klump MC, *Frumin M, **Shenton ME**, McCarley RW. Neural synchrony indexes disordered perception and cognition in schizophrenia. Poster presented at the 43rd

- A220. *Spencer KM, Nestor PG, Perlmutter R, *Niznikiewicz MA, Klump MC, *Frumin M, **Shenton ME**, McCarley RW. Gamma-band synchrony indexes disordered perception and cognition in schizophrenia. *Psychophysiology* 2004;41:S90-S90.
- A221. *Spencer KM, Nestor PG, *Niznikiewicz MA, Valdman O, **Shenton ME**, McCarley RW. Hyperpriming of attention shifting in schizophrenia: Experiment and simulation. *International J of Psychopharmacology* 2004;54:20-20.
- A222. McCarley RW, **Shenton ME**, *Onitsuka T, Nestor P, *Niznikiewicz MA, *Salisbury D. Fusiform gyrus volume reduction and altered face processing in schizophrenia. Poster presented at the 43rd Annual Meeting of the *American College of Neuropsychopharmacology*, December, 2004, San Juan, Puerto Rico. *Neuropsychopharmacology* 2004;29:S64-S64.
- A223. **Shenton ME**, Gerig G, *Kwon JS, *Park HJ, *Deutsch C, *Kubicki M, McCarley RW. Midline cavum septi pellucidi abnormalities, shape abnormalities, and diffusion tensor corpus callosum asymmetry abnormalities in schizophrenia. *International J of Neuropsychopharmacology* 2004;7:S59-S59.
- A224. *Koo M, *Dickey CC, **Shenton ME**, *Ji NY, *Bouix S, *Kuroki N, Voglmaier MM, Seidman LJ, *Nakamura M, McCarley RW. Smaller neocortical gray matter and larger CSF volumes in female neuroleptic-naive subjects with personality disorder. *10th International Congress on Schizophrenia Research Meeting*, Savannah, Georgia, 2005, *Schizophr Bull* 2005;3(2):396-396.
- A225. *Kubicki M, Nestor PG, *Connor E, *Ungar L, *Niznikiewicz M, Kikinis R, McCarley RW, **Shenton ME**. Evidence of executive attentional network abnormalities in schizophrenia. *10th International Congress on Schizophrenia Research Meeting*, Savannah, Georgia, 2005, *Schizophr Bull* 2005;3(2):396-396.
- A226. *Levitt JJ, *Connor EE, *Woolston SL, *Ungar LP, *Kuroki N, Kikinis R, Jolesz FA, McCarley RW, **Shenton ME**. The limbic striatum in schizophrenia: An MRI study. *10th International Congress on Schizophrenia Research Meeting*, Savannah, Georgia, 2005, *Schizophr Bull* 2005;3(2):397-397.
- A227. *Nakamura M, McCarley RW, *Kubicki M, *Dickey CC, *Niznikiewicz MA, Voglmaier MM, Seidman LJ, Maier SE, Westin CF, Kikinis R, **Shenton ME**. Fronto-temporal disconnectivity in schizotypal personality disorder: A diffusion tensor imaging study. *10th International Congress on Schizophrenia Research Meeting*, Savannah, Georgia, 2005, *Schizophr Bull* 2005;3(2):401-401.
- A228. *Dickey CC, *Kubicki M, Morocz I, **Shenton ME**, *Dreusicke M, *Connor E, Seidman LJ, Voglmaier M, *Niznikiewicz M, *Paynter V, McCarley RW. Early auditory sensory processing in schizotypal personality disorder: A fMRI study. *10th International Congress on Schizophrenia Research Meeting*, Savannah, Georgia, 2005, *Schizophr Bull* 2005;3(2):416-416.
- A229. McCarley RW, *Spencer KM, Nestor PG, Perlmutter R, *Niznikiewicz MA, Klump MC, *Frumin M, **Shenton ME**. Abnormal gamma band neural synchrony indexes disordered perception and cognition in schizophrenia. *10th International Congress on Schizophrenia Research Meeting*, Savannah, Georgia, 2005, *Schizophr Bull* 2005;3(2):459-459.
- A300. *Niznikiewicz MA, *Paynter V, *Lucia L, Nestor P, **Shenton M**, McCarley RW. Hyper-priming in first episode schizophrenia. *10th International Congress on Schizophrenia Research Meeting*, Savannah, Georgia, 2005, *Schizophr Bull* 2005;3(2):460-461.
- A301. *Salisbury DF, Collins KC, *Kuroki N, **Shenton ME**, McCarley RW. Auditory N1 and Heschl's gyrus in first hospitalized and chronic schizophrenia. *10th International Congress on Schizophrenia Research Meeting*, Savannah, Georgia, 2005, *Schizophr Bull* 2005;3(2):462-462.

- A302. *Allen CG, Nestor PG, *Niznikiewicz MA, Cunningham T, Adams J, **Shenton ME**, McCarley RW. Transdermal nicotine-effects on attention in schizophrenia. *10th International Congress on Schizophrenia Research Meeting*, Savannah, Georgia, 2005, *Schizophr Bull* 2005;3(2):509-509.
- A303. *Nakamura M, *Hirayasu H, *Salisbury DF, *Bouix S, Pohl KM, Yoshida T, *Koo MS, **Shenton ME**, McCarley RW. Smaller neocortical gray matter volume in both first episode schizophrenia and first episode affective psychosis, determined by a new segmentation algorithm. Poster presented at the 60th Annual Meeting of Biological Psychiatry, Atlanta, GA, *Biological Psychiatry* 2005:57:29S-29S.
- A304. McCarley RW, **Shenton ME**, *Kasai K, *Salisbury DF. Regionally specific progression of MRI gray matter volume loss after schizophrenia onset. Poster presented at the 60th Annual Meeting of Biological Psychiatry, Atlanta, GA, *Biological Psychiatry* 2005:57:72S-72S.
- A305. *Koo MS, *Dickey CC, **Shenton ME**, *Ji NY, *Bouix S, Voglmaier MM, *Levitt JJ, *Nakamura M, McCarley RW. Neocortical gray matter and CSF abnormalities in female neuroleptic-naive subjects with schizotypal personality disorder determined with new segmentation method. Poster presented at the 60th Annual Meeting of Biological Psychiatry, Atlanta, GA, *Biological Psychiatry* 2005:57:98S-98S.
- A306. *Kubicki M, Nestor PG, *Connor EE, *Ungar LP, *Niznikiewicz MA, McCarley RW, **Shenton ME**. Evidence of executive attentional network abnormalities in schizophrenia. Poster presented at the 60th Annual Meeting of Biological Psychiatry, Atlanta, GA, *Biological Psychiatry* 2005:57:116S-116S.
- A307. *Salisbury DF, Collins KC, *Kuroki N, **Shenton ME**, McCarley RW. Auditory N1 deficits in chronic and in first-hospitalized schizophrenia. Poster presented at the 60th Annual Meeting of Biological Psychiatry, Atlanta, GA, *Biological Psychiatry* 2005:57:196S-196S.
- A308. *Levitt JJ, *Rosow LK, *Connor EE, *Ungar LP, *Kuroki N, Kikinis R, Jolesz FA, McCarley RW, **Shenton ME**. The limbic striatum in schizophrenia: An MRI study. Poster presented at the 60th Annual Meeting of Biological Psychiatry, Atlanta, GA, *Biological Psychiatry* 2005:57:204S-204S.
- A309. **Shenton ME**, *Salisbury DF, *Kasai K, *Kubicki M, *Park HJ, McCarley RW. In vivo neuroimaging data in support of auditory processing abnormalities in schizophrenia. *Biological Psychiatry* 2005;57(8):18S-19S.
- A310. *Dreusicke M, *Dickey CC, Morocz I, *Niznikiewicz M, Voglmaier M, Seidman L, *Paynter V, **Shenton ME**, McCarley RW. fMRI Suggests Altered Emotional Language Processing in Schizotypal Personality Disorder (SPD). *Fourteenth Annual Research Day, Harvard Medical School. Sponsored by the Mysell Committee, Department of Psychiatry, April 5, 2006.*
- A311. *Markant D, *Levitt JJ, *Cohen A, *Bouix S, McCarley RW, **Shenton ME**. Optimized Voxel-Based Morphometric Analysis of Gray Matter in Chronic Schizophrenia. *Fourteenth Annual Research Day, Harvard Medical School. Sponsored by the Mysell Committee, Department of Psychiatry, April 5, 2006.*
- A312. *Bushell GB, *Kubicki M, *Bouix S, *Park HJ, *Dreusicke MH, Westin CF, Kikinis R, McCarley RW, **Shenton ME**. Diffusion Fiber Tractography Suggests Fronto-Temporal Disconnectivity in Schizophrenia. *Fourteenth Annual Research Day, Harvard Medical School. Sponsored by the Mysell Committee, Department of Psychiatry, April 5, 2006.*
- A313. Gerothanassis D, *Dickey CC, **Shenton ME**, *Niznikiewicz MA, Voglmaier M, *Cohen AS, *Bushell GL, *Dreusicke MH, Seidman LJ, McCarley RW. A Pilot Volumetric MRI Study of the Prefrontal Cortex in Individuals with Schizotypal Personality Disorder. *Fourteenth Annual Research Day, Harvard Medical School. Sponsored by the Mysell Committee, Department of Psychiatry, April 5, 2006.*
- A314. Wolfe D, Morocz I, McCarley RW, Seidman L, Thermenos H, *Dreusicke M, *Paynter V, Voglmaier M, *Niznikiewicz M, **Shenton ME**, *Dickey CC. Altered Cortical Activity During Visual Working Memory in

Schizotypal Personality Disorder: A Pilot fMRI Study. *Fourteenth Annual Research Day, Harvard Medical School. Sponsored by the Mysell Committee, Department of Psychiatry, April 5, 2006.*

