**CURRICULUM VITAE**

Date Prepared: 07/01/2018

**PART I: GENERAL INFORMATION**

**Name**

Martha Elizabeth Shenton

**Office**

Psychiatry Neuroimaging Laboratory VA Boston Healthcare System

Department of Psychiatry, Brigham and Women’s Hospital Brockton Division-115B

1249 Boylston Street – 3rd Floor, Boston, MA 02215 940 Belmont Street, Brockton, MA 02301

Phone: (617) 525-6117 Phone: (508) 583-4500 X61371

E-mail: [Shenton@bwh.harvard.edu](mailto:Shenton@bwh.harvard.edu) (preferred) E-mail: [Martha.shenton@VA.Gov](mailto:Martha.shenton@VA.Gov)

Website: [http://pnl.bwh.harvard.edu](http://pnl.bwh.harvard.edu/)

**Education**

1973 A.B. Wellesley College

1976 M.S. Tufts University

1981 A.M. Harvard University

1984 Ph.D. Harvard University

**Post-Doctoral Training**

**Fellowship**

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)

**Faculty Academic Appointments**

1984-1986 Research Fellow in Biological Psychiatry, in the Laboratory of Neurophysiology, Department of Psychiatry, HMS, MMHC, Boston, MA

1984-1985 Visiting Lecturer in Psychology, Brandeis University, Waltham, 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 Affiliated Institutional Appointments**

*VA Appointments*

1985-1995 Research Health Scientist (WOC), Department of Psychiatry, HMS, at the VA Medical Center Brockton, Brockton, MA

1995-1995 Health Statistician, Department of Psychiatry, HMS, at the VA Medical Center Brockton, Brockton, MA

1995-1998 Research Health Scientist (WOC), Department of Psychiatry, HMS, at the VA Medical Center Brockton, Brockton, MA

1998-2005 Lead Psychologist, Department of Psychiatry, HMS, at the VA Boston Healthcare System, Brockton Division, Brockton, MA

2005- Health Scientist, VA Boston Healthcare System, Brockton Division, Brockton, MA

*Laboratory Appointments within the VA as Part of the Department of Psychiatry, Brockton, and HMS*

1986-2005 Director, Clinical Evaluation Section, Neuroscience Laboratory, Department of Psychiatry, HMS, at the VA Medical Center Brockton, Brockton, MA

1986-2005 Clinical Research Advisor for Post-Doctoral Research Fellows in the Department of Psychiatry, HMS, at the VA Medical Center Brockton, Brockton, MA

1987-2005 Director, MRI Section Laboratory of Neuroscience, Department of Psychiatry, HMS at the Brockton VA Medical Center, Brockton, MA

1990-2005 Clinical Research Advisor for Visiting Scholars in the Department of Psychiatry, HMS, at the VA Medical Center Brockton (then VA Boston Healthcare System, Brockton Division), Brockton, MA

1992-2005 Co-Director, Cognitive Neuroscience Laboratory, Department of Psychiatry, HMS, at the VA Boston Healthcare System, Brockton Division, Brockton MA

1995-2000 Scientific Co-Director, VA Center for Basic and Clinical Neuroscience Studies of Schizophrenia, Department of Psychiatry, HMS, VA Medical Center Brockton, Brockton, MA

*Other Hospital or Affiliated Institutional 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

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

2005-2007 Research Associate, Department of Psychiatry, Brigham and Women’s Hospital, HMS, Boston, MA

2007- Senior Scientist, Brigham and Women’s Hospital

2008- Senior Scientist, Judge Baker Children’s Center

2016- Research Staff, Massachusetts General Hospital

**Hospital and Healthcare Organization Service and Other Major Administrative Responsibilities**

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

1993-1994 Coordinator, Neuroscience Seminar Series, Residency Training Program in Psychiatry, Veterans Affairs Medical Center, HMS, Brockton, MA

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

2007-2012 Director, Resident Pathways Training in Research, Harvard South Shore Psychiatry Residency Training Program, HMS, VA Boston Healthcare System, Brockton, MA

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

*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

2012-2016 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 Sciences, and Harvard Integrated Life Sciences, Mentor

2015-2016 Neuroimaging Collaborative Working Group, The Football Players Health Study at Harvard University, Member

*Harvard Medical School*

1991-2003 Mysell Committee, Department of Psychiatry, HMS, Member

1993-1994 Acting Co-Director, 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

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

1995-2005 Promotions and Appointments Committee, Department of Psychiatry at the VA Boston Healthcare System, Brockton Division, HMS, Member

1996-2008 Associate Director, Clinical Research Training Program, Department of Psychiatry, HMS, Boston, MA

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

2001-2013 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

2008- Co-Director, Clinical Research Training Program, Department of Psychiatry, HMS

2010 Harvard Catalyst Pilot Grants, Reviewer

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

2012 HMS-Portugal Program in Collaborative Clinical and Translational Research Grants, Review Committee, Member

2014 HMS-Portugal Program in Collaborative Clinical and Translational Research Grants, Review Committee, Member

2014- Council of Mentors, Harvard Medical School, Member

2018-2019 Ad Hoc Search Committee for Chair of Psychiatry, VA Boston Healthcare System, Brockton Division, Member

*Harvard School of Public Health*

2014 Ad Hoc Committee for Professorial Appointments at Harvard School of Public Health

*Brigham and Women’s Hospital, Boston, MA*

1993-1995 Brain Research Committee, Department of Radiology, Brigham & Women's Hospital, Member

1995- Director, Psychiatry and Behavioral Sciences Imaging, Surgical Planning Laboratory, MRI Division, Department of Radiology, Brigham & Women’s Hospital, HMS, Boston, MA

2005- Founding Director, Psychiatry Neuroimaging Laboratory, Department of Psychiatry and Radiology, Brigham and Women’s Hospital

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

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

2006-2007 Neuroscience Research Center Working Group, Biomedical Research Institute

2007 Neuroscience Imaging Service Line Council, Department of Radiology, Brigham and Women’s Hospital, Member

2007- BRI Bridge Funding Review Committee, Member

2007-2010 Neuroscience Work Group, Neuroscience Initiative for Biomedical Research Institute, 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

2016-2017 BRI Bridge Funding Review Committee, Chair

2018- BRI Bridge Funding Review Committee, Member

*Longwood Medical Area, Boston, MA*

2006*-*2006Harvard Longwood Psychiatry Residency Training Program Task Force, Member

2006-2010 Harvard Longwood Psychiatry Residency Training Program Advisory Committee, Member

2006- Commonwealth Research Center, Beth Israel-Deaconess-Massachusetts Mental Health Center, Scientific Advisory Board, Member

**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 Local Committee, XIIth Event-Related Potentials International Congress (EPIC XII), Member

1998 NIH Special Emphasis Panel Review, Member

1998-2000 NIH Brain Disorders & Clinical Neuroscience Study Section (BDCN-6), 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 Reviewer, Sheffield Hospitals Charitable Trust for Medical Research, The University of Sheffield

2004-2006 Ethics Committee, *American College of Neuropsychopharmacology*, Member

2005- International Advisory Board Member, *Schizophrenia International Research Society*

2006 Program Committee, *International Congress on Schizophrenia Research*, Member

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)

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

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

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

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

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, Braga, Portugal, Member

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

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

2012Ad-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

2012- Awards Committee, *American Neuropsychiatric Association*

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

2013 Organizer with Dr. Brett Clements for setting up a reception for NIMH Sponsored Young Investigators for the *International Congress of Schizophre*nia, 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* (*SIRS*), 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 (mDTI): A Meeting of Experts,” sponsored by the *Institute of Medicine’s Forum on Neuroscience and Nervous System Disorders*, *Health Arm of the Institute of Medicine of the National Academy of Science*, Invited Member (August 22, 2013)

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

2014 *The Swiss National Science Foundation*, Reviewer

2014 *The South African Medical Research Council*, Reviewer

2014 *Presiding Committee of the Austrian Academy of Sciences*, Reviewer

2014 Mentor Program, Mentor, *American College of Neuropsychopharmacology*

2014- Chronic Effects of Neurotrauma Consortium (CENC): Neuroimaging Leadership Work Group Meeting, Member

2015 Organizer with Dr. Brett Clements for setting up a reception for NIMH Sponsored Young Investigators for the *International Congress of Schizophre*nia, for all young investigators dating back to 1987

2015 *Israel Science Foundation*, Grant Reviewer

2015 Center for Scientific Review, National Institute of Health, Special Emphasis Panel ZRG1 BDCN-W (04), Member

2015 Reviewer for the *Medical Research Council*, UK

2015 Reviewer for the *Netherlands Organization for Scientific Research* (NWO)

2015 Reviewer for the *Traumatic Brain Injury Endpoints Development (TED) Seed Projects*

2015- Advisory Group, *American College of Radiology* (*ACR*), *Head Injury Institute*

2015-2018 Membership Committee, *American College of Neuropsychopharmacology*, Member

2017 Program Committee Connectomics in NeuroImaging, Member, Quebec Canada (MICCAI workshop; <http://www.miccai2017.org/satellite-events>)

2018-2020 *Society for International Research on Schizophrenia* (*SIRS*), Program Committee

2018 *The Swiss National Science Foundation*, Reviewer

**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

1989-2000 *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

2002-2007 *American College of Neuropsychopharmacology*, Member

2005- *Schizophrenia International Research Society*, Member

2007- *American College of Neuropsychopharmacology*, Fellow

2010- *International College of Neuropsychopharmacology* (CINP), Fellow

2012- *American Neuropsychiatric Association*, Member

2013- *International Brain Injury Association* (IBIA), Member

2017- *American Association for the Advancement of Science*, Member

2018- IEPA, Early Intervention in Mental Health, Member

**Editorial Boards and Review Service**

*Editorial Boards*

1996- *Psychiatry Research: Neuroimaging* (Member)