- A315. *Hsu LY, *Dickey CC, **Shenton ME**, *Niznikiewicz MA, Voglmaier M, Seidman L, *Paynter V, McCarley RW. Superior Temporal Sulcus Volumes and Schizotypal Personality Disorder Deficits. *Fourteenth Annual Research Day, Harvard Medical School. Sponsored by the Mysell Committee, Department of Psychiatry, April 5, 2006.*
- A316. *Dickey CC, Morocz IA, *Dreusicke M, *Paynter V, Voglmaier M, *Niznikiewicz M, Seidman LJ, **Shenton ME**, McCarley RW. Lack of Cingulate activation by fMRI in subjects with schizotypal personality disorder during an emotional courting stroop task. *Biological Psychiatry* 2006;59(8s):28s-28s.
- A317. *Niznikiewicz M, *Spencer K, *Paynter V, Voglmaier M, *Dickey C, Seidman L, **Shenton M**, McCarley R. Abnormal pitch MMN in schizotypal personality disorder individuals. *Biological Psychiatry* 2006;59(8s):28s-28s.
- A318. Wolfe DJ, *Dickey CC, Seidman LJ, Morocz IA, Thermenos HW, *Dreusicke MH, *Paynter VR, Voglmaier MM, *Niznikiewicz MA, **Shenton ME**, McCarley RW. Altered cortical activity during visual working memory in schizotypal personality disorder: A pilot fMRI study. *Biological Psychiatry* 2006;59(8s):31s-31s.
- A319. Gerothanassis D, *Dickey CC, **Shenton ME**, *Niznikiewicz MA, Voglmaier MM, *Cohen AS, *Bushell GL, *Dreusicke MH, Seidman LJ, McCarley RW. A pilot volumetric MRI study of the prefrontal cortex in individuals with schizotypal personality disorder. *Biological Psychiatry* 2006;59(8s):35s.
- A320. *Salisbury DF, Adler M, Brown C, **Shenton ME**, McCarley RW. P300, cognition, and symptoms at first hospitalization and longitudinally in the first episode schizophrenia. *Biological Psychiatry* 2006;59(8s):54s-54s.
- A321. *Kubicki M, *Bushell GL, *Markant D, *Dreusicke M, *Park HJ, *Bouix S, Westin CF, Kikinis R, McCarley RW, **Shenton ME**. In-vivo diffusion fiber tractography suggests disruptions in connectivity between the frontal and temporal lobes in schizophrenia. *Biological Psychiatry* 2006;59(8s):57s-57s.
- A322. *Kubicki M, *Ungar L, Wible, CG, Nestor PG, *Connor EE, Westin CF, Kikinis R, **Shenton ME**, McCarley RW. Executive attentional network-functional activation and anatomical integrity in schizophrenia. *Biological Psychiatry* 2006;59(8s):83s-83s.
- A323. *Nakamura M, Nestor PG, **Shenton ME**, *Niznikiewicz MA, *Levitt JJ, *Kawashima T, *Cohen AS, McCarley RW. Orbitofrontal volume deficit and sulcal pattern alteration in schizophrenia and volumetric association with the Iowa gambling task. *Biological Psychiatry* 2006;59(8s):117s-117s.
- A324. *Levitt JJ, *Rosow LK, *Conner EE, *Ungar LP, *Kuroki N, Kikinis R, Jolesz FA, McCarley RW, **Shenton ME**. An MRI study of ventral and dorsal striatum in schizophrenia. *Biological Psychiatry* 2006;59(8s):160s-160s.
- A325. *Koo MS, *Kubicki M, McCarley RW, *Niznikiewicz M, *Kuroki N, *Lee KU, *Levitt JJ, Westin CF, *Bouix S, **Shenton ME**. Diffusion tensor imaging study of the fornix and hippocampus in neuroleptic-naive schizotypal personality disorder. *Biological Psychiatry* 2006;59(8s):163s-163s.
- A326. **Shenton ME**, *Kubicki M, *Bouix S, *Niethammer M, O'Donnell L, Westin CF, Fletcher T, Styner M, Whitaker R, Gerig G, Kikinis R. Diffusion tensor Analysis. Poster presented at the Road Map National Centers for Biomedical Computing (NCBC), All Hands Meeting, Lister Hill Center and Natcher Conference Center, National Institute of Health, Bethesda, MD, July 17, 2006.
- A327. *Kubicki M, *Park HJ, Nestor PG, *Bushell G, Westin CF, *Niethammer M, *Markant D, Kindlmann G, *Rosenberger G, Kikinis R, McCarley RW, **Shenton ME**. Disruptions in connectivity between frontal and temporal lobes in schizophrenia: A diffusion fiber tractography study. *45th Annual Meeting of the American College of Neuropsychopharmacology*, December 5, 2006, Hollywood, FL. *International J of Neuropsychopharmacology* 2006;9:S42-S42.

- A328. McCarley RW, *Spencer KM, **Shenton ME**, Nestor PG. Abnormalities of gamma EEG oscillations in schizophrenia. *Neuropsychopharmacology* 2006;31:S64-S64.
- A329. *Dickey CC, Morocz IA, *Khan U, *Niznikiewicz M, Voglmaier M, Seidman LJ, **Shenton ME**, McCarley RW. Pilot fMRI study of prosody in schizotypal personality disorder: Sarcasm is difficult to process. *Neuropsychopharmacology* 2006;31:S85-S85.
- A330. *Kubicki M, *Park JH, Nestor PG, *Bushell G, Westin CF, *Niethammer M, *Markant D, Kindlmann G, *Rosenberger G, Kikinis R, McCarley RW, **Shenton ME**. Disruptions in connectivity between frontal and temporal lobes in schizophrenia: A diffusion fiber tractography study. *Neuropsychopharmacology* 2006;31:S154-S154.
- A331. Romero JR, Ramirez DM, Aglio LS, **Shenton ME**, Pascual-Leone A, Titone D, Richardson M, Gugino LD. Benefit of stereotactic optic guidance for reproducibility of motor cortex functional maps using transcranial magnetic stimulation (TMS). *Neurology* 2006;66(5):A179-A179.
- A332. *Nakamura M, *Hirayasu Y, *Salisbury DF, *Bouix S, Pohl KM, Yoshida T, *Koo MS, **Shenton ME**, McCarley RW. Neocortical gray matter volume in first episode schizophrenia and first episode affective disorder: A cross-sectional and longitudinal study. *Schizophr Res* 2006;81:5S-5S.
- A333. *Kubicki M, Nestor P, *Connor E, *Ungar L, *Niznikiewicz M, McCarley RW, **Shenton ME**. Relationship between color stroop performance and cingulum bundle diffusion anisotropy in schizophrenia. *Schizophr Res* 2006;81:160S-161S.
- A334. *Jeong BS, *Kubicki M, Wible C, **Shenton M**, McCarley RW. Conjoint abnormalities of fMRI activation and of white matter connectivity of left inferior PFC in schizophrenia. Poster presented at the 15th Annual Research Day, Sponsored by the Mysell Committee, Department of Psychiatry, Harvard Medical School, April 25, 2007.
- A335. *Rosenberger G, *Kubicki M, Nestor P, *Connor E, *Bushell G, *Markant D, Westin CF, Kikinis R, McCarley RW, **Shenton ME**. Age-related decline in frontal-temporal lobe connections in schizophrenic patients: a diffusion tensor tractography study. Poster presented at the 15th Annual Research Day, Sponsored by the Mysell Committee, Department of Psychiatry, Harvard Medical School, April 25, 2007.
- A336. *Smith K, *Kubicki M, O'Donnell L, Westin CF, *Niznikiewicz M, McCarley RW, **Shenton ME**. Automatic cluster analysis of corpus callosum subdivisions in schizophrenia: A diffusion tensor imaging study. Poster presented at the 15th Annual Research Day, Sponsored by the Mysell Committee, Department of Psychiatry, Harvard Medical School, April 25, 2007.
- A337. *Fitzsimmons J, *Kubicki M, *Smith K, San Jose R, Westin CF, Kikinis R, McCarley R, **Shenton M**. Diffusion tractography of the fornix in male schizophrenic patients. Poster presented at the 15th Annual Research Day, Sponsored by the Mysell Committee, Department of Psychiatry, Harvard Medical School, April 25, 2007.
- A338. *Davidson CA, *Levitt JJ, *Kuroki N, *Niznikiewicz M, McCarley RW, **Shenton ME**. An MRI study of septi pellucidi in relation to hippocampus and fornix in schizophrenia. Poster presented at the 15th Annual Research Day, Sponsored by the Mysell Committee, Department of Psychiatry, Harvard Medical School, April 25, 2007.
- A339. *Alvarado JL, *Levitt JJ, *Khan U, *Markant D, *Niznikiewicz M, McCarley RW, **Shenton ME**. Abnormalities in the anterior limb of the internal capsule in schizophrenia using diffusion tensor imaging. Poster presented at the 15th Annual Research Day, Sponsored by the Mysell Committee, Department of Psychiatry, Harvard Medical School, April 25, 2007.
- A340. *Nakamura M, *Khan U, *Kubicki M, *Bouix S, *Quintus K, Kindlmann G, Westin CF, Kikinis R, *Niznikiewicz M, McCarley RW, **Shenton ME**. White matter abnormalities in whole brain and its regional specificity in chronic schizophrenia: a diffusion tensor imaging study. Poster presented at the 15th Annual

Research Day, Sponsored by the Mysell Committee, Department of Psychiatry, Harvard Medical School, April 25, 2007.

- A341. *Khan U, Morocz I, McCarley RW, **Shenton ME**, *Niznikiewicz M, *LaVallee S, Voglmaier M, *Dickey CC. Abnormal prosody processing in schizotypal personality disorder in fMRI experiments. Poster presented at the 15th Annual Research Day, Sponsored by the Mysell Committee, Department of Psychiatry, Harvard Medical School, April 25, 2007.
- A342. *Markant D, *Levitt JJ, *Cohen A, *Bouix S, *Niznikiewicz M, McCarley RW, **Shenton ME**. Inferior frontal gyrus volume reduction in chronic schizophrenia: An MRI study. Poster presented at the 15th Annual Research Day, Sponsored by the Mysell Committee, Department of Psychiatry, Harvard Medical School, April 25, 2007.
- A343. *LaVallee SE, Voglmaier MM, **Shenton ME**, *Dickey CC, Seidman LJ, McCarley RW, *Niznikiewicz MA. Category Formation in Schizotypal Adults: Event-Related Potential and Behavioral Correlates. Poster presented at the 15th Annual Research Day, Sponsored by the Mysell Committee, Department of Psychiatry, Harvard Medical School, April 25, 2007.
- A344. Minney DS, McCarley RW, **Shenton ME**, *Niznikiewicz M, Voglmaier M, Seidman LJ, *LaVallee S, *Khan UA, *Smith K, *Dickey CC. Neuroleptic-Naive Schizotypal Personality Disorder Subjects and Volumetric Measurements of the Superior Temporal Sulcus. Poster presented at the 15th Annual Research Day, Sponsored by the Mysell Committee, Department of Psychiatry, Harvard Medical School, April 25, 2007.
- A345. *Kubicki M, Styner M, *Markant D, *Dreusicke M, *Bouix S, Kikinis R, McCarley RW, **Shenton ME**. Interhemispheric connectivity and schizophrenia - Diffusion tensor imaging study. *International Congress of Schizophrenia Research 2007, Schizophr Bull* 2007;33(2):340-340.
- A346. *Levitt JJ, *Rosow LK, *Khan U, Kikinis R, Jolesz FA, McCarley RW, **Shenton ME**. The ventral and dorsal striatum in schizophrenia: An MRI study. *International Congress of Schizophrenia Research 2007, Schizophr Bull* 2007;33(2):342-342.
- A347. McCarley RW, *Nakamura M, Nestor PG, *Niznikiewicz MA, *Levitt JJ, *Kawashima T, *Hsu L, *Cohen A, **Shenton ME**. Region-specific orbitofrontal volume deficit in schizophrenia and orbitofrontal volumetric association with Iowa gambling task in healthy population. *International Congress of Schizophrenia Research 2007, Schizophr Bull* 2007;33(2):345-345.
- A348. *Nakamura M, Nestor PG, McCarley RW, *Niznikiewicz MA, *Levitt JJ, *Kawashima T, *Hsu L, *Cohen A, **Shenton ME**. Altered orbitofrontal sulco-gyral pattern in schizophrenia. *International Congress of Schizophrenia Research 2007, Schizophr Bull* 2007;33(2):348-349.
- A349. *Dickey CC, Morocz IA, *Khan U, **Shenton ME**, *Niznikiewicz M, Voglmaier M, McCarley RW. Abnormal prosody processing and production in schizotypal personality disorder: A pilot fMRI and behavioral study. *International Congress of Schizophrenia Research 2007, Schizophr Bull* 2007;33(2):366-366.
- A350. *Kubicki M, *Rosenberger G, Westin CF, Nestor P, **Shenton M**. Abnormalities in white matter fronto-temporal connections in chronic schizophrenia. *International Congress of Schizophrenia Research 2007, Schizophr Bull* 2007;33(2):374-375.
- A351. **Shenton ME**. Longitudinal diffusion tensor imaging (DTI) of white matter changes in schizophrenia. *Schizophr Bull* 2007;33(2):355-355.
- A352. *Fitzsimmons J, *Kubicki M, *Smith K, San Jose R, Westin CF, Kikinis R, McCarley R, **Shenton M**. Diffusion tractography of the fornix in male schizophrenia patients. Poster presented at the *Society for Biological Psychiatry 2007 Annual Meeting*, San Diego, CA. *Biol Psychiatry* 2007;61:75S-76S.

- A353. *Kubicki M, Styner M, *Markant D, *Bouix S, Kikinis R, McCarley RW, **Shenton ME**. Corpus callosum and schizophrenic-diffusion tensor imaging study. Poster presented at *the Society for Biological Psychiatry 2007 Annual Meeting*, San Diego, CA. *Biol Psychiatry* 2007;61:159S-159S.
- A354. *Rosenberger G, *Kubicki M, Westin CF, *Markant D, *Bushell GB, Kikinis R, McCarley RW, **Shenton ME**. Age-related decline in fronto-temporal connections in schizophrenic patients: A diffusion tensor Tractography study. Poster presented at *the Society for Biological Psychiatry 2007 Annual Meeting*, San Diego, CA. *Biol Psychiatry* 2007;61:160S.-160.
- A355. *Jeong B-S, *Kubicki M, Wible C, **Shenton M**, McCarley RW. Conjoint abnormalities of fMRI activation and of white matter connectivity of left inferior PFC in schizophrenia. Poster presented at *the Society for Biological Psychiatry 2007 Annual Meeting*, San Diego, CA. *Biol Psychiatry* 2007;61:243-243SS.
- A356. *Levitt JJ, *Markant DM, McCarley RW, *Kawashima T, *Nakamura M, *Bouix S, *Kubicki M, **Shenton ME**. Inferior frontal gyrus and thalamic volume reduction in schizophrenia: An MRI study. Poster presented at *the Society for Biological Psychiatry 2007 Annual Meeting*, San Diego, CA. *Biol Psychiatry* 2007;61:245S-245S.
- A357. Synder JS, *Niznikiewicz MA, Nestor PG, **Shenton ME**, McCarley RW. Auditory recurrent and lateral suppression in schizophrenia. Poster presented at *the Society for Biological Psychiatry 2007 Annual Meeting*, San Diego, CA. *Biol Psychiatry* 2007;61:250S-250S.
- A358. *Nakamura M, Nestor PG, McCarley RW, *Niznikiewicz MA, *Levitt JJ, Kawashima T, Hsu L, *Cohen A, **Shenton ME**. Altered Orbitofrontal Sulcogyral Pattern and Region-Specific Orbitofrontal Volume Deficit in Schizophrenia. Symposium Presentation at 12th Annual Meeting of Japanese Society of Cognitive Neuroscience, July 22, 2007, Fukuoka, Japan.
- A359. *Dickey C, Morocz I, **Shenton M**, *Niznikiewicz M, Voglmaier V, Seidman L, *Kahn U, Zack R, McCarley RW. Prosody in schizotypal personality disorder: A behavioral and imaging study. Poster presented at *the 46th Meeting of the American College of Neuropsychopharmacology*, Boca Raton, FL, December 2007.
- A360. *Levitt JJ, *Markant DB, McCarley RW, Nestor PG, *Kawashima T, *Nakamura M, *Bouix S, *Kubicki M, **Shenton ME**. An optimizing VBM and manual tracing study of inferior frontal gyrus in schizophrenia. Poster presented at *the 46th Meeting of the American College of Neuropsychopharmacology*, Boca Raton, FL, December 2007.
- A361. **Shenton ME**, *Tgo T, *Rosenberger G, Westin C, *Levitt JJ, McCarley RW, *Kubicki M. Study of thalamo-cortical white matter fiber tract projects in schizophrenia using diffusion stochastic tractography. Poster presented at *the 46th Meeting of the American College of Neuropsychopharmacology*, Boca Raton, FL, December 2007.
- A362. *Levitt J, Styner M, Niethammer M, *Bouix S, *Koo MS, Voglmaier M, *Dickey C, *Niznikiewicz M, McCarley RW, **Shenton ME**. Caudate nucleus shape abnormalities in schizotypal personality disorder. Poster presented at *the Society for Biological Psychiatry 2008 Annual Meeting*, Washington, DC., 2008;63:55S-55S.
- A363. *Levitt J, *Alvarado J, *Kubicki M, Nestor PG, McCarley RW, **Shenton ME**. Decreased anisotropy in the anterior limb of the internal capsule in schizophrenia: A diffusion tensor imaging. Poster presented at *the Society for Biological Psychiatry 2008 Annual Meeting*, Washington, DC., 2008;63:258S-258S.
- A364. *Khan U, *Kubicki M, Westin CF, Pieper S, McCarley RW, **Shenton ME**. Atlas-based segmentation of DTI in schizophrenia. Poster presented at *the Society for Biological Psychiatry 2008 Annual Meeting*, Washington, DC., 2008;63:257S-257S.
- A365. *Kawashima T, *Niznikiewicz M, *Nakamura M, *Davidson C, *Salisbury D, **Shenton ME**, McCarley RW. Progressive decrease of right prefrontal cortex gray matter volume in first-episode schizophrenia: A longitudinal magnetic resonance imaging study. Poster presented at *the Society for Biological Psychiatry 2008 Annual Meeting*, Washington, DC., 2008;63:275S-275S.

- A366. *Voineskos AN, O'Donnell LJ, Lobaugh NJ, *Niethammer M, *Markant D, Mulsant BH, Pollock BG, Kennedy JL, Westin CF, **Shenton ME**. Quantitative examination of a novel clustering method using magnetic resonance diffusion tensor tractography. Poster presented at *the Society for Biological Psychiatry 2008 Annual Meeting*, Washington, DC., 2008;63:279S-279S.
- A367. *Oh JS, **Shenton ME**, Westin CF, *Kubicki M. Decreased resting-state functional connectivity in schizophrenia. Poster presented at *the Society for Biological Psychiatry 2008 Annual Meeting*, Washington, DC., 2008;63:55S-55S.
- A368. *Dickey CC, *Niznikiewicz M, Voglmaier M, **Shenton M**, Seidman L, *Chakerian J, Zacks R, Murphy C, McCarley RW. Pars opercularis and verbal fluency in schizotypal personality disorder. Poster presented at *the Society for Biological Psychiatry 2008 Annual Meeting*, Washington, DC., 2008;63:141S-141S.
- A369. McCarley RW, *Nakamura M, **Shenton ME**, *Salisbury DF. Progression of MRI and electrophysiological abnormalities in first episode patients with schizophrenia & affective (Bipolar) psychosis. Poster presented at *the Society for Biological Psychiatry 2008 Annual Meeting*, Washington, DC., 2008;63:237S-238S.
- A370. Whitfield-Gabrieli S, Thermenos HW, Milanovic S, Tsuang MT, Faraone SV, McCarley RW, **Shenton ME**, Green AI, LaViolette P, Wojcik J, Gabrieli JDE, Seidman LF. Hyperactivity and hyperconnectivity of the default network in schizophrenia and in first degree relatives of persons with schizophrenia. Poster presented at *the Society for Biological Psychiatry 2008 Annual Meeting*, Washington, DC., 2008;63:272S-272S.
- A371. *Fitzsimmons J, *Smith K, *Kubicki M, San Jose R, Westin CF, Kikinis R, McCarley RW, *Salisbury D, **Shenton ME**. Fornix in first episode schizophrenia: A diffusion tractography study. Poster presented at the 16th *Harvard Psychiatry Annual Research Day*, Sponsored by the Mysell Committee, Department of Psychiatry, Harvard Medical School, April 30, 2008.
- A372. *Alvarado J, *Davidson CA, *Niethammer M, McCarley RW, *Kubicki MR, **Shenton ME**, *Levitt JJ. Sobel filter segmentation of the globus pallidus in schizophrenics. Poster presented at the 16th *Harvard Psychiatry Annual Research Day*, Sponsored by the Mysell Committee, Department of Psychiatry, Harvard Medical School, April 30, 2008.
- A373. *Khan U, *Kubicki M, Westin CF, Pieper P, McCarley RW, **Shenton ME**. Atlas based analysis of compromised white matter integrity in schizophrenia using diffusion tensor imaging. Poster presented at the 16th *Harvard Psychiatry Annual Research Day*, Sponsored by the Mysell Committee, Department of Psychiatry, Harvard Medical School, April 30, 2008.
- A374. *Torres L, *Niethammer M, *Alvarado JL, *Dickey CC, *Levitt JJ, *Hoogenboom WS, McCarley RW, **Shenton ME**. Hypothalamus volume and positive symptoms in schizophrenia spectrum disorders. Poster presented at the 16th *Harvard Psychiatry Annual Research Day*, Sponsored by the Mysell Committee, Department of Psychiatry, Harvard Medical School, April 30, 2008.
- A375. **Shenton ME**, *Kawashima T, *Fitzsimmons J, *Salisbury D, *Bouix S, Westin CF, McCarley RW, *Kubicki M. Advances in white matter imaging in schizophrenia. *The Journal of The European College of Neuropsychopharmacology*, 2008;18(Supplement 4):S176.
- A376. **Shenton ME**, *Kawashima T, *Nakamura M, *Bouix S, *Salisbury DF, Westin CF, McCarley RW, Kubicki M. Uncinate fasciculus and cingulum bundle findings in first episode schizophrenia and first episode bipolar disorder: A diffusion tensor imaging study. *European Psychiatry*, 2008;23:S43-S44 Suppl.2.
- A377. *Voineskos A, O'Donnell L, Lobaugh N, *Markant D, *Niethammer M, Mulsant B, Pollock B, Kennedy J, Westin C, **Shenton M**. Quantitative examination of a novel clustering method using magnetic resonance diffusion tensor tractography. *Clin Inv Med*, 2008;31(4):S24, 18682080.