1997-2004 *Schizophrenia Bulletin* (Member)

2001- *Schizophrenia Research* (Member)

2006- *Brain Imaging and Behavior* (Associate Editor, one of founding Editors; Impact = 4.598)

2007- *BMC Psychiatry* (Member)

2009-2015 *Schizophrenia Bulletin* (Member)

2010-2014 *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. Bigler and Tate on a Special Issue on *Neuroimaging Contributions to Understanding Mild Traumatic Brain Injury*)

2012-2015 *World Journal of Psychiatry* (Member)

2014- *Journal of Psychology and Clinical Psychiatry* (Member)

2015 *Schizophrenia Research* (Guest Editor with Dr. Kubicki on a Special Issue on *White Matter Pathology in Schizophrenia*)

2015-2017 *Journal of Neuroimaging* (Member)

2015- *Journal of Neuroimaging in Psychiatry & Neurology* (One of founding members)

2016-2019 *World Journal of Psychiatry* (Member)

2018- *Computational Psychiatry, part of Frontiers of Psychiatry* (Review Editor)

*Ad Hoc Reviewer*

*Archives of General Psychiatry (now JAMA-Psychiatry) American Journal of Psychiatry*

*Brain Imaging and Behavior Schizophrenia Research*

*Cerebral Cortex Schizophrenia Bulletin*

*Journal of the American Medical Association (JAMA) Psychiatric Research The New England Journal of Medicine Journal of Psychiatric Research*

*Biological Psychiatry* *Brain*

*Proceedings of the National Academy of Sciences Development and Psychopathology Journal of Abnormal Psychology NeuroImage*

*Nature Reviews Neuroscience PlosONE*

*Journal of Psychophysiology Psychosomatic Medicine*

*Neuropsychopharmacology Neurology India*

*Neuroreport Cognitive Brain Research*

*Biological Psychology Harvard Review of Psychiatry*

*Journal of Nervous and Mental Diseases Neurobiology of Disease*

*Epilepsia Psychological Bulletin*

*Psychiatry Research: Neuroimaging Behavioral Neuroscience*

*Journal of Child Psychology and Psychiatry Neuropsychobiology*

*Neuroscience Letters Hippocampus*

*American Journal of Medical Genetics European Neuropsychopharmacology*

*Neuropsychology Future Neurology*

*Journal of Neurotrauma The Cleft Palate-Craniofacial Journal*

*International Journal of Neuropsychopharmacology Neuropsychiatric Genetics*

*Psychological Reports: Perceptual and Motor Skills PLos Medicine*

*Journal of International Neuropsychological Society Genes, Brain, and Behavior*

*European Archives of Psychiatry and Clinical Neuroscience Pediatrics*

*Psychiatry Interpersonal and Biological Processes Developmental Psychopathology*

*Neurodegenerative Diseases Journal of Military Medicine*

*Journal of Neurodegenerative Diseases Developmental Neurobiology*

*Military Medicine*

*Progress in Neuro-Psychopharmacology & Biological Psychiatry*

**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 T32 National Research Service Award (NRSA) - Clinical Research Training Fellow in Biological Psychiatry, Massachusetts Mental Health Center, Boston, MA

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, International 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 ([Braga Foundation](http://www.uminho.pt/en/uminho_en/carlos-lloyd-braga-foundation))

([Honorary Chair](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 Investigator Award*, Department of Psychiatry, Brigham and Women’s Hospital, Harvard Medical School

2015 *Ph.D. Honors Lecture in Recognition of Honor and Achievement in the Field of Psychological Science*, Universidade do Minho, Braga, Portugal

**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;

17. Use of Transcranial Direct Current Stimulation (tDCS) for Treatment of Persistent Post-concussive Symptoms in Mild Traumatic Brain Injury.

*Narrative Description of Research* (see also: [Interview with Dr. Shenton](http://pnl.bwh.harvard.edu/wp-content/uploads/2014/10/Shenton-Interview-2013.pdf)):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 likely play a key role. An important early paper that is often cited in the field is Dr. Shenton’s 1992 *New England Journal of Med*icine study which showed temporal lobe and temporal lobe limbic system abnormalities, especially pronounced on the left that may be implicated in the pathophysiology of schizophrenia. This early study also described the interconnections among brain regions involved with verbal memory, and formal thought disorder, the latter manifested in odd language and speech. A more recent focus on

neural systems and brain connectivity abnormalities in neuropsychiatric disorders is the logical extension from evaluating more local, albeit interconnected brain regions, and work here has led to a greater appreciation of the role of alterations in brain circuits and connections in severe psychosis. The evaluation of neural systems and brain connections is clearly an important direction for research, as it will lead to a better understanding of both normal brain connectivity and alterations in brain connectivity that may help us to understand further schizophrenia as well as other neuropsychiatric disorders.

The broad goal of Dr. Shenton’s research program has been to apply new imaging techniques to the study of schizophrenia and related psychoses in order to determine and to localize brain abnormalities, and abnormal brain connections, which likely underlie the symptoms and disordered behavior observed in patients suffering from severe mental illness. Early work by this investigator and her research team focused on 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), were 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 disorders such as 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.

Dr. Shenton and her collaborators have used these techniques to make volumetric measurements of: (1) whole brain for gray matter, white matter and cerebral spinal fluid (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, as noted above, 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 that there was damage to an interconnected neural network that may be important to verbal associations and verbal memory, and which may account for the loose associations so often observed in schizophrenia. This line of research has continued and newer methods are being developed for analyzing the brain, including many automated measures that have replaced the laborious tracing of smaller regions of the brain. Additionally, measures of shape are being applied to brain regions of interest because 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 psychosis 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. Of further note, a focus on the prodromal period affords the opportunity to investigate differences between those who go on to develop psychosis versus those who do not, so that earlier intervention strategies might be developed. Here, Dr. Shenton and colleagues are investigating the role of neuroinflammation in early psychosis, as well as prior to psychosis, in order to determine whether or not neuroinflammation is an important precursor to developing psychosis. Such findings would likely lead to a different strategy for treatment, and, ultimately, to prevention of psychosis in those who are at risk.

Measures here include a method developed by Dr. Ofer Pasternak for separating measures of diffusion into those that are extracellular and those that are surrounding or within tissue. This technique was developed and used first to eliminate edema in tumor cases in order to reveal the underlying damaged corpus callosum that was not otherwise visible. This technique is now being applied to early psychosis where findings demonstrate that there is widespread extracellular water in early psychosis, but also a small amount of water surrounding tissue in the frontal lobe, where the latter is likely indicative of neurodegenerative changes. In another study of chronic patients, the opposite was observed, i.e., very little extracellular water, i.e., perhaps no neuroinflammatory response, and more changes in the water surrounding or within tissue, likely more indicative of neurodegenerative changes. Dr. Shenton is also working with Dr. Larry Seidman and others in a sample of prodromes in Shanghai who are unmedicated (as well as applying this method as part of a large center grant with Dr. Tyrone Cannon) to investigate whether or not a neuroinflammatory response, measured using these diffusion derived measures, will, in prodromes, be an important biomarker that may identify a subset of individuals who go on to develop psychosis versus those who do not.

Dr. Shenton has also worked closely with collaborators (e.g., Drs. Roger Pitman, Mark Gilbertson, Omer Bonne, Tamara Gurvitz, and Arieh Shalev) investigating hippocampal abnormalities in individuals diagnosed with post-traumatic stress disorder (PTSD). A morphometric brain study of the amygdala-hippocampus in monozygotic twins was conducted where one twin was diagnosed with PTSD as a result of combat exposure in the Vietnam War, and the other twin was not.

Findings suggested that given that the unaffected co-twin showed reduced volume in the amygdala-hippocampal complex, similar to the affected co-twin, there might be some individuals who have a predisposition to develop PTSD. Other morphometric studies of brain abnormalities in clinical populations include studies investigating cognitive and behavioral correlates of brain abnormalities in William’s syndrome patients and in velocardiofacial syndrome, the latter a genetic disorder which, besides the risk of schizophrenia in a monozygotic twin where one is diagnosed with schizophrenia, those with velocardiofacial syndrome, or 22q11.DS, have the highest risk for developing schizophrenia.

Work using transcranial magnetic stimulation (TMS) has also been conducted by Dr. Shenton and collaborators in an attempt to understand further cognitive processes that are interrupted by TMS, thereby affording the opportunity to link cognitive processes that occur in the millisecond range with specific loci in the brain. This program of research was developed to examine motor maps but was 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. The latter proved to be difficult as the areas of language are folded in from the surface and stimulation proved to be difficult. The focus was then shifted to investigate the visual system where stimulation was coupled with a task where the individual pushed a button to unusual stimuli as TMS was performed over different time periods (Continuous Performance Task-CPT). Findings revealed a small window in which information was disrupted in visual processing, and where visual information did not reach secondary visual cortex, which also corresponded with poor performance on the CPT task, i.e., no awareness of the visual information on the CPT. That is, visual information did not reach the brain because the message was interrupted. This study was important because it provided information about external stimulation such as visual stimuli, and the time period to perceptual awareness of visual stimuli, and how, and under what circumstances, this perceptual processing stream may be interrupted. Future studies need to focus on disrupting brain circuits that are likely important in psychiatric disorders in order to determine the effects of stimulation on cognitive processes.