- A378. *Voineskos A, Lobaugh N, *Bouix S, Kennedy J, Mulsant B, Pollack B, **Shenton M**. Changes in three major frontotemporal white matter tracts in healthy aging and schizophrenia across the adult lifespan: A diffusion tensor tractography study. Poster presented at the *47th Annual Meeting of the American College of Neuropsychopharmacology*, Scottsdale, Arizona, December 10, 2008.
- A379. *Whitford T, *Kubicki M, *King R, *Khan U, *Markant D, *Alvarado J, McCarley R, **Shenton M**. Corpus callosum abnormalities in patients with schizophrenia: A diffusion-tensor imaging study. Poster presented at the *47th Annual Meeting of the American College of Neuropsychopharmacology*, Scottsdale, Arizona, December 10, 2008.
- A380. *Nakamura M, *Salisbury DF, *Hirayasu Y, McCarley RW, **Shenton ME**. Disease Specific Alteration of Orbitofrontal Sulcogyral Pattern in First Episode Schizophrenia. Oral Presentation at *1st Schizophrenia International Research Society Conference*, June 23, 2008, Venice, Italy.
- A381. *Nakamura M, Nestor PG, McCarley RW, *Niznikiewicz MA, *Levitt JJ, *Kawashima T, Hsu L, *Cohen A, **Shenton ME**. Oral Presentation, Altered Orbitofrontal Sulcogyral Pattern and Region-Specific Orbitofrontal Volume Deficit in Schizophrenia. *3rd Annual Meeting of Japanese Society of Schizophrenia Research*, March 14 2008, Tokyo, Japan.
- A382. *Nakamura M, *Salisbury DF, *Hirayasu Y, *Bouix S, Pohl KM, Yoshida T, *Koo MS, **Shenton ME**, McCarley RW. Neocortical Gray Matter Volume in First Episode Schizophrenia and First Episode Affective Psychosis: A Cross-sectional and Longitudinal MRI Study. Oral Presentation at *3rd Annual Meeting of Japanese Society of Schizophrenia Research*, March 14, 2008, Tokyo, Japan.
- A383. *Nakamura M, *Hirayasu Y, **Shenton ME**, McCarley RW. Orbitofrontal Structural Alterations and Social Disturbance in Schizophrenia. Symposium Presentation at *13th Pacific Rim College of Psychiatrists Scientific Meeting (PRCP)*, November 2, 2008, Tokyo, Japan.
- A384. *Terry D, *Rausch AC, *Alvarado JL, Melonakos ED, *Markant D, Westin CF, Kikinis R, *Von Siebenthal J, **Shenton ME**, *Kubicki M. White matter properties of emotion related connections in schizophrenia. Poster presented at the *17th Harvard Psychiatry Annual Research Day*, Sponsored by the Mysell Committee, Department of Psychiatry, Harvard Medical School, April 8, 2009.
- A385. *Alvarado JL, *Terry DP, *Markant D, *Ngo T, Kikinis R, Westin CF, McCarley RW, **Shenton ME**, *Kubicki M. Study of language-related white matter fiber tract projections in schizophrenia using diffusion stochastic tractography. Poster presented at the *17th Harvard Psychiatry Annual Research Day*, Sponsored by the Mysell Committee, Department of Psychiatry, Harvard Medical School, April 8, 2009.
- A386. *Hoogenboom WS, Perlis RH, Smoller JW, Zeng-Treitier Q, Gainer VS, Murphy SN, Churchill SE, Kohane I, **Shenton ME**, *Iosifescu DV. Limbic structures in chronic depression: A study using pre-existing clinical and MRI data. Poster presented at the *17th Harvard Psychiatry Annual Research Day*, Sponsored by the Mysell Committee, Department of Psychiatry, Harvard Medical School, April 8, 2009.
- A387. *Romo-Nava F, *Hoogenboom WS, *Pelavin P, *Alvarado JL, *Bobrow L, Macmaster FT, Keshavan M, McCarley RW, **Shenton ME**. Pituitary volume in schizophrenia spectrum disorders. Poster presented at the *17th Harvard Psychiatry Annual Research Day*, Sponsored by the Mysell Committee, Department of Psychiatry, Harvard Medical School, April 8, 2009.
- A388. *Pelavin P, *Rausch AC, *Alvarado JL, McCarley RW, **Shenton ME**, Levitt JJ. Volumetric abnormalities in the dorsal and ventral striatum in chronic schizophrenia using MRI. Poster presented at the *17th Harvard Psychiatry Annual Research Day*, Sponsored by the Mysell Committee, Department of Psychiatry, Harvard Medical School, April 8, 2009.

- A389. *Bobrow LH, *Kubicki M, **Shenton ME**, McCarley RW, *Niznikiewicz MA. Differential fMRI activation in a priming paradigm using two different word relatedness types in schizophrenia. Poster presented at the 17th *Harvard Psychiatry Annual Research Day*, Sponsored by the Mysell Committee, Department of Psychiatry, Harvard Medical School, April 8, 2009.
- A390. *Srinivasan P, *Rathi Y, McCarley RW, **Shenton ME**, *Bouix S. Measuring neocortical gray matter volume in chronic schizophrenia; An automated MR study. Poster presented at the 17th *Harvard Psychiatry Annual Research Day*, Sponsored by the Mysell Committee, Department of Psychiatry, Harvard Medical School, April 8, 2009.
- A391. *Lucia D, *Schneiderman J, *Alvarado J, *Kubicki M, **Shenton ME**. Diffusion tensor imaging of the uncinate fasciculus in first-episode schizophrenia. Poster presented at the 17th *Harvard Psychiatry Annual Research Day*, Sponsored by the Mysell Committee, Department of Psychiatry, Harvard Medical School, April 8, 2009.
- A392. *Kikinis Z, Fallon J, *Niznikiewicz M, *Kubicki M, Nestor P, Wible C, *Davidson C, *Bobrow L, *Pelavin P, *Chiu M, Fischl B, McCarley RW, Kikinis R, **Shenton ME**. Changes in gray matter volumes in rostral middle frontal gyrus of schizophrenia subjects. Poster presentation at the *International Congress of Schizophrenia Research*, San Diego, March 28 to April 1, 2009.
- A393. *Dickey C, Panych L, **Shenton ME**, Morocz I, *Niznikiewicz M, *Voglmaier M, *Zacks R, Murphy C, *Terry D, McCarley RW. Prosody in schizophrenia spectrum disorders. Poster presentation at the *International Congress of Schizophrenia Research*, San Diego, March 28 to April 1, 2009.
- A394. *Whitford TJ, *Kubicki M, *King R, *Khan U, *Markant D, *Alvarado J, McCarley RW, **Shenton ME**. Abnormalities in tensor morphology in patients with schizophrenia: A DTI study of the corpus callosum. Poster presentation at the *International Congress of Schizophrenia Research*, San Diego, March 28 to April 1, 2009.
- A395. Malcolm JG, **Shenton ME**, *Rathi Y. *BMAP* 2009, oral poster presentation “Multi-fiber tractography using a recursive filter”. August, 2009 (<http://www.ibmisp-worldcongress.org>).
- A396. *Levitt JJ, *Lucia DM, *Bobrow LH, McCarley RW, **Shenton ME**. Anterior cingulate and paracingulate abnormalities in schizophrenia. Oral presentation, *Society for Neuroscience Meeting*, Chicago, IL, October 17-21, 2009.
- A397. *Romo-Nava F, Hoogenboom WS, *Pelavin PE, *Alvarado JL, *Bobrow LH, McCarley RW, Keshavan M, **Shenton ME**. Pituitary gland volume in schizophrenia spectrum disorders. Poster session, 1st place award, *XXI National Meeting of the Mexican Psychiatric Association*, Acapulco, Mexico, November 13-17th, 2009.
- A398. *Rathi Y, Malcolm JG, *Bouix S, Kindlmann G, Westin C-F, *Kubicki M, **Shenton ME**. Mixture model for estimating fiber ODF and multi-directional tractography. In: *International Society for Magnetic Resonance in Medicine Scientific Meeting*, 2009.
- A399. Atwood SB, *Schneiderman JS, **Lucia DM**, **Pelavin PE**, **Meshulam-Gately RI**, **Seidman LJ**, *Goldstein JM, McCarley RW, *Kubicki M, **Shenton ME**. The uncinate fasciculus in first-episode schizophrenia. Poster presented at the *18th Harvard Psychiatry Annual Research Day*, Sponsored by the Mysell Committee, Department of Psychiatry, Harvard Medical School, March 24, 2010.
- A400. *Ballinger T, *Kikinis Z, *Asami T, Finn CT, Kucherlapati R, *Kubicki M, **Shenton ME**. Axonal integrity of brain white matter tracts in 22q11del syndrome subjects: A diffusion tensor imaging study. Poster presented at the 18th *Harvard Psychiatry Annual Research Day*, Sponsored by the Mysell Committee, Department of Psychiatry, Harvard Medical School, March 24, 2010.