New studies using MR diffusion tensor imaging (MR-DTI) are also a major focus of work that Dr. Shenton and her research team are using to investigate white matter pathology in psychotic disorders. This is a relatively new imaging technique that is important for examining white matter fiber tracts in the brain and it has been applied to the study of 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, including Dr. Marek Kubicki, have used DTI to investigate 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 from this work, as well as other work in the field, 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 those who are at risk for developing schizophrenia (prodromal phase) either by genetic predisposition or because of clinical symptoms (see description above).

Another area of research that Dr. Shenton and her colleagues, including Drs. Ross Zafonte, Inga Koerte, Robert Stern, Alex Lin, Ofer Pasternak, Paul Echlin, Connie Duncan, and Howard Eisenberg, are conducting is in the area of mild traumatic brain injury (mTBI). Here, the main damage to the brain is diffuse axonal injury, which is best characterized by diffusion imaging techniques. Mild TBI, also known as concussion, is, in fact, 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 are 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 has been conducted to understand better the neurobiology of TBI and PTSD. Dr. Murray Stein was principal investigator on this 10-site PTSD/TBI Clinical Consortium known as INTRuST (Injury & Traumatic Stress). On this project, Dr. Shenton and her team were responsible for setting up the image acquisition protocols at each site, setting up the image processing pipeline, conducting quality control and image processing, and storing the imaging data for future use. Work is also being conducted with Dr. Robert Stern and colleagues at Boston University investigating chronic traumatic encephalopathy using neuroimaging techniques in a sample of retired National Football Players (NFL) who have cognitive impairments and symptoms that are likely associated with repetitive brain trauma. This study was the first R01 funded by the National Institute of Neurological Diseases and Stroke where Dr. Stern was the principal investigator and it is now funded, with a focus on positron emission tomography as well as MR imaging, cognitive and clinical measures, and retired NFL players as well as college football players through a U01 mechanism with Drs. Robert Stern, Cummings, Reiman, and Shenton as multiple principal investigators. These latter two studies are ongoing.

A study of professional soccer players without concussion but with *subconcussive* blows to the head (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), the latter both 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 post-mortem brains of deceased NFL players, who experienced many clinical and cognitive symptoms, will be observed in living NFL players using a new PET tau ligand (supported by the Department of Defense with Drs. Shenton and Stern as multiple principal investigators). Findings from this study may lead to the identification of early changes in tauopathy in the brains of living NFL players, which might then set the stage for possible treatment and efficacy studies to prevent the cascade of progressive changes observed in chronic traumatic encephalopathy.

Finally, Dr. Shenton and her research team have been in the forefront of the field in developing MR tools to be applied to clinical populations. For example, members of her research team have pioneered in the development of novel tractography methods (e.g., UKF tractography), new diffusion contrasts (e.g., free-water, dispersion), novel analysis methods such as normative atlas analyses, automatic multi-atlas masking approaches, image denoising, between-site data harmonization for diffusion tensor imaging, as well as novel acquisition schemes such as line scan diffusion imaging, Q space imaging, in addition to multi-shell and compressed sensing approaches (see [http://pnl.bwh.harvard.edu](http://pnl.bwh.harvard.edu/)). The latter method significantly reduces the scan time of diffusion MRI by several orders of magnitude, and is being tested now by a member of Dr. Shenton’s laboratory, Dr. Yogesh Rathi, who is developing and applying these techniques in children with attention-deficit hyperactivity disorder, a group that is difficult to acquire high quality imaging data from because they cannot stay still in the magnet for a sufficient period of time. Further, the tractography methods developed will make it possible, combined with the multi-shell compressed algorithm, to probe white matter neural circuits in the brains of these children, as well as in other clinical populations. Dr. Shenton and her research team have also worked closely with Dr. Ron Kikinis over the past 29 years and many of the tools developed have been integrated into open source software, set up by Dr. Kikinis, and available, publically, as part of 3D Slicer (<https://www.slicer.org>). By applying these new techniques to assess heretofore immeasurable 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.

**Report of Funding**

*Past Grant Support (96 grants)*

1986-1990 NIH/NIMH R01 MH 40799 Co-Investigator

Project: Neurophysiological Studies of Schizophrenia

(PI: Dr. Robert McCarley)

1988-1993 NIH/NIMH K01 MH 00746 Principal Investigator

Project: Schizophrenia: Clinical Symptoms & Brain Mechanisms

1988-1993 Veterans Administration Merit Review Co-Investigator

Project: Neurophysiology of Behavior

(PI: Dr. Robert McCarley)

1990-1993 NIH/NIMH R01 MH 40799 Co-Investigator

Project: Neurophysiological Studies of Schizophrenia

(PI: Dr. Robert McCarley)

1990-1993 Scottish Rite Foundation Principal Investigator

Project: Computer Aided Image Analysis of Magnetic Resonance Brain Scans in Schizophrenia

1991-1992 William F. Milton Fund Award Principal Investigator

Project: Analysis of Morphometric Information from MR Brain Images in Schizophrenia Using Newly Developed Techniques

1992-1994 Stanley Foundation Principal Investigator

Project: MR Image Processing Techniques Applied to the Volumetric Analysis of the Superior Temporal Gyrus in Normal Controls and Patients Afflicted with Schizophrenia

1992-1995 The Whitaker Foundation Co-Principal Investigator

Project: Development of Computerized Image Processing Methods for the Quantitative Analysis of Brain Magnetic Resonance Images for the Diagnosis of Schizophrenia

(PI: Dr. Ron Kikinis)

1992-1997 NIH/NIMH P01 MH 31154 Co-Principal Investigator, Project

Project: Collaborative Biological Research in Schizophrenia (PI: Dr. Philip Holzman)

Project: Electrophysiology Studies in Schizophrenia (PI: Dr. Robert McCarley, Co-PI: Shenton)

1993-1997 NIH/NIMH R01 MH 40799 Co-Investigator

Project: Neurophysiological Studies of Schizophrenia

(PI: Dr. Robert McCarley)

1993-1998 Veterans Administration Merit Review Co-Investigator

Project: Neurophysiology of Behavior

(PI: Dr. Robert McCarley)

1994-1999 NIH/NIMH R29 MH 50740 Principal Investigator

Project: Computerized Image Analyses of MR Scans in Schizophrenia

1994-1999 NIH/NIMH K02 MH 01110 Principal Investigator

Project: Clinical Symptoms & Brain Abnormalities in Schizophrenia

1994-1999 NIH/NIMH R01 MH 52807 Co-Principal Investigator

Project: Biological Basis of Schizotypal Personality Disorder

(PI: Dr. Robert McCarley)

1995-1997 Scottish Rite Foundation Principal Investigator

Project: Study of Cortical Speech Localization and Verbal Processing Using Rapid-Rate Transcranial Magnetic Stimulation in Normal Controls and Schizophrenic Patients

1995-1997 Supplement to NIH/NIMH R29 MH 50740 Principal Investigator

Research Supplement to Promote the Recruitment of Individuals with Disabilities into Biomedical Research Careers

1995-1997 NARSAD Co-Mentor

National Alliance for Schizophrenia and Depression, Young Investigator Award

Project: 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)

1995-2000 VA Center for Basic and Clinical Scientific Co-Director

Project: Neuroscience Studies of Schizophrenia: The Neuroscience of Schizophrenia

(PI: Dr. Robert McCarley)

1996-1998 NIH/NIMH R01 MH 50379 Principal Investigator (sub-contract)

Project: Prospective MRI Study of Hippocampus After Mental Trauma

(PI: Dr. Arieh Shalev)

1996-2007 NIH/NIMH T32 MH 016259 Co-Investigator

Project: 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 07/01/08-06/30/2013, 07/01/2013-06/30/2018 (see below)

1997-2004 Senior Mentor, Stanley Scholars Program Principal Investigator

1998-2001 VA Merit Award Co-Investigator

Project: MRI Hippocampal Volume in Twins Discordant for Combat Exposure and PTSD

(PI: Dr. Mark Gilbertson)

1998-2003 NIH/NIMH R01 MH 40799 Co-Investigator

Project: Neurophysiological Studies of Schizophrenia

(PI: Dr. Robert W. McCarley)

1998-2003 VA Merit Award Co-Investigator

Project: MRI Anatomy of Schizophrenia

(PI: Dr. Robert McCarley)

1998-2003 NIH/NIMH P01 MH 31154 Co-Investigator

Project: Collaborative Biological Research in Schizophrenia (PI: Dr. Philip Holzman)

Project: Dysmorphology Studies in Schizophrenia (PI: Dr. Curtis Deutsch)

1998-2013 NIH/NIH P41 RR13218 Principal Investigator (2projects)/Investigator

Project: Neuroimaging Analysis Center (PI: Dr. Ferenc Jolesz, Co-PI Dr. Ron Kikinis)

Project: Interactive Digital Anatomy Atlas of the Brain

Project: Schizophrenia (PI: Dr. Martha E. Shenton)

(1998-2003 Dr. Shenton was PI on the Schizophrenia Project)

(2003-2013 Dr. Shenton was a Collaborative Partner and Co-Investigator)

1999-2000 William F. Milton Fund Award Principal Investigator

Project: MR Diffusion Tensor Imaging in Schizophrenia

1999-2001 NARSAD Co-Mentor

National Alliance for Schizophrenia and Depression, Young Investigator Award (PI: Dr. Melissa Frumin; Co-Mentors: Drs. Martha Shenton and Robert McCarley)

1999-2004 NIH/NIMH R01 MH 50740 Principal Investigator

Project: Computerized Image Analyses of MR Scans in Schizophrenia

1999-2004 NIH/NIMH K02 MH 01110 Principal Investigator

Project: Clinical Symptoms & Brain Abnormalities in Schizophrenia

2000-2003 VA Merit Award Principal Investigator

Project: MR Brain Diffusion Tensor Imaging in Schizophrenia

2000-2003 VA Career Award Co-Mentor with Dr. Robert McCarley

fMRI and MRI Studies in Schizophrenia & Schizotypal Personality Disorder

(PI: Dr. Chandlee Dickey)

2000-2003 Binational Science Foundation American-PI

Project: Volumetric Analysis of Hippocampal Volume in Posttraumatic Stress Disorder

(PI: Dr. Omer Bonne)

2000-2004NIH**/**NIMH R01 MH 60775 Co-Investigator

Project:Brain Midline Malformations in Schizophrenia

(PI: Dr. Curtis Deutsch)

2001-2002 Infrastructure Suppl.: NIH/NIMH R01 50740 Principal Investigator

Project: Computerized Image Analyses of MR Scans in Schizophrenia

2001-2003CA R21 89449 Co-Investigator

Project: Mutual Information Based Image Processing for fMRI

(PI: Dr. William Wells III)

2001-2003 NIH/NIMH R01 MH 50379 Co-Investigator

Project: Prospective MRI Study of Hippocampus After Mental Trauma

(PI: Dr. Arieh Shalev)

2001-2003 NARSAD Co-Mentor

National Alliance for Research in Schizophrenia and Depression, Young Investigator Award

Project: A magnetic Resonance Diffusion Tensor Study of the Cingulate Fasciculus in Schizophrenia

(PI: Dr. Marek Kubicki; Co-Mentors: Drs. Martha Shenton and Robert McCarley)

2000-2005 NIH/NIMH R01 MH 52807 Co-Principal Investigator

Project: Biological Basis of Schizotypal Personality Disorder

(PI: Dr. Robert McCarley)

2002-2005 VA Merit Award Consultant

Project: Structural Brain MRI and Neurocognitive Function in Female Nurse Vietnam Veterans

(PI: Dr. Mark Gilbertson)

2003-2004 VA Career Development Award Co-Mentor with Dr. Robert McCarley

White Matter Abnormalities in Schizophrenia

(PI: Dr. Melissa Frumin)

2003-2005 NIH/NIMH R03 MH 068464 Co-Investigator

Project: White Matter Myelin Abnormalities in Schizophrenia

(PI: Dr. Marek Kubicki) (One Year No Cost Extension to 2006)

2003-2005 NARSAD Co-Mentor

National Alliance for Schizophrenia and Depression, Young Investigator Award

Project: Understanding the Nature of White Matter Abnormalities in Cingulate Fasciculus in Schizophrenia

(PI: Dr. Marek Kubicki; Co-Mentors: Drs. Martha E. Shenton and Robert W. McCarley)(One Year No Cost Extension to 2006)

2003-2006 VA Research Enhancement Award Program Co-Principal Investigator

Project: Neuroimaging Studies in Schizophrenia

(PI: Dr. Robert McCarley)

2003-2006 BWH Translational Grant Mentor

Structural and Functional MRI of the Cingulate Gyrus to Examine Emotional Processing in Schizophrenia and Schizotypal Personality Disorder

(PI: Dr. Chandlee Dickey; Co-PI: Dr. Marek Kubicki)

2003-2006 VA Advanced Career Development Award Co-Mentor with Dr. Robert McCarley

Functional & Structural MRI of Temporal Lobe in Schizotypal Personality Disorder

(PI: Dr. Chandlee Dickey)

2003-2007 NIH/NIMH R01 MH 40799 Co-Investigator

Project: Neurophysiological Studies of Schizophrenia

(PI: Dr. Robert W. McCarley)

2003-2008 VA Merit Award Principal Investigator

Project: MR Brain Diffusion Tensor Imaging in Schizophrenia

2003-2008 VA Merit Award Co-Investigator

Project: MRI Anatomy of Schizophrenia

(PI: Dr. Robert W. McCarley)

2003-2013 NIH P41 RR13218 Co-Investigator/Collaborative Partner

Neuroimaging Analysis Center (PI: Dr. Ron Kikinis)

Project: The Development of White Matter Tools Based on Diffusion MRI

(PI: Dr. Carl-Fredrik Westin)

2004-2005 NIH/NIMH R01 MH 50740 Principal Investigator

Project: Computerized Image Analyses of MR Scans in Schizophrenia”

[No Cost Extension]

2004-2010 National Alliance for Medical Imaging Core-Principal Investigator

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) (Co-Investigator: Dr. Martha E. Shenton)

2005-2005 Supplement to NIH/NIMH R01 50740 Principal Investigator

Project: Computerized Image Analyses of MR Scans in Schizophrenia

Minority Supplement (Christopher Webber)

2004-2009 NIH/NIMH K05 MH 070047 Principal Investigator

Project: Clinical Symptoms & Brain Abnormalities in Schizophrenia

2005-2009 VA Merit Award Consultant

Project: Context and the Hippocampus in Unremitting Posttraumatic Stress Disorder

(PI: Dr. Mark Gilbertson)

2005-2010 NIH/NIMH R01 MH 52807 Co-Principal Investigator

Project: Biological Basis of Schizotypal Personality Disorder

(PI: Dr. Robert W. McCarley)

2005-2010 NIH/NIMH R01 MH 50740 Principal Investigator

Project: Computerized Image Analyses of MR Scans in Schizophrenia

(1 year No-Cost Extension to 2011)

2006-2009 Supplement to NIH/NIMH R01 MH 50740 Principal Investigator

Project: Computerized Image Analyses of MR Scans in Schizophrenia

Reentry to Biomedical Research (Dr. Zora Kikinis funded)

2006-2011 Fogarty International Center US Program Faculty/Mentor

FIC NIH 2 D43 TW05807

Project: 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)

2006-2011 VA Schizophrenia Center Grant Co-Principal Investigator

Project: Neuroimaging Insights into Schizophrenia & Treatment Implications

(PI: Dr. Robert W. McCarley)

2007-2012 NIH/NIMH R01 MH 074794 Co-Investigator/Contributor

Project: Novel DT-MRI Analyses of White Matter in Schizophrenia

(PI: Dr. Carl-Fredrik Westin)(sub award)

2007-2012 NIH/NIMH R01 MH 40799 Co-Investigator

Project: Neurophysiological Studies of Schizophrenia

(PI: Dr. Robert W. McCarley) (sub award)

2007-2012 NIH/NIMH 1P50 MH 080272 Project PI and Core PI

NIH Mental Health Centers for Interventional Development and Applied Research (CIDAR)

Project: 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)(sub award)

2008-2010 NARSAD Co-Mentor

National Alliance for Schizophrenia and Depression Young Investigator Award

Project: White Matter Changes in Subjects with Neuregulin 1 Haplotype HAP-ICE and ErbB4 Schizophrenia Risk Haplotypes

(PI: Dr. Zora Kikinis; Co-Mentors: Drs. Martha E. Shenton, Gabriel Corfas and Raj Kucherlapati)

2008-2010 NIH/ NIMH R21 MH 077979 Co-Investigator/Contributor

Project: Behavioral and fMRI study: Social Reciprocity in Schizotypal Personality Disorder”

(PI: Dr. Chandlee Dickey)

2008-2012 FIRCA R03 TW008134 Principal Investigator/Mentor

Project: 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 2013)

2008-2012 National Health &Medical Research Council Supervisor/Mentor

Australian Government

MHMRC Training Fellowship

(PI: Dr. Thomas Whitford)

2008-2013 NIH/NIMH T32 MH 016259-29 Principal Investigator

Clinical Research in Biological and Social Psychiatry

Name change to: The Stuart T. Hauser Clinical Research Training Program in Biological & Social Psychiatry. Grant entering 29th year: (07/01/1980-6/30/2013) (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.

2008-2013 W81XWH-08-2-0159 Co-Principal Investigator

Department of Defense (No Cost Extension to 2014)

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)

2008-2013 W81XWH-08-2-0159 Investigator

Department of Defense (No Cost Extension to 9/2016)

Infrastructure Support to Harvard Clinical Consortium

2009-2009 Supplement to NIH/NIMH R01 MH 50740 Principal Investigator

Project: Computerized Image Analyses of MR Scans in Schizophrenia

NIH American Recovery and Reinvestment Act of 2009 (ARRA) Administrative Supplement to R01 MH 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)

2009-2011 NIH/NIMH R21 MH 083205 Co-Investigator

Project: Language and Risk in Schizophrenia

(PI: Dr. Lynn DeLisi)(sub award)

2009-2011 CIMIT Mentor

Center for Integration of Medicine and Innovative Technology

Solider in Medicine Award

Project: Traumatic Brain Injury Diagnosis with Diffusion MRI

(PI: Dr. Sylvain Bouix)(Continued through No Cost Extension – 2012)

2009-2011 NARSAD Principal Investigator

National Alliance for Research in Schizophrenia and Depression

Distinguished Investigator Award

Project: A Novel Application for Diffusion-Weighted Functional Magnetic Resonance Imaging to Schizophrenia: A More Robust Measure of Brain Activation (Continued through no cost extension to 2013)

2009-2012 VA Merit Award Co-Investigator

Project: MR Brain Imaging of Frontal-Striatal-Thalamic Circuits in Schizophrenia

(PI: Dr. James Levitt)

2009-2013 W81XWH-08-2-0159 PI Neuroimaging Leadership Core

Department of Defense (No Cost Extension to 9/2016)