- A401. *Bobrow LH, *Kubicki M, *Markant D, *Bienfang DC, *Gitlin D, **Shenton ME**, Barsky AJ. Functional brain activity in patients with conversion disorder. Poster presented at the *18th Harvard Psychiatry Annual Research Day*, Sponsored by the Mysell Committee, Department of Psychiatry, Harvard Medical School, March 24, 2010.
- A402. *Bolden KA, *Schneiderman JS, *LaVenture A, *Vu MT, *Pelavin PE, *Terry DP, Mesholam-Gately RI, Seidman LJ, *Goldstein JM, McCarley RW, Lyons MJ, *Kubicki M, **Shenton ME**. White matter differences in the Inferior longitudinal fasciculus between first episode and chronic schizophrenia patients. Poster presented at the 18th Harvard Psychiatry Annual Research Day, Sponsored by the Mysell Committee, Department of Psychiatry, Harvard Medical School, March 24, 2010.
- A403. *Hawley KJ, *Schneiderman JS, *Whitford TJ, *Pelavin PE, *Rausch AC, Mesholam-Gately RI, Seidman LJ, *Goldstein JM, McCarley RW, *Kubicki M, **Shenton ME**. Diffusion tensor imaging of the corpus callosum in patients with first-episode and chronic schizophrenia. Poster presented at the *18th Harvard Psychiatry Annual Research Day*, Sponsored by the Mysell Committee, Department of Psychiatry, Harvard Medical School, March 24, 2010.
- A404. *Kikinis Z, *Asami T, *Ballinger T, Finn CT, Kucherlapati R, *Kubicki M, **Shenton ME**. DTI study of white matter integrity in 22q11del syndrome subjects. Poster presented at the *18th Harvard Psychiatry Annual Research Day*, Sponsored by the Mysell Committee, Department of Psychiatry, Harvard Medical School, March 24, 2010.
- A405. *LaVenture AB, *Lee SH, *Asami T, *Pelavin PE, Seidman L, *Goldstein J, McCarley RW, **Shenton ME**, *Kubicki M. Abnormalities in white matter integrity in first-episode schizophrenia using atlas-based segmentation. Poster presented at the *18th Harvard Psychiatry Annual Research Day*, Sponsored by the Mysell Committee, Department of Psychiatry, Harvard Medical School, March 24, 2010.
- A406. *Lee SH, *Asami T, *Kubicki M, *Pelavin P, Seidman L, *Goldstein J, Mesholam-Gately R, McCarley RW, **Shenton ME**. Correlation between executive function and white matter abnormalities in first-episode schizophrenia. Poster presented at the 18th Harvard Psychiatry Annual Research Day, Sponsored by the Mysell Committee, Department of Psychiatry, Harvard Medical School, March 24, 2010.
- A407. *Lucia D, *Bobrow L, *Kikinis Z, *Ballinger T, *Alvarado J, Finn C, Kucherlapati R, **Shenton ME**, *Kubicki M. Fractional anisotropy reductions of deep white matter in velocardiofacial (22q11del) syndrome subjects. Poster presented at the *18th Harvard Psychiatry Annual Research Day*, Sponsored by the Mysell Committee, Department of Psychiatry, Harvard Medical School, March 24, 2010.
- A408. *Ng HP, *Kubicki M, *Pelavin P, *Rathi Y, *Malcolm J, *Lucia D, *Niznikiewicz M, Kikinis R, McCarley RW, **Shenton ME**. Inter-hemispheric fiber tracts between bilateral superior temporal gyrus gray matter and its asymmetry measures in chronic schizophrenia. Poster presented at the *18th Harvard Psychiatry Annual Research Day*, Sponsored by the Mysell Committee, Department of Psychiatry, Harvard Medical School, March 24, 2010.
- A409. *Ohtani T, *Levitt JJ, Nestor P, *Niznikiewicz M, *Kawashima T, *Asami T, *LaVenture A, *Pelavin P, *Hawley K, *Ballinger T, *Alvarado J, *Terry D, **Shenton ME**, McCarley RW. Prefrontal cortex volume deficit in schizophrenia. Poster presented at the *18th Harvard Psychiatry Annual Research Day*, Sponsored by the Mysell Committee, Department of Psychiatry, Harvard Medical School, March 24, 2010.
- A410. *Pelavin PE, *Alvarado JL, Koerte I, *Saito Y, *Schneiderman J, *Niznikiewicz MA, McCarley RW, *Kubicki M, **Shenton ME**. Motor deficits originating in the extrapyramidal system in chronic schizophrenia: A diffusion tensor imaging study. Poster presented at the 18th Harvard Psychiatry Annual Research Day, Sponsored by the Mysell Committee, Department of Psychiatry, Harvard Medical School, March 24, 2010.
- A411. *Rausch AC, *Whitford TJ, *Savadjiev P, *Kubicki M, O'Donnell L, *Terry DP, *Bouix S, Westin C-F, *Schneiderman JS, *Bobrow L, *Niznikiewicz M, Nestor PG, Pantelis C, Wood S, *McCarley RW, **Shenton ME**. Fiber geometry and its relationship to fractional anisotropy in the genu of patients with schizophrenia. Poster presented at the 18th Harvard Psychiatry Annual Research Day, Sponsored by the Mysell Committee, Department of Psychiatry, Harvard Medical School, March 24, 2010.

- A412. *Schneiderman JS, *Whitford TJ, *Pelavin PE, *Terry DP, *Swisher T, Mesholam-Gately RI, Seidman LJ, *Goldstein JM, McCarley RW, *Kubicki M, **Shenton ME**. The cingulum bundle in first episode schizophrenia. Poster presented at the 18th Harvard Psychiatry Annual Research Day, Sponsored by the Mysell Committee, Department of Psychiatry, Harvard Medical School, March 24, 2010.
- A413. *Terry DP, *Rausch AC, *Whitford TJ, Nestor PG, O'Donnell L, *Bobrow LH, Westin CF, Kikinis R, McCarley RW, **Shenton ME**, *Kubicki M. Neuropsychology measures predict integrity of functional white matter networks in chronic schizophrenia. Poster presented at the 18th Harvard Psychiatry Annual research Day, Sponsored by the Mysell Committee, Department of Psychiatry, Harvard Medical School, March 24, 2010.
- A414. *Vu MT, *Zacks RB, Henry AM, McCarley RW, Panych LP, Voglmaier M, *Niznikiewicz MA, *Terry DP, **Shenton ME**, Dickey CC. Pars opercularis volumes, verbal fluency, and prosody deficits in schizotypal personality disorder: A common origin?. Poster presented at the 18th Harvard Psychiatry Annual Research Day, Sponsored by the Mysell Committee, Department of Psychiatry, Harvard Medical School, March 24, 2010.
- A415. *Whitford TJ, *Kubicki M, *Schneiderman JS, Hawley KJ, *Niznikiewicz M, McCarley RW, **Shenton ME**, *Spencer KM. Inter-Hemispheric Transfer Time and White Matter Integrity in Schizophrenia: a combined ERP and DTI study. Poster presented at the 18th Harvard Psychiatry Annual Research Day, Sponsored by the Mysell Committee, Department of Psychiatry, Harvard Medical School, March 24, 2010.
- A416. *Ng HP, *Kubicki, *Rathi Y, Malcolm J, *Pelavin P, Kikinis R, **Shenton ME**. Decreased fractional anisotropy in inter-hemispheric connection between bilateral superior temporal gyrus gray matter in chronic schizophrenia, Poster Presented at the *Schizophrenia International Research Society Conference*, Florence, Italy, 2010.
- A417. *Ng HP, *Kubicki M, *Rathi Y, *Pelavin P, Malcolm J. *Niznikiewicz M, McCarley RW, Kikinis R, **Shenton ME**. Abnormalities in inter-hemispheric white matter connection between the auditory cortex and its clinical correlates in chronic schizophrenia. *Decade of the Mind VI*, Singapore, October, 2010.
- A418. *Ng HP, *Kubicki M, Malcolm J, *Rathi Y, *Pelavin P, McCarley RW, **Shenton ME**. Diffusion two-tensor tractography study on inter-hemispheric connection between bilateral Heschl gyrus in schizophrenia”, *18th Annual Meeting of International Society for Magnetic Resonance in Medicine*, Stockholm, Sweden, May, 2010.
- A419. *Ng HP, *Kubicki M, *Terry D, *Pelavin A, *Rausch A, **Shenton ME**. Connection between bilateral superior temporal gyrus in schizophrenia: a preliminary diffusion tensor imaging study”, *18th Annual Meeting of International Society for Magnetic Resonance in Medicine*, Stockholm, Sweden, May, 2010.
- A420. *Ng HP, *Kubicki M, *Pelavin P, Rathi Y, Malcolm J, Lucia D, *Niznikiewicz M, Kikinis R, McCarley RW, **Shenton ME**. Inter-hemispheric fiber tracts between bilateral superior temporal gyrus gray matter and its asymmetry measures in chronic schizophrenia, *18th Harvard Psychiatry Annual Research Day*, Massachusetts, USA, March, 2010.
- A421. *Schneiderman JS, *Whitford TJ, *Pelavin PE, *Terry DP, *Swisher T, Mesholam-Gately RI, Seidman LJ, *Goldstein JM, McCarley RW, *Kubicki M, **Shenton ME**. Diffusion tensor imaging of the cingulum bundle in first episode schizophrenia. Poster presented at the *Schizophrenia International Research Society*, Venice, Italy, April 10-14, 2010. [*Schizophr Res*, 2010;117(2-3):461.]
- A422. *Schneiderman JS, *Whitford TJ, *Pelavin PE, *Lucia DM, Atwood SB, Mesholam-Gately RI, Seidman LJ, *Goldstein JM, McCarley RW, *Kubicki M, **Shenton ME**. Diffusion tensor imaging of the uncinate fasciculus in first episode schizophrenia. Poster presented at the *65th Annual Meeting of the Society of Biological Psychiatry*, New Orleans, LA, May 20-22, 2010. [*Biol Psychiatry*, 2010;67(9S):275.]
- A423. *Whitford TJ, *Kubicki M, *Schneiderman JS, McCarley RW, **Shenton ME**, *Spencer KM. Inter-hemispheric transfer time and white matter integrity in schizophrenia: A combined ERP and DTI study. Poster presented at the

65th Annual Meeting of the Society of Biological Psychiatry, New Orleans, LA, May 20-22, 2010. [*Biol Psychiatry*, 2010;67(9S):279.]