Project: Neuroimaging Leadership for the 10 PTSD/TBI Clinical Consortium Sites

(Other PIs: Drs. Ron Kikinis and Bruce Rosen)

2009-2014 VA Merit Award Principal Investigator

Project: MR Brain Diffusion Tensor Imaging in Schizophrenia

2009-2014 NIH/NIA R01 AG034554 Co-Investigator

Project: Social and Neural Underpinnings of Octogenarian Wellbeing

(PI: Dr. Robert Waldinger)

2009-2014 NIH/NIMH R01 MH 082918 Co-Principal Investigator

Project: Computational Morphometry in Schizophrenia and Related Disorders

(PI: Dr. Sylvain Bouix) (No Cost Extension – 2015)

2010-2011 CIMIT Principal Investigator

Center for Integration of Medicine and Innovative Technology

Project: Improving Imaging of Diffuse Axonal Injury in Traumatic Brain Injury

(Co-PI: Drs. Bruce Kristal and Ross Zafonte)(Continued through No Cost Extension to 2015)

2010-2012 NARSAD Co-Mentor

National Alliance for Schizophrenia and Depression Young Investigator Award

Project: 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 E. Shenton, Christos Pantelis and Judith Ford) (Continued through No Cost Extension to 2014)

2010-2014 NIH/NIA R01 AG 034155 Co-Investigator

Project: Identifying Biomarkers of Alzheimer’s in Insulin Resistant Patients Using MRI

(PI: Dr. Gail Musen)

2011-2012 CIMIT Significant Contributor

Center for Integration of Medicine and Innovative Technology

Project: 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 2016)

2011-2012 CIMIT Co-Investigator

Center for Integration of Medicine and Innovative Technology

Project: Neurochemical and Multimodal Markers for Chronic Traumatic Encephalopathy

(PI: Dr. Alexander Lin)(Continued through No Cost Extension to 2016)

2011-2013 W81XWH-08-2-0159 Co-PI and PI Sub award

Project: Brain Indices of Risk for PTSD Following Mild TBI

(PI: Dr. Connie Duncan) (No Cost Extension to 9/2016)

2011-2013 W81XWH-08-2-0159 Principal Investigator

Project: Post-Processing of Images for Clinical Consortium

(Other PIs: Drs. Ron Kikinis and Bruce Rosen) (No Cost Extension 9/2016)

2011-2013 W81XWH-08-2-0159 Principal Investigator of Sub award

Project: A Randomized-Clinical Trial of Glyburide (RP-1127) for TBI

(PI: Dr. Howard Eisenberg) (No Cost Extension to 9/2016)

2011-2013 W81XWH-08-2-0159 Principal Investigator

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 2015)

2011-2015 NIH/NINDS R01 NS 078337-01 Co-Investigator

Project: Chronic Traumatic Encephalopathy: Clinical Presentation and Biomarkers

(PI: Dr. Robert Stern) (No Cost Extension to 2016)

2011-2015 NIH/NIMH R01 MH 090291-01 Co-Investigator

Project: Fetal Hormonal Programming of Sex Differences in Aging of the Memory Circuitry

(PI: Dr. Jill Goldstein) (No Cost Extension to 9/2016)

2012-2016 NIH/NIMH 5R01 MH 64824-11 Consultant

Project: Biomarkers for Psychosis in Velocardiofacial Syndrome

(PI: Dr. Wendy Kates)

2012-2016 NIH/NIMH 1R01 MH 09238 Co-Investigator

Project: Genetic Determinants of Schizophrenia Intermediate Phenotypes

(PI: Dr. Tracey Petryshen)

2013-2015 F31 NS 081957 Co-Sponsor

Ruth L. Kirchstein National Research Service Award for Individual Pre-Doctoral Fellows

Project: Frontal Lobe Neuroimaging as a Biomarker of Chronic Traumatic Encephalopathy

(PI: Dr. Julie Stamm; Co-Sponsors Drs. Robert Stern and Martha E. Shenton)

2013-2016 NIH/NIMH R01 MH 101052 Consultant and then Co-Investigator

Project: Validating Biomarkers for the Prodrome and Transition to Psychosis in Shanghai

(PI: Dr. Larry Seidman)

2013-2016 W81XWH-13-2-0063 Principal Investigator

Congressionally Directed Medical Research Programs (CDMRP)

Traumatic Brain Injury Award

Project: Tau Imaging of Chronic Traumatic Encephalopathy

(Co-Partnering PI: Dr. Robert Stern)

2013-2015 NARSAD Co-Mentor

(NCE 2017) National Alliance for Schizophrenia and Depression Young Investigator Award

Project: Free-Water as a Novel Imaging Biomarker for the Investigation of Inflammation and Degeneration Dynamics in Schizophrenia (No Cost Extension to 12/2016)

(PI: Dr. Ofer Pasternak; Co-Mentors: Drs. Martha E. Shenton and Marek Kubicki)

2015-2016 NIH/NINDS 2R56 NS 078337 Co-Investigator

Bridge Funding for NIH/NINDS R01 NS 078337-01

Project: Chronic Traumatic Encephalopathy: Clinical Presentation and Biomarkers

(PI: Dr. Robert Stern)

*Current Grant Support (21 grants)*

2012-2017 NIH/NIMH R01 MH 074794 Significant Contributor

Project: Novel DT-MRI Analyses of White Matter in Schizophrenia

(PI: Dr. Carl-Fredrik Westin)

2012-2017 NIH/NIMH R01 MH 097979 Significant Contributor, then Co-Investigator

Project: Taking Advanced Diffusion Imaging to the Clinic for Pediatric Patients with ADHD

(PI: Dr. Yogesh Rathi)

2013-2018 VA Career Development Award Co-Mentor

Providence VAMC

Project: PTSD and the Default Network: Developing Imaging Phenotypes

(PI: Dr. Noah Philip; Co-Mentors: Drs. Robert Swift, Martha Shenton, Lawrence Sweet, Linda Carpenter, Tracie Shea)

2013-2018 NIH/NIMH K23 MH 097844 Co-Mentor

Project: Cognitive Processing Therapy for PTSD with Co-Morbid Mild Traumatic Brain Injury

(PI: Dr. Kaloyan Tanev)(Co-Mentors: Drs. Roger Pitman, Martha Shenton, Ross Zafonte, Patricia Resick, Jennifer Vasterling, Naomi Simon)

2013-2018 NIH/NIA R01 AG 042512 Significant Contributor, then Co-Investigator

Project: Neural Substrates of Diffusion Imaging in Cognitively Aging Rhesus Monkeys

(PI: Dr. Marek Kubicki)

2013-2018 NIH/NIMH T32 MH 016259-29 Principal Investigator

Clinical Research in Biological and Social Psychiatry

Name change to: The Stuart T. Hauser Clinical Research Training Program in Biological & Social Psychiatry. Grant entering 34th 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.

2014-2018 VA Merit Award (I01 RX00928) Principal Investigator

Project: Development of MR Biomarkers of Brain Injury in Acute and Chronic mTBI

2014-2019 NIH/NIMH R01 MH102377 Co-Investigator

Project: Diffusion Imaging Biomarkers for Risk, Onset, & Outcome in Schizophrenia

(PI: Dr. Marek Kubicki)

2014-2019 NIH/NIMH MH K23 10061 Co-Mentor

Project: Speech and Cognitive Networks in Hallucinators Across the Psychoses Spectrum. (PI: Ann Shin; Co-Mentors: Drs. Dos Ongur, Martha Shenton, John Gabrieli, and Randy Buckner)

2015-2017 NARSAD Mentor

National Alliance for Schizophrenia and Depression Young Investigator Award

Computational methods for structural brain morphology in neurodevelopment (PI: Dr. Peter Savadjiev)

2015-2017 NIMH R21 106793 Significant Contributor

Structural Connectivity Biomarkers in Prodromes and 22q11.2 Deletion Syndrome

(PI: Dr. Zora Kikinis)

2015-2019 Fogarty/NIH 5D43 MH 108169 Principal Investigator of Subaward

Multidisciplinary Training Program on Neuropsychiatry and Behavioral Disorders in First Nations (NEUOFIN)

(PI: Dr. Gabriel A. de Erausquin)

2015-2019 VA Merit Award (I01 CX000176-06) Principal Investigator

Project: MR Brain Diffusion Tensor Imaging in Schizophrenia

2015-2020 NIH/NIMH U01 MH 081928-06 Co-Investigator

Project: Predictors and Mechanisms to Psychosis

(PI: Dr. Tyrone Cannon; Site PI in Boston: Dr. Larry Seidman)

2015-2022 U01 NS 093334 Multiple PI

Diagnostics, Imaging, and Genetics Network for the Objective Study and Evaluation (DIAGNOSE) of chronic traumatic encephalopathy

(Multiple PIs: Drs. Robert Stern, Jeffrey Cummings, Eric Reiman, and Martha Shenton)

2016-2018 NIMH R21 MH109819 Subaward PI

Ventricles, Corpus Callosum & M1R137 in Large N Study of Schizophrenia

(PI: Dr. Elisabetta Del Re)

2016-2019 R01 HD 090641 Co-Investigator

CRCNS: Subject-Specific Diffusion MRI Profiles of Injury in TBI and PTSD

(PI: Dr. Sylvain Bouix)

2016-2020 U01 NIMH 109977 Contact PI, Multiple PI

Human Connectome Project for Early Psychosis

(Multiple PI: Dr. Alan Breier; Site PIs: Drs. Larry Seidman, Dost Ongur, Daphne Holt)