- A424. *Iosifescu D, *Hoogenboom WS, Perlis RH, Smoller JW, Zeng-Treitler Q, Gainer VS, Murphy SN, Churchill SE, Kohane E, **Shenton ME**. Limbic system white matter microstructure and treatment outcomes in major depressive: A large scale DTI stud using legacy data. Poster presented at the *ACNP 49th Annual Meeting*, December 6, 2010, Miami, FL, p. 139-140 (*Neuropsychopharmacology* 2010;35:139-140S).
- A425. *Niznikiewicz M, Pinheiro A, Del Re E, Taosheng L, Nestor P, Thompson E, **Shenton M**, McCarley R. Abnormalities in social cognition related to gaze processing abnormalities in schizophrenia for conditions with higher processing demands. Poster presented at the *ACNP 49th Annual Meeting*, December 6, 2010, Miami, FL, p. 231. (*Neuropsychopharmacology* 2010;35:231S).
- A426. Thermenos H, Gabrieli S, Juelich R, Jabbar G, Salwen K, **Shenton M**, *Kubicki M, Kuperberg G, Gabrieli J, Seidman L, Keshavan M, DeLisi L. Altered language network activity in first-degree relatives of persons with schizophrenia. Poster presented at the *ACNP 49th Annual Meeting*, December 6, 2010, Miami, FL, p. 245. (*Neuropsychopharmacology* 2010;35:245S).
- A427. *Schneiderman J, *Whitford T, *Pelavin P, *Lucia D, Atwood S, Meshulam-Gately R, Seidman L, *Goldstein J, McCarley R, *Kubicki M, **Shenton M**. Poster presented at the *ACNP 49th Annual Meeting*, December 7, 2010, Miami, FL, p. 283. (*Neuropsychopharmacology* 2010;35:283S).
- A428. *Savadjiev P, *Kubicki M, *Bouix S, Kindlmann GL, **Shenton ME**, Westin C-F. Tract-based parameterization of local white matter geometry. In: *International Society for Magnetic Resonance in Medicine Conference* (Stockholm, Sweden), May, 2010.
- A429. *Savadjiev P, Westin C-F, *Rausch AC, Maddah M, *Bouix S, **Shenton ME**, *Kubicki M. Tract-oriented parameterization of left uncinate geometry abnormalities in schizophrenia. In: *Human Brain Mapping* (Barcelona, Spain), June, 2010.
- A430. *Rathi Y, Malcolm JG, *Bouix S, Westin C-F, **Shenton ME**. False positive detection using filtered tractography. In: *International Society for Magnetic Resonance in Medicine Scientific Meeting*, 2010.
- A431. *Koerte I, *Pelavin P, Kirmess B, Berweck S, Reiser M, *Kubicki M, **Shenton M**, Heinen F, Ertl-Wagner B. Anisotropy of callosal motor fibers predicts impairment in children with periventricular leukomalacia. *ASNR* May, 2010, Boston, MA (Oral Presentation).
- A432. *Koerte I, Kaufmann D, *Pelavin P, *Eckbo R, *Rathi Y, Reiser M, *Kubicki M, Heinen F, **Shenton M**, Ertl-Wagner B. Differentiation of transcallosal motor fibers of the upper and lower extremities in professional soccer players as demonstrated by a two-tensor algorithm. *RSNA*, December, 2011, Chicago, IL (Oral Presentation).
- A433. *Kikinis Z, *Asami T, *Ballinger T, *Bouix S, Finn CT, Tworog-Dube E, Jucherlapati R, Kikinis R. *Kubicki M, **Shenton ME**. White matter in 22q11 deletion syndrome subject: A tract-based spatial-statistics study. Poster presentation at the *International Imaging Genetics Conference*, Irvine, CA, January 17-18, 2011.
- A434. *Hsu PC, *Rathi, Y, *Eckbo R, Nestor P, *Niznikiewicz M, Thompson E, *Kubicki M, **Shenton ME**. Two-Tensor Diffusion Tensor Imaging of Acoustic Radiations in Schizophrenia. *Nineteenth Annual Research Day, Harvard Medical School. Sponsored by the Mysell Committee, Consolidated Department of Psychiatry*, Boston, MA, March 30, 2011.
- A435. *King R, *Asami T, *Pelavin P, *Ballinger T, *Hawley K, R, **Shenton ME**, *Kubicki M. Structural Abnormalities of the Extreme Capsule in Schizophrenia. *Nineteenth Annual Research Day, Harvard Medical School. Sponsored by the Mysell Committee, Consolidated Department of Psychiatry*, Boston, MA, March 30, 2011.

- A436. *Hamoda H, *Schneiderman J, Makris N, Seidman L, *Hawley K, *Ballinger T, McCarley R, *Goldstein J, **Shenton ME**. Abnormalities of Cerebellar-Thalamic Connections in Patients with First-Episode and Chronic Schizophrenia: A DTI Study. *Nineteenth Annual Research Day, Harvard Medical School. Sponsored by the Mysell Committee, Consolidated Department of Psychiatry, Boston, MA, March 30,2011.*
- A437. *Hawley KJ, *Pelavin PE, Jabbar GA, Thermenos HW, Seidman LJ, Keshavan M, Delisi LE, **Shenton ME**, *Kubicki M. Diffusion Tensor Imaging of White Matter Tracts in Subjects at High Genetic Risk for the Development of Schizophrenia. *Nineteenth Annual Research Day, Harvard Medical School. Sponsored by the Mysell Committee, Consolidated Department of Psychiatry, Boston, MA, March 30,2011.*
- A438. *Pelavin PE, *Ballinger TW, Zafonte R, **Shenton ME**, *Bouix S. Construction of a Normative White Matter Atlas as a Diagnostic Tool for Diffuse Axonal Injury in TBI. *Nineteenth Annual Research Day, Harvard Medical School. Sponsored by the Mysell Committee, Consolidated Department of Psychiatry, Boston, MA, March 30,2011.*
- A439. *Swisher TM, *Kikinis Z, *Saito Y., *Hawley K.J, *Ballinger T.W, O'Donnell L, Finn CT, Tworog-Dube E, Kucherlapati R, Kikinis R, *Kubicki M, **Shenton ME**. Abnormalities of the Corpus Callosum in Patients with 22q11 Deletion Syndrome: A Study Using Whole-brain Tractography and Automated Fiber Clustering. *Nineteenth Annual Research Day, Harvard Medical School. Sponsored by the Mysell Committee, Consolidated Department of Psychiatry, Boston, MA, March 30,2011.*
- A440. *Ballinger T, *Whitford TJ, *Bobrow L, *Vu M, Malcolm J, *Kubicki M, **Shenton ME**. Neural Effects of Spatial and Temporal Control/Non-control in a Navigation Task. *Nineteenth Annual Research Day, Harvard Medical School. Sponsored by the Mysell Committee, Consolidated Department of Psychiatry, Boston, MA, March 30,2011.*
- A441. *Vu MT, Wolfe DJ, McCarley RW, *Niznikiewicz MA, *Voglmaier MM, **Shenton ME**, *Dickey CC. Default Mode Network Abnormalities in Schizotypal Personality Disorder. *Nineteenth Annual Research Day, Harvard Medical School. Sponsored by the Mysell Committee, Consolidated Department of Psychiatry, Boston, MA, March 30,2011.*
- A442. Thermenos HW, Seidman LJ, Whitfield-Gabrieli S, Juelich R, Jabbar G, Salwen KK, **Shenton ME**, *Kubicki M, Kuperberg G, Gabrieli JD, Keshavan M, DeLisi L. Altered Language Network Activity and Verbal Memory Deficits in Young Adult First-Degree Relatives of Persons with Schizophrenia. Poster presented at the 13th Annual Meeting of the *International Congress on Schizophrenia Research*, Colorado Springs, CO, USA, April 2-6, 2011. [*Schizophr Bull*, 2011;37(suppl 1):153.]
- A443. *Schneiderman J, *Whitford T, *Pelavin P, *Terry D, *Swisher T, Meshulam-Gately R, Seidman LJ, *Goldstein J, McCarley R, *Kubicki M, **Shenton ME**. Cingulum Bundle Diffusion and Delusions of Reference in First Episode Schizophrenia. Poster presented at the 13th Annual Meeting of the *International Congress on Schizophrenia Research*, Colorado Springs, CO, USA, April 2-6, 2011. [*Schizophr Bulletin*, 2011;37(suppl 1):17.]
- A444. **Shenton ME**, *Schneiderman J, *Pelavin P, *Kubicki M. "Changes in White Matter in the Early Stages of Schizophrenia." Talk given as part of a symposium presentation on "Vulnerability to Progression in Schizophrenia," presented at the 13th Annual Meeting of the *International Congress on Schizophrenia Research*, Colorado Springs, CO, USA, April 2-6, 2011. [*Schizophr Bulletin*, 2011;37(suppl 1):176.]
- A445. *Voineskos A, Felsky D, Tiwari A, Lobaugh N, Mulsant B, **Shenton ME**, Kovacevic N, McIntosh AR, Kennedy JL. Genetic Mechanisms of Disrupted White Matter Connectivity in Schizophrenia. Poster presented at the 13th Annual Meeting of the *International Congress on Schizophrenia Research*, Colorado Springs, CO, USA, April 2-6, 2011. [*Schizophr Bulletin*, 2011;37(suppl 1):181.]
- A446. Dickey C, Panych L, *Zacks R, Voglmaier M, *Niznikiewicz M, Vu M, **Shenton ME**, McCarley R. Odd Speech of Schizotypal Personality Disorder Quantified on Single Word Level. Oral presentation at the 13th Annual

Meeting of the *International Congress on Schizophrenia Research*, Colorado Springs, CO, USA, April 2-6, 2011. [*Schizophr Bulletin*, 2011;37(suppl 1):204.]