2016-2021 R01 MH 111448 Multiple PI

A Psychological Follow Up Study of Transition from Prodrome to Early Psychosis

(Multiple PIs: Huijun Li, Ph.D., Robert W. McCarley, M.D., Larry Seidman, Ph.D., (Contact PI), Martha E. Shenton, Ph.D., Jijun Wang, M.D., Ph.D., Susan Whitfield-Gabrieli)

2016-2021 R01 MH 108574 Co-Investigator

New Generation Diffusion MRI Biomarkers for Prodromal Schizophrenia

(PI: Dr. Ofer Pasternak)

**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 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 Directed Monthly Seminar for Residency Pathway to Research Training Program, Harvard South Shore Residency Training Program in Psychiatry, VA Boston Healthcare System, Brockton, MA

**Report of Mentoring and Training**

Dr. Shenton has mentored many talented trainees over the course of her career, including former trainees who are now Deans of Medical Schools (n=3), Associate Deans of Medical School (n=1), Presidents or Directors of Hospitals (n=3), Medical Directors of Hospitals (n=2), Vice Presidents of Hospitals (n=1), Department Chairs (n=6), Professors (n=14), Associate Professors (n=18), Assistant Professors (n=20), Instructors (n=7), as well as Research/Senior Scientists (n=8), and Residency Training Directors (n=1). In addition, Dr. Shenton has mentored graduate school dissertations (n=4), master’s theses (n=4), undergraduate senior honors theses (n=7), undergraduate independent study course (n=13), and set up a program to enroll medical students, undergraduates, and high school students to obtain what for many are their first on hands research experience (n=>300). She has also supervised research assistants who have gone on to graduate and medical school and beyond (n=>100). In addition many trainees have gone on to residency training and to clinical staff positions (n=20). (Note: some individuals were both Professors and Department Chairs.) See also **Awards and Honors** section of CV for mentoring awards Dr. Shenton has received, including the *William Silen Lifetime Achievement Award for Mentoring*, from Harvard Medical School.

*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.)

1994-1996 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 *Kaplen 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). (Associate Professor of Psychology, Rice University, Texas, then Assistant Professor of Psychology, Florida State University, and currently Associate Professor in Psychology, University of Oregon.)

1994-2007 Chandlee Dickey, M.D., Research Fellow, and Assistant Professor, and now Associate Professor Clinical, Neuroscience Division, Laboratory of Neuroscience (1994-2010),

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; *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.

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 President of Arakaki Hospital, Okinawa, Japan.)

1995-1997 Paola Mazzoni, Medical Student from the University of Chicago taking a leave of

(see also 2004-2005) 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). (Professor and Chairman, Department of Psychiatry, Yokohama City University School of Medicine, Yokohama, Japan, and, as of April 1, 2010, President of Yokohama City University Hospital Medical Center, and Dean of the Graduate School of Medicine, Yokohama City University Graduate School of Medicine, Yokohama, Japan. Youngest full Professor in Japan at the time of his Appointment. Currently General Director of the Medical Corporation, Hirayasu Hospital. Professor Emeritus, Yokahama City University.)

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* 1998-1999; 1999-2000). (See Bibliography portion of CV for first author and co-authorship on papers, abstracts and presentations at professional meetings). (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 Assistant Professor, Department of Psychiatry, Brigham and Women’s Hospital and 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). (Resident in Psychiatry at the South Shore Residency Training Program, Department of Psychiatry, Harvard Medical School and then Geriatric Psychiatrist at the Mental Health Center of Greater Manchester, NH. Currently, Staff Psychiatrist, VA Bedford Healthcare System, Bedford, MA.)

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). (Professor of Psychiatry and Dean, The Catholic University Medical College, Seoul, Korea and currently Professor and Director, Department of Psychiatry, Kangwon National University School of Medicine, Gangwon Provincial Mental Health Center, and Director, Gangwon Suicide Prevention Center, Chief Medical Officer, Kangwon National University Hospital, Gangwon-do, Republic of Korea.)

1999- Marek R. Kubicki, M.D., Ph.D., Visiting Assistant Professor, then Assistant Professor, Clinical Neuroscience Division, Laboratory of Neuroscience, Department of Psychiatry, Harvard Medical School, followed by Associate Professor, and now Professor, in the Departments of Psychiatry and Radiology, Psychiatry Neuroimaging Laboratory, Brigham and Women’s Hospital, Harvard Medical School, Boston, MA, and Associate Director of the Psychiatry Neuroimaging Laboratory, Brigham and Women’s Hospital, and Harvard Medical School. He has been supported by a fellowship from the Kosciuszko Foundation, Poland, and from NIMH funds; received the *Neal Mysell Award*, 2000, for most outstandin 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; elected to Membership of ACNP, 2014. (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, and Assistant Professor of Psychiatry at NYU School of Medicine, NY, 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. The Youngest Professor in all of Japan at the time of his appointment.)

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 and Kyushu Hospital, Fukuoika, Japan.)

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.) (Associate Professor and now Professor, Department of Nuclear Medicine, Department of Radiology and Psychiatry, Yonsei University College of Medicine, Seoul, Korea, and Adjunct 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 Professor of the Serverance 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.) Currently he is Addiction Psychiatrist at Tri County Medical Associates, Milford, MA.

(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). Completed his Ph.D. in Medical Imaging in the Department of Biomedical Engineering, Linköping University, Linköping, Sweden. Now Assistant Professor in Image Analysis, Center for Image Analysis, Swedish University of Agricultural Sciences, Uppsala University, Uppsala, Sweden. He is also CEO and part owner of Chorus Cognition AB.

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 Welfide 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, and clinician at the National Center of Neurology and Psychiatry – NCNP, Department of Psychiatry, 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, Gangnung City, Korea. (Supported from NIH funds.) (See Bibliography portion of CV for first author and co-authorship on papers, abstracts and presentations.) (Currently Dean, Catholic Kwandong University School of Medicine, Professor and Chairperson, Department of Psychiatry, Catholic Kwandong University College of Medicine, and Chair and Director of Myung-Ji Hospital, Gangnung City, 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, and Division Chief and Researcher, Kinkou Hospital, Hangawa Psychiatric Center, 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, 2016-2019,

and 2018-2023.) (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). (Visiting Researcher, Department of Psychiatry, Yokohama City University School of Medicine, Yokohama, Japan, and now Director and Clinical Psychiatrist, Shonan Yoshida Clinic, 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. (Child fellow in Psychiatry at Columbia College of Physicians and Surgeons and currently Psychiatrist in private practice.)

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.)(Assistant Professor, tenured Associate Professor, and now tenured Professor, Department of Computer Science, University of North Carolina.)

2005-2008 Toshiro 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 Associate Professor in the Department of Psychiatry, Saga Medical School, Kyushu University, Fukuoka, Japan.)

2006-2008 Katharina Quintus, M.S., Research Associate, Psychiatry Neuroimaging Laboratory, Brigham and Women’s Hospital, Harvard Medical School. (Currently computer scientist at Ergonomic & Technologie (E&T), GmBH, Zurich, Switzerland.)

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, Republic of Korea. (Returned to work at the Korean Advanced Institute of Science and Technology, Graduate School of Medical Science & Engineering, Department of Psychiatry, and is currently Associate Professor, KAIST Clinic, Daejeon, Republic of Korea.)

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 Innsbrook, Innsbrook, Austria. (Currently Psychiatrist, University Clinical and for General and Social Psychiatry, Medical University of Innsbrook, Innsbrook, Austria.)

2006-2011 David Tate, Ph.D., Lecturer (2006-2008), Instructor (2008-2010), Assistant Professor (2010-2011), Department of Radiology, Brigham and Women’s Hospital, and Harvard Medical School, and member of the Psychiatry Neuroimaging Laboratory. (Currently Associate Professor of Research, Missouri Institute of Mental Health, University of Missouri, St. Louis, MO.)

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, Instructor, and now Assistant Professor in the 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.)

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 was in his 4th year resident in Psychiatry. He completed his 5th year residency training in 2008 and in 2007 he received 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, was Instructor in the Department of Psychiatry,

Toronto University School of Medicine, then Assistant Professor in the Department of Psychiatry, Institute of Medicine, University of Toronto, and Koermer New Scientist and Head of the Kimel Family Translational Imaging-Genetic Laboratory, and now Associate Professor of Psychiatry, Department of Psychiatry, University of Toronto, and Director of the Slaight Family Centre for Youth in Transition, and Head of the Kimel Family Translational Imaging-Genetics Laboratory, Centre for Addiction and Mental Health, Toronto, Canada.

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, Associate Professor, Department of Nuclear Medicine, Asan Medical Center University of Ulsan College of Medicine, Seoul, Republic of Korea.)

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. Returned to Argentina to private practice.

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. (Currently Assistant Professor, Department of Psychiatry, Dartmouth Medical Center, Hanover, NH, and Physician, White River Junction VA Medical Center, Vermont.)

2007- Yogesh Rathi, Ph.D., Post-Doctoral Research Fellow (2007-2008), Instructor (2008), Assistant Professor (2009), and Associate Professor (2016), 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](http://www.nimh.nih.gov/research-priorities/inside-nimh/2012-autumn-inside-nimh.shtml) 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*.

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. 1st place for poster at the poster session, *XXI National Meeting of the Mexican Psychiatric Association*, Acapulco, Mexico, November 13-20th, 2009. (Currently, researcher in the Department of Psychiatry and Mental Health, Faculty of Medicine, National Autonomous University of Mexico, and staff physician National Institute of Psychiatry, Mexico City, Mexico.)

2008-2009 Julien de 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). Post-Doctoral Research Fellow, Children’s Hospital, Boston, MA. (Currently, Co-Founder and contractor at Smart-Tree, Bern Area, Switzerland.)

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. (Currently Professor, Department of Mental Health, Chungnam National University College of Medicine, Gunggu Daejeon, Republic of Korea.)

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). (Currently, Assistant Professor, Psychology Department, University of Sydney, Sydney, Australia.)

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.) (Currently, Adolescent and Child Psychiatrist in San Jose, CA.)

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 City University School of Medicine, Yokohama, Japan.)

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.)

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. (Currently, Behavioral Medicine Scientist and Researcher at Wyle and NASA.)

2008-2017 Peter Savadjiev, Ph.D., Post-doctoral Research Fellow, then Instructor, and now Assistant Professor, Psychiatry Neuroimaging Laboratory, Department of Psychiatry, Brigham and Women’s Hospital, Harvard Medical School. Recipient of the *2009 MICCAI Young Scientist Award* for the best paper: <http://ubimon.doc.ic.ac.uk/MICCAI09/m773.html>).

Also recipient of a NARSAD Young Investigator Award (2015-2017), a prestigious award granted from the [Brain and Behavior Research Foundation](http://bbrfoundation.org/) (See also CV for publications.)

2008- Alexander P. Lin, Ph.D., Instructor and now Assistant Professor of Radiology, Center for Clinical Spectroscopy, and Psychiatry Neuroimaging Laboratory, Brigham and Women’s Hospital, Harvard Medical School. Recipient of the *BWH Biomedical Research Institute Clinical Research Excellence Award* (2011), and the *Harvard Medical School Young Mentor Award* (2014). He has also been supported by a Department of Defense Congressionally Directed Medical Research Program award, and is part of an NIA study

of Chronic Traumatic Encephalopathy as well as a Department of Defense Psychological health and Traumatic Brain Injury Research Program award for investigating Tau Imaging of Chronic Traumatic Encephalopathy. He has also completed an Innovations Award from the *Center for Integration of Medicine and Innovative Technology* (CIMIT) as well as completing a project funded by Siemens. Draper Laboratory funded him for a *University Research and Development Grant* and he received a *Harvard Catalyst Pilot Grant Award* entitled “Noninvasive Cerebral Glutamate Monitoring in Veterans with Traumatic Brain Injury.”

2009-2009 Inga Koerte, M.D., Visiting Research Fellow, Psychiatry Neuroimaging Laboratory,

(see also 2011-present) Department of Psychiatry, Brigham and Women’s Hospital, Harvard Medical School. Funded from Ludwig-Maximillian-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.)

2009-2010 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. (Currently, research, Mechanistic Systems Biology NMR Group, Singapore Bioimaging Consortium – Agency of Science Technology and Research, Singapore.)

2009-2011 Toshiaki 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. (Currently Associate Professor of Neuropsychiatry in the Department of Clinical Medicine, Kyushu University and Kyushu University Hospital, Fukuoika, Japan.)

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. (Currently Associate Professor and Department Chairperson, Department of Psychiatry, Bundang CHA

Medical Center, CHA University School of Medicine, and Director of Clinical Trials in CHA Bundang Medical Center, Yatap, Bundang, Seongnam, Kyounggi, Republic of 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.)

2009-2014 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 the Department of Psychiatry, Harvard Medical School. Funded

from the Department of Psychiatry, University of Tokyo, Tokyo, Japan. (See also Dr. Hosokawa’s CV for publications.) (Currently, Vice President of Tsuchida Hospital, affiliated Hospital of Tokyo University, Tokyo, Japan.)

2009-2015 Hesham Hamoda, M.D., Clinical Fellow in Psychiatry, Instructor, and now Assistant Professor, Children’s Hospital, Harvard Medical School, and Associate Research 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). Vice-President for the International Association for Child and Adolescent Psychiatry and Allied Professions (IACAPAP)

2009- Ofer Pasternak, Ph.D., Post-doctoral Research Fellow, then Instructor, and now Assistant Professor in Psychiatry and Radiology, and Director of Neuroscience Image Computing, 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, as well as from a *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. (Currently, in 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. (Currently, residency training program in Otorhinolaryngology, Ludwig-Maximillian-University, Munich, Germany.)

2010-2011 Christian Clemm Von Hohenberg, Visiting Research Fellow, Psychiatry Neuroimaging Laboratory, Department of Psychiatry, Brigham and Women’s Hospital, Harvard Medical School, Boston, MA. Medical Student funded from the University of Munich, Germany, through a scholarship awarded to only the top 1% of students, the studienstiftung des deutschen volkes. (Currently, Medical Student at the Ludwig-Maximillian-University, Munich, Germany.)

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. (Currently, Consultant, Department of Neuroradiology, Universitatsk Linikum Freiburg, Freiburg, Germany.

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). (Currently, Post-Doctoral Research Fellow, Brain Imaging Center, McLean Hospital, Belmont, MA.)

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.

2010-2013 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. (Currently, Assistant Professor and Senior Scientist at INRIA (Institute National de Recherche en Information at en Automatique), Sophia- Antipolis Mediterance, France.)

2011-2012 Yingying Tang, Ph.D., Visiting Research Fellow, Psychiatry Neuroimaging Laboratory,

(See also 2014) Department of Psychiatry, Brigham and Women’s Hospital, Harvard Medical School, Boston, MA. Visiting from Department of Biomedical Engineering Shanghai Jio Tong University, Shanghai, China, where she is currently Associate Professor.

2011-2012 Calegero Montedoro, medical and Ph.D. school candidate, Université Catholique de Louvain School of Medicine, Louvain-la-Neuve, Belgium. (Currently, research Psychological Sciences Research Institute, Université Catholique de Louvain School of Medicine.)

2011-2015 Julie Stamm, Pre-Doctoral Student, Boston University School of Medicine, Anatomy and Neurobiology Ph.D. Program. She received her PhD in 2015. She was supported, in part, by a *F31 Ruth L. Krischstein National Research Service Award for Individual Pre- Doctoral Students* (F31NS 081957), entitled: “Frontal Lobe Neuroimaging as a Biomarker of Chronic Traumatic Encephalopathy.” (See publications in CV.) (Currently, Post-Doctoral Fellow in the Department of Radiology, School of Medicine and Public Health, University of Wisconsin Hospital and Clinics, Madison, Wisconsin.)

2011- Inga Koerte, M.D. Visiting Lecturer, and then Visiting Professor, and Senior Research Associate in the Psychiatry Neuroimaging Laboratory, Department of Psychiatry, Brigham and Women’s Hospital, Harvard Medical School, from Ludwig-Maximillian-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* (2011-2013); *Deutsche Gesellschaft für Neuroradiologie, Germany, Marc-Dünzl-Prize, Young Investigator Award* (2011); *Deutscher Akademi Scher Austaushdierst, 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). Currently she is also Professor of Neurobiological Research, Child and Adolescent Psychiatry, Ludwig-Maximillian-University of Munich, Munich German (2014).

2011-2016 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 one of his Co-Mentors.

2011- Kaloyan Tanev, M.D., Assistant Psychiatrist in Psychiatry, Massachusetts General Hospital, and Instructor, Harvard Medical School. Received a K23 MH 097844 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. (Currently, Professor in Computer Science and Engineering, Henana University, China.)

2012-2013 William Panenka M.D., M.Sc., FRCPS (Neurology and Psychiatry), 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 was in the PNL to learn more about traumatic brain injury (TBI) and more sophisticated MRI techniques that are useful in understanding TBI. (Currently Assistant Professor, University of British Columbia, Canada, Member British Columbia Provincial Neuropsychiatry Program.)

2013-2013 Elįf 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 Guthenburg, Guthenburg, Sweden.

2013-2013 Beth Ripley, M.D., Ph.D. Research Fellow in the Psychiatry Neuroimaging Laboratory, Departments 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.

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. (Currently, Medical Director, Department of Psychiatry, Toshima Hospital, Japan.)

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.

2013-2014 Ahmed Maklouf, M.D, Observership in the Psychiatry Neuroimaging Laboratory, Departments of Psychiatry and Department of Radiology, Brigham and Women’s Hospital, Harvard Medical School (graduate from Ain Shams Medical school in Cairo, Egypt).

2013- Elisabetta Del Re, Ph.D., Assistant Professor in Psychiatry, Harvard Medical School, VA Boston Healthcare System and the Psychiatry Neuroimaging Laboratory, Brigham and Women’s Hospital.

2014-2014 Marc Muehlmann, M.D. Post-doctoral Research Fellow in the Psychiatry Neuroimaging Laboratory, Departments of Psychiatry and Radiology, Brigham and Women’s Hospital, Harvard Medical School. Received his M.D. from Ludwig-Maximillian University, Munich, Germany, in 2014. (Currently, in the Residency Training Program in Radiology at the Ludwig-Maximilian University of Munich, Munich, Germany.)

2014-2015 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 Jio Tong University, Shanghai, China, where she is currently Associate Professor.

2014- Ann Shinn, M.D., Assistant Professor, Department of Psychiatry, McLean Hospital, and Co-Medical Director, McLean On Tract (first episode program), and Director of Clinical Research, Schizophrenia and Bipolar Disorder Research Program. Joined the Psychiatry Neuroimaging Laboratory to learn diffusion tensor imaging as part of her K23 NIMH award (2014-2019), entitled “Auditory, Speech, and Cognitive Networks in Hallucinators

Across the Psychosis Spectrum”, Co-Mentors: Drs. Dost Ongur, Martha Shenton, John Gabrieli, and Randy Buckner. Awards and honors include: 2009-2011 Clinical Investigator Training Program, Harvard/MIT Health Science and Technology; 2009-2012 Dupont-Warren Fellowship; 2009-2012 APRIE/Lilly Psychiatric Research Fellowship: 2011-2012 Eleanor and Miles Shore Harvard Medical School Fellowship; 2011-2012 NARSAD Young Investigator Award; 2012-2014 T32 Stuart T. Hauser Training Program in Biological & Social Psychiatry.