- A447. *Bouix S, *Pelavin P, *Pasternak, *Schneiderman J, *Kubicki M, Zafonte RD, **Shenton ME**. Diagnosis of Diffuse Axonal Injury with Diffusion Tensor Imaging, *3rd Federal Interagency Conference on TBI*, Washington DC, 2011.
- A448. *Pasternak O, *Kubicki O, *Pelavin P, Zafonte RD, **Shenton ME**, and *Bouix S. Identification of Neuroinflammation in Mild Traumatic Brain Injuries using a Free-Water Atlas. *Annual Meeting of the Organization for the Human Brain Mapping*, 2011.
- A449. *Pasternak O, Westin C-F, *Bouix S, **Shenton ME**, *Kubicki M. Free Water Modulation of White Matter Integrity Measures - with Application to Schizophrenia. *International Society For Magnetic Resonance in Medicine Scientific Meeting*, 2011.
- A450. *Pasternak O, *Bouix S, *Kubicki M, *Pelavin P, *Schneiderman J, Zafonte RD, **Shenton ME**. Diffusion Imaging Reveals Two Spatially Separable Mechanisms In Mild TBI. *3rd Federal Interagency Conference on TBI*, Washington, DC, 2011.
- A451. *Wassermann D, *Savadjiev P, *Rathi Y, *Bouix S, *Kubicki M, Kikinis R, **Shenton ME**, Westin C-F. Cluster-Based Statistics Along White Matter Tracts. *International Society For Magnetic Resonance in Medicine Scientific Meeting*, 2011.
- A452. *Quan M, *Asami T, *Bouix S, *Kubicki M, *Whitford T, Mesholam-Gately R, *Goldstein J, Seidman L, **Shenton M**, McCarley R. Smaller superior temporal gyrus MRI volume in first episode schizophrenia and its symptom correlations. Society for Neuroscience (SfN), Washington DC, USA, (Poster), November 12-16, 2011.
- A453. *Quan M, *Lee S-H, *Otsuka T, *Kikinis Z, *Kubicki M, *Rathi Y, Mesholam-Gately R, *Goldstein J, Seidman L, McCarley R, *Levitt J, **Shenton M**. Abnormalities of White Matter Tracts between Rostral Middle Frontal Gyrus / Inferior Frontal Gyrus and Striatum in First-Episode Schizophrenia. 66th Annual Meeting, Society of Biological Psychiatry (SOBP), San Francisco, USA, (Poster), May 12-14, 2011.
- A454. **Shenton ME**, *Pasternak O, *Bouix S, *Pelavin P, *Kubicki M, Zafonte R. Identification of Neuroinflammation in Mild Traumatic Brain Injury Using a Free Water Atlas, *9th World Congress on Brain Injury (IBIA)*, Edinburgh, Scotland, March 22, 2012.
- A455. *Kikinis Z, *Vu M, Makris N, *Bouix S, *Kubicki M, **Shenton ME**. Reduced Myelination of Anterior Commissure in Schizophrenia Subjects: a Diffusion Tensor Imaging Study. Poster presented at the *20th Harvard Psychiatry Annual Research Day*, Sponsored by the Mysell Committee, Department of Psychiatry, Harvard Medical School, March 28, 2012.
- A456. *King R, *Hamoda H, Makris N, Mesholam-Gately R, McCarley R, Seidman L, **Shenton M**. Cerebellar-Thalamic White Matter Abnormalities in Prodromal Patients. Poster presented at the *20th Harvard Psychiatry Annual Research Day*, Sponsored by the Mysell Committee, Department of Psychiatry, Harvard Medical School, March 28, 2012.
- A457. *McCaffrey D, *Ballinger T, Guttmann C, Assaf Y, **Shenton M**, *Kubicki M, *Pasternak O. Inflammation and Degeneration Dynamics in Multiple Sclerosis. Poster presented at the *20th Harvard Psychiatry Annual Research Day*, Sponsored by the Mysell Committee, Department of Psychiatry, Harvard Medical School, March 28, 2012.
- A458. *Smith KA, Seidman L, Makris N, Faraone SV, Tsuang MT, **Shenton ME**, *Levitt J. Striatum Volume in Adolescents-at-Familial-Risk for Schizophrenia. Poster presented at the *20th Harvard Psychiatry Annual Research Day*, Sponsored by the Mysell Committee, Department of Psychiatry, Harvard Medical School, March 28, 2012.

- A459. *Swisher TM, Michalowski AZ, *Kubicki M, **Shenton ME**, Waldinger RJ. White Matter Integrity of the Cingulum Bundle in Healthy Aging. Poster presented at the 20th *Harvard Psychiatry Annual Research Day*, Sponsored by the Mysell Committee, Department of Psychiatry, Harvard Medical School, March 28, 2012.
- A460. *Vu MT, *Kikinis Z, Peled S, Kulkarni P, Ferris C, Makris N, *Bouix S, Makinodan M, Kikinis R, *Kubicki M, Corfas G, **Shenton ME**. Changes in Myelination of the Anterior Commissure in Mice with Loss of ErbB Receptor Signaling in Oligodendrocytes. Poster presented at the 20th *Harvard Psychiatry Annual Research Day*, Sponsored by the Mysell Committee, Department of Psychiatry, Harvard Medical School, March 28, 2012.
- A461. Francis AN, Seidman LJ, Jabber GA, Thermenos HW, Juelich R, Proal A, **Shenton M**, Kubicki M, Keshavan M, DeLisi LE. Neuroanatomical alterations in regions mediating language in young adults at high risk for inheritance of schizophrenia (FHR). Poster presented at *Schizophrenia International Research Society (SIRS) – Biennial Meeting*, Florence. Italy, April, 2012.
- A462. *Vu MT, *Kikinis Z, Peled S, Kulkarni P, Ferris C, *Bouix S, Makinodan M, *Kubicki M, Corfas G, **Shenton ME**. Changes in Myelination of Anterior Commissure in Mice with Loss of ErbB Receptor Signaling in Oligodendrocytes. Poster to be presented at the *Society of Biological Psychiatry Annual Meeting*, Philadelphia, PA, 2012.
- A463. *Vu MT, *Kikinis Z, Peled S, Kulkarni P, Ferris C, Makris N, *Bouix S, Makinodan M, Kikinis R, *Kubicki M, Corfas G, **Shenton ME**. Changes in Myelination of Anterior Commissure in Mice with Loss of ErbB Receptor Signaling in Oligodendrocytes. Poster to be presented at the 20th *Harvard Psychiatry Annual research Day*, Sponsored by the Mysell Committee, Department of Psychiatry, Harvard Medical School, March 28, 2012.
- A464. *Quan M, Tang Y, *Kubicki M, *Eckbo R, Zhang F, Gao Y, McCarley R, *Levitt J, Wang J, **Shenton ME**. VLPFC-Striatum Pathway in First-Episode Schizophrenia: A Cross-Sectional and Longitudinal DTI Study. 18th Annual Meeting, Organization for Human Brain Mapping (OHBM), Beijing, China, (Poster), June 10-14, 2012.
- A465. *Quan M, *Kubicki M, *Eckbo R, *Kikinis Z, McCarley RW, *Levitt JJ, **Shenton ME**. Changes in DLPFC-Striatum Connections in First Episode Schizophrenia: A Cross-Sectional and Longitudinal DTI Study. 3rd Biennial Schizophrenia International Research Society (SIRS), Florence, Italy, (Poster), April 14-18, 2012.
- A466. *Quan M, *Kubicki M, *Eckbo R, *Kikinis Z, McCarley RW, *Levitt JJ, **Shenton ME**. Changes in DLPFC-Striatum Connections in First Episode Schizophrenia: A Cross-Sectional and Longitudinal DTI Study. 3rd *Biennial Schizophrenia International Research Society (SIRS)*, Florence, Italy, (Poster), April 14-18, 2012.
- A467. *Quan M, *Tang Y, *Kubicki M, *Eckbo R, Zhang F, Gao Y, McCarley RW, *Levitt JJ, Wang J, **Shenton M**. VLPFC-Striatum Pathway in First-Episode Schizophrenia: A Cross-Sectional and Longitudinal DTI Study. 18th Annual Meeting, *Organization for Human Brain Mapping (OHBM)*, Beijing, China, (Poster), June 10-14, 2012.
- A468. *Hamoda H, *Schneiderman J, Makris N, Seidman L, *Hawley K, *Ballinger T, McCarley R, **Shenton M**. A DTI study of cerebellar-thalamic connections in patients with first episode and chronic schizophrenia. Poster presentation at the 59th meeting of the *American Academy of Child & Adolescent Psychiatry*, San Francisco, CA, (Poster) October 25, 2012.
- A469. *Pasternak O, *Rathi Y, **Shenton M**, Westin C-F. Estimation of the angle between crossing fibers as a novel structural quantity. Proceedings of the 20th International Society for Magnetic Resonance in Medicine meeting (ISMRM), Melbourne, Australia, 2012.
- A470. Woodberry KA, Serur RA, Hallinan SB, Meshulam-Gately RI, Wojcik JD, Cousins A, Gnong-Granato AG, Friedman-Yakoobian M, Rodenhiser-Hill J, Hornbach S, Francis G, Min G, Tucker L, Keshavan M, *Goldstein J, **Shenton M**, McCarley RW, Seidman LJ. *Childhood onset of symptoms as reported in first episode schizophrenia and clinical high risk youth*. Poster presented at the Eighth International Conference on Early Psychosis, San Francisco, CA, 2012.

- A471. *Rathi Y, Michailovich O, *Bouix S, **Shenton ME**, Westin C-F. Predicting T1 information from diffusion data. Proceedings of the 20th International Society for Magnetic Resonance in Medicine Scientific Meeting (ISMRM), Melbourne, Australia, 2012.
- A472. Kaufmann D, *Koerte IK, Muehlmann M, Hartl E, Reiser M, Makris N, *Rathi Y, **Shenton ME**, Ertl-Wagner B. White matter integrity of motor tracts in professional musicians and soccer players. Poster session. *European Society of Radiology (ESR)*, Vienna, Austria, 2013.
- A473. *Pasternak O, *Bouix S, *Rathi Y, Branch C, Westin C-F, **Shenton M**, Lipton M. Identification of mild traumatic brain injuries by comparison of free-water corrected z-distributions. *Proceeding of the 21st International Society for Magnetic Resonance in Medicine Meeting (ISMRM)*, Salt Lake City, UT (accepted; 2013).
- A474. *Dahlben BA, *Rathi Y, Riklin-Raviv T, *Eckbo R, Simpson JC, McCarley RW, **Shenton ME**, *Levitt JJ. Aberrant wiring in fronto-striatal pathways in chronic schizophrenia. Poster presented at the 21st *Harvard Psychiatry Annual Research Day*, Sponsored by the Mysell Committee, Department of Psychiatry, Harvard Medical School, April 10, 2013.
- A475. *Fitzsimmons J, *Hamoda H, *Swisher T, *Terry D, *Rosenberger G, Seidman LJ, *Goldstein J, Mesholam-Gately R, Petryshen T, Wojcik J, Kikinis R, McCarley RW, **Shenton ME**, *Kubicki M. Diffusion tensor imaging study of the fornix in first episode schizophrenia and in healthy controls. Poster presented at the 21st *Harvard Psychiatry Annual Research Day*, Sponsored by the Mysell Committee, Department of Psychiatry, Harvard Medical School, April 10, 2013.
- A476. *Giwerc M, *Green K, *Kikinis Z, Porter C, Peled S, Kulkarni P, Ferris C, Kikinis R, Makris N, *Bouix S, **Shenton ME**, Kristal B. Tractography of fornix, cingulum, and corpus callosum in the rat brain. Poster presented at the 21st *Harvard Psychiatry Annual Research Day*, Sponsored by the Mysell Committee, Department of Psychiatry, Harvard Medical School, April 10, 2013.
- A477. *Green K, *Giwerc M, *Kikinis Z, *Bouix S, Makris N, Thompson E, Mezin J, Scheiber N, Corfas G, Kucherlapati R, Kikinis R, *Kubicki M, **Shenton ME**. Associations of ErbB4 SNP rs4673628 with integrity of the inferior longitudinal fasciculus and visual and verbal memory in chronic schizophrenia patients. Poster presented at the 21st *Harvard Psychiatry Annual Research Day*, Sponsored by the Mysell Committee, Department of Psychiatry, Harvard Medical School, April 10, 2013.
- A478. *Hosokawa T, *Niznikiewicz M, **Shenton ME**, *Salisbury D, Hirano Y, Oribe N, McCarley RW. Longitudinal study of parietal gray matter volume in first-episode schizophrenia. Poster presented at the 21st *Harvard Psychiatry Annual Research Day*, Sponsored by the Mysell Committee, Department of Psychiatry, Harvard Medical School, April 10, 2013.
- A479. *Mayinger M, *Koerte IK, *Muehlmann M, *Kaufmann D, *Purohit MP, Steffinger D, *Eckbo R, *Rathi Y, *Bouix S, *Pasternak O, Reiser M, Zafonte R, Stern RA, Ertl-Wagner B, *Kubicki M, **Shenton ME**. White matter integrity in professional soccer players without symptomatic concussion. Poster presented at the 21st *Harvard Psychiatry Annual Research Day*, Sponsored by the Mysell Committee, Department of Psychiatry, Harvard Medical School, April 10, 2013.
- A480. *Pasternak O, Westin CF, *Bouix S, Seidman LJ, *Goldstein JM, Woo TW, Petryshen TL, Mesholam-Gately RI, McCarley RW, Kikinis R, **Shenton ME**, *Kubicki M. Global white matter inflammation pattern in first-episode schizophrenia – A free-water MRI study. Poster presented at the 21st *Harvard Psychiatry Annual Research Day*, Sponsored by the Mysell Committee, Department of Psychiatry, Harvard Medical School, April 10, 2013.
- A481. *Zuo JX, *Green G, Seidman LJ, *Goldstein JM, Petryshen TL, Mesholam-Gately RI, Wojcik J, McCarley RW, *Kubicki M, **Shenton ME**. Clinical and neuropsychological correlates of diffusion tensor imaging indices in first-episode schizophrenia. Poster presented at the 21st *Harvard Psychiatry Annual Research Day*, Sponsored by the Mysell Committee, Department of Psychiatry, Harvard Medical School, April 10, 2013.