2014- Amanda Lyall, Ph.D., Post-Doctoral Research Fellow, and then Instructor, Psychiatry Neuroimaging Laboratory, Department of Psychiatry, Brigham and Women’s Hospital and Harvard Medical School. Funding from 2014-2016 from the Stuart T. Hauser Training Program in Biological & Social Psychiatry; 2016-2017 Peter B. Livingston Fellowship Award; 2017 World Federation of Society of Biological Psychiatry (WFSBP) Young Investigator Award to attend the 13th World Congress of Biological Psychiatry, Copenhagen, Denmark; 2017 Young Investigator Best Poster Award, 13th World Congress of Biological Psychiatry, Copenhagen, Denmark; 2017 American College of Neuropsychopharmacology (ACNP) Travel Awardee.

2015-2015 Marucela Juana Uscarmayta Avyar, B.A., Research Trainee in the Psychiatry Neuroimaging Laboratory, Department of Psychiatry, Brigham and Women’s Hospital, Harvard Medical School, Boston MA. Supported through a Master’s Degree program in Medical Sciences & Clinical & Translational Research Concentration in Neuropsychiatry and Behavioral Disorders in First Nations, a Multidisciplinary Training Program sponsored by Fogarty International Research Awards, University of South Florida (PI: Dr. Gabriel de Erausquin).

2015-2016 Christopher LePage, Research Fellow, Psychiatry Neuroimaging Laboratory, Department of Psychiatry, Brigham and Women’s Hospital, Harvard Medical School, Boston, MA. PhD candidate in the PhD Program in Psychology at the University of Ottawa, Canada. Training in neuropsychology with experience in brain trauma injury, rehabilitation, and brain imaging. Funded from the Canadian government to work on image processing in mild TBI.

2016-2016 Juan Toranzo, B.A., Research Trainee in the Psychiatry Neuroimaging Laboratory, Department of Psychiatry, Brigham and Women’s Hospital, Harvard Medical School, Boston MA. Supported through a Master’s Degree program in Medical Sciences & Clinical & Translational Research Concentration in Neuropsychiatry and Behavioral Disorders in First Nations, a Multidisciplinary Training Program sponsored by Fogarty International Research Awards, University of South Florida (PI: Dr. Gabriel de Erausquin).

2015-2017 Jung Sun Lee, M.D., Ph.D., Visiting Assistant Professor, Department of Psychiatry, Psychiatry Neuroimaging Laboratory. From the University of Ulsan College of Medicine, Asan Medical Center, Seoul, Republic of Korea.

2016-2018 Jeffrey Guenette, M.D. Research Fellow, Department of Psychiatry, Psychiatry Neuroimaging Laboratory and Harvard Medical School. Diagnostic Radiology Resident at Brigham and Women’s Hospital, Diagnostic Radiology Residency Clinician-Scientist Research Pathway program.

2016-2017 Li Yin, M.D., Ph.D., Visiting Assistant Professor, Department of Psychiatry, Psychiatry Neuroimaging Laboratory. From West China Hospital of Sichuan University; received an award to perform research here from West China Hospital.

2016- Sinead Kelly, Ph.D. Post-doctoral Research Fellow, and now Instructor in the Department of Psychiatry, Psychiatry Neuroimaging Laboratory and Harvard Medical School. From the Trinity College Dublin, Ireland.

2016- Guusje Collins, M.D., Ph.D. Post-doctoral Research Fellow, Department of Psychiatry, Psychiatry Neuroimaging Laboratory and Harvar Medical School. Marie Curie Global Fellowship from the European Commission (Grant no. 749201) to come to the US from the Department of Psychiatry, University of Utrecht School of Medicine, Utrecht, The Netherlands.

2016-2017 Huang Huan, M.D. Pre-doctoral Research Fellow, Department of Psychiatry, Psychiatry Neuroimaging Laboratory and Harvard Medical School. From School of Medicine at Shanghai Jio Ton University where she is currently a Ph.D. candidate in Psychiatry.

2016-2017 Ana Maria Rivas-Grajales, M.D., M.Sc. Post-doctoral Research Fellow, Department of Psychiatry, Massachusetts General Hospital and Psychiatry Neuroimaging Laboratory Brigham and Women’s Hospital and Harvard Medical School. Her degrees are from the Universidad del Valle, Colombia. She is a fellow in the International Research Institute.

2017-2017 Itatí Branca, B.S. National University of Córdoba, Argentina,and Research Trainee in the Psychiatry Neuroimaging Laboratory, Department of Psychiatry, Brigham and Women’s Hospital, Harvard Medical School, Boston MA. Supported through a Master’s Degree program in Medical Sciences & Clinical & Translational Research Concentration in Neuropsychiatry and Behavioral Disorders in First Nations, a Multidisciplinary Training Program sponsored by Fogarty International Research Awards, University of South Florida (PI: Dr. Gabriel de Erausquin).

2018-2018 Ana Gareca Arizaga, M.S., Research Trainee in the Psychiatry Neuroimaging Laboratory, Department of Psychiatry, Brigham and Women’s Hospital, Harvard Medical School, Boston MA. Supported through a Master’s Degree program in Medical Sciences & Clinical & Translational Research Concentration in Neuropsychiatry and Behavioral Disorders in First Nations, a Multidisciplinary Training Program sponsored by Fogarty International Research Awards, University of South Florida (PI: Dr. Gabriel de Erausquin).

2018- Elena Bonke, Research Trainee in the Psychiatry Neuroimaging Laboratory, Department of Psychiatry, Brigham and Women’s Hospital, Harvard Medical School, Boston, MA. Scholarship from the Univeristy of Paderborn, Germany where she is a Master’s degree student. She will work with Drs. Inga Koerte and Martha Shenton.

2018-2019 Tamires Aravjo Zanao, Research Trainee in the Psychiatry Neuroimaging Laboratory, Department of Psychiatry, Brigham and Women’s Hospital, Harvard Medical School, Boston, MA. PhD candidate at the University of Campinas, San Paulo, Brazil. Supported by the San Paulo Research Foundation.

2019-2019 Ana Pinheiro, Ph.D., Visiting Assistant Professor Psychiatry Neuroimaging Laboratory, Department of Psychiatry, Brigham and Women’s Hospital, Harvard Medical School, Boston, MA. Fulbright Scholar from the Faculty of University of Lisbon, Lisbon, Portugal.

*Examiner of Thesis*

2015 Aleksandra Klimova, Graduate Student in the Ph.D. program in School of Psychology, Faculty of Sciences, The University of New South Wales, Sydney, Australia, April, 2015. Thesis, “Brain White Matter in the Context of Traumatic Stress: A Diffusion Tensor Imaging Study.”

*Thesis Supervision of Graduate Students*

2012-2015Julie Stamm, Graduate Student in the Anatomy and Neurobiology Ph.D. Program, Boston University Medical School, Thesis “The effects of age of first exposure to repeated head impacts through tackle football on later-life white matter structural integrity on neurobehavioral function.”

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”.

2017- Sean Tobyn, Graduate Student in Ph.D. Program in the Department of Psychological and Brain Science, Boston University, Thesis “Mapping sensory-biased cognition across prefrontal cortex: Cognitive control, attention, and repetitive head injury.”

*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.) 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 was published in *Schizophrenia Research* (2001), where Janos was first author. As a medical school at Mount Sinai, he received a *Howard Hughs 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 theUniversity 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”. This thesis was awarded *Magna plus cum laude*. Paper recently submitted and accepted (2015) to *Schizophrenia Bulletin* for publication.

2013-2014 Wendy Melissa Coronado, Class of 2014, Neurobiology Major, Department of Neurobiology and Neuroscience, Harvard College. Senior Honors Thesis: “Role of the hypothalamus in schizophrenia.” This thesis was awarded *Magna cum laude*.

*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

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.

2012-2015 Jonathan Duskin, Boston University, Class of 2015, independent study.

2013-2014 Marcia Frimpong, Wellesley College, Class of 2015, independent study.

2013-2014 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 School, Boston, MA, 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, and now Associate 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 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, Pittsburg, 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 2002-2003 Sara Rabbit

1985-1986 Ruth Ballinger 2002-2004 Daniel Schwartz

1985-1986 Melanie Cane 2002-2004 Meredith Klump

1986-1989 Brian Marcy 2002-2004 Rachel Berman

1988-1989 Amy Ludwig 2002-2004 Rachel Berman

1988-1990 Virginia Penhune 2002-2004 Sunny Kim

1989-1990 Erik Mondrow 2002-2005 Lisa Lucia

1990-1992 Seth Pollak 2003-2004 Aaron Baer

1991-1992 R. Scott Smith 2003-2004 Sophie Woolston

1991-1993 Mathew Kimble 2003-2005 Katherine Long

1992-1993 Lloyd Smith 2003-2005 Erin Connor

1992-1993 I-han Chou 2003-2005 Matthew Koskowski

1992-1993 Lisa Kaplan 2003-2005 Kankshi Thakur

1993-1994 Sue Law 2004-2006 Courtney Brown

1993-1995 Jonathan Solinger 2004-2006 Adam Cohen

1993-1996 Andrea Sherwood 2004-2006 Laura