- A482. *Fredman E, *Dahlben B, *Duskin J, *Kikinis Z, *Cho I-K, *Eckbo S, *Bouix S, Makris N, Coman I, Kates K, *Kubicki M, **Shenton M**. Delineation of the inferior longitudinal fasciculus in subjects with 22q11.2 deletion syndrome. Poster presented at the *International Congress of Schizophrenia Research*, Orlando, Florida, 2013.
- A483. *Kubicki M, *Savadjiev P, *Pasternak O, Crow TJ, James AC, DeLisi L, **Shenton ME**. Beyond “white matter integrity” disruptions in schizophrenia. Poster presented at the *International Congress of Schizophrenia Research*, Orlando, Florida, 2013.
- A484. *Pasternak O, Westin C-F, *Bouix S, Seidman L, *Goldstein J, Woo T, Petryshen T, Mesholam-Gately R, McCarley R, Kikinis R, **Shenton M**, *Kubicki M. Global white matter inflammation pattern in first-episode schizophrenia – A free-water MRI study. Poster presented at the *International Congress of Schizophrenia Research*, Orlando, Florida, 2013.
- A485. *Whitford TJ, *Kubicki M, *Pelavin PE, *Lucia D, *Schneiderman JS, Pantelis C, McCarley RW, **Shenton ME**. Delusions of control and structural integrity of the cingulum bundle in patients with schizophrenia. Poster presented at the *International Congress of Schizophrenia Research*, Orlando, Florida, 2013.
- A486. Seidman LJ, Mesholam-Gately RI, Bergen SE, Stone W, Wojcik JD, Woodberry K, Cousins A, Friedman-Yakoobian M, Giuliano A, Gnong-Granato A, Rodenheiser-Hall J, Hornbach S, Fancis G, Pilo C, Gibson LE, Serum R, Min G, Hallinan S, Frazier J, Keshavan M, *Goldstein JM, **Shenton M**, Petryshen T, Woo T-U, McCarley RW. Progression of neurocognitive impairment from at-risk to chronic phases of schizophrenia in the Boston CIDAR study. Poster Symposium 1-3 entitled “Staging of Progression in Schizophrenia in the Boston CIDAR: From Phenotype to Genotype, Chair Dr. Tracey Petryshen, Co-Chair Dr. Martha Shenton, presented at the *International Congress of Schizophrenia Research*, Orlando, Florida, 2013.
- A487. *Goldstein JM, Abbs B, Thermenos H, Juelich R, Longenecker J, Mesholam-Gately R, Woodbury K, **Shenton M**, McCarley RW, Seidman LJ. Sex differences in the developmental trajectory of verbal memory deficits in schizophrenia. Poster Symposium 1-3 entitled “Staging of Progression in Schizophrenia in the Boston CIDAR: From Phenotype to Genotype, Chair Dr. Tracey Petryshen, Co-Chair Dr. Martha Shenton, presented at the *International Congress of Schizophrenia Research*, Orlando, Florida, 2013.
- A488. McCarley RW, Del Re E, Oribe N, Hirano Y, *Spencer K, *Niznikiewicz M. Abnormal auditory and visual event-related potentials in prodromal and first episode schizophrenia subjects and their clinical correlates. Poster Symposium 1-3 entitled “Staging of Progression in Schizophrenia in the Boston CIDAR: From Phenotype to Genotype, Chair Dr. Tracey Petryshen, Co-Chair Dr. **Martha Shenton**, presented at the *International Congress of Schizophrenia Research*, Orlando, Florida, 2013.
- A489. Petryshen T, Bergen S, Mesholam-Gately R, Del Re E, Purcell S, Seidman LJ, McCarley R. Genetic determinants of abnormalities in brain function in schizophrenia. Poster Symposium 1-3 entitled “Staging of Progression in Schizophrenia in the Boston CIDAR: From Phenotype to Genotype, Chair Dr. Tracey Petryshen, Co-Chair Dr. **Martha Shenton**, presented at the *International Congress of Schizophrenia Research*, Orlando, Florida, 2013.
- A490. *Levitt JL, *Rathi Y, Raviv TR, *Eckbo R, Simpson JC, McCarley RW, **Shenton ME**. MR-DTI frontostriatal tractography findings in chronic schizophrenia. Poster presented at the *International Congress of Schizophrenia Research*, Orlando, Florida, 2013.
- A491. Mauney S, Pietersen CY, *Goldstein JM, Petryshen T, Seidman LJ, **Shenton ME**, McCarley RW, Woo TW. Gene expression profiling of oligodendrocytes in dorsolateral prefrontal cortex deep white matter in bipolar disorder and schizophrenia. Poster presented at the *International Congress of Schizophrenia Research*, Orlando, Florida, 2013.
- A492. Mesholam-Gately RI, Hallinan SB, Hornbach S, Stone WS, Frances G, Pilo C, Gibson LE, Wojcik JD, Woodberry K, Cousins A, Friedman-Yakoobian M, Giuliano AJ, Gnong-Granato A, Rosenheiser-Hill J, Serur R, Min G, Keshavan M, *Goldstein JM, **Shenton M**, Petryshen T, Berger SE, Woo TW, McCarley RW, Seidman LJ.

Staging of olfactory functioning from at-risk to chronic phases of schizophrenia in the Boston CIDAR study. Poster presented at the *International Congress of Schizophrenia Research*, Orlando, Florida, 2013.

- A493. Seidman LJ, Mesholam-Gately RI, Bergen SE, Stone W, Wojcik JD, Woodberry K, Cousins A, Friedman-Yakoobian M, Giuliano A, Gnong-Granato A, Rodenheiser-Hill J, Hornback S, Francis G, Pilo C, Gibson LE, Serur R, Min G, Hallinan S, Frazier J, Keshavan M, *Goldstein JM, **Shenton M**, Petryshen T, Woo TW, McCarley RW. Progression of neurocognitive impairment from at-risk to chronic phases of schizophrenia in the Boston CIDAR study. Poster presented at the *International Congress of Schizophrenia Research*, Orlando, Florida, 2013.
- A494. *Asami T, *Whitford T, *Bouix S, *Dickey C, *Niznikiewicz M, **Shenton M**, Voglmaier M, McCarley R. Globally and locally reduced gray matter volumes in neuroleptic-naïve men with schizotypal personality disorder: Association with negative symptoms. *The 11th World Congress of Biological Psychiatry*, June 24, 2013, Kyoto, Japan.
- A495. *Hosokawa T, **Shenton M**, *Niznikiewicz M, *Salisbury D, McCarley R. Parietal lobe volume deficit in first-episode schizophrenia: Longitudinal study of gray matter volume. *The 11th World Congress of Biological Psychiatry*, June 25, 2013, Kyoto, Japan.
- A496. *Saito Y, *Kubicki M, *Otsuka T, *Asami T, *Rathi Y, *Pasternak O, *Eckbo R, *Kikinis Z, *Clemm C, *Koerte I, Roppongi T, Kinoshita T, **Shenton M**. Motor related white matter abnormalities in patients with first-episode schizophrenia. Poster presented at *The 11th World Congress of Biological Psychiatry*, June 26, 2013, Kyoto, Japan.
- A497. *Kikinis Z, *Green K, *Giwerc M, *Bouix S, Makris N, *Levitt JJ, Corfas G, Kucherlapati R, Kikinis R, *Kubicki M, **Shenton ME**. Genetic variant in the proline dehydrogenase gene is associated with demyelination of brain white matter and severity of clinical symptoms in schizophrenia patients. *XXIst Meeting of The World Congress of Psychiatric Genetics*. October 17-21, 2013, Boston, MA.
- A498. *Levitt JJ, *Kikinis Z, *Green K, *Dahlben B, *Rathi Y. **Shenton ME**. Impact of Genetic Variation in the Proline Dehydrogenase Gene on Deafferentation of the Striatum in Schizophrenia. *XXIst Meeting of The World Congress of Psychiatric Genetics*. October 17-21, 2013, Boston, MA.
- A499. *Kikinis Z, *Green K, *Giwerc M, *Bouix S, Makris N, Schreiber N, Corfas G, Kucherlapati R, Kikinis R, *Kubicki M, **Shenton ME**. Associations of the rs4818 polymorphism in the COMT gene with demyelination of the inferior longitudinal fasciculus in the white matter of the brain and cognition in schizophrenia patients. *American Society of Human Genetics*, October 22-26, 2013, Boston, MA.
- A500. *Pasternak O, Stern RA, *Giwerc M, *Yergatian C, Merugumala S, Liao H, Baugh CM, Westin C-F, Shenton ME, Lin AP. The relation between free-water, atrophy and microstructural pathologies in NFL players – A combined diffusion MRI and MRS study. *International Society for Magnetic Resonance Imaging in Medicine (ISMRM)*, Accepted, Milan, Italy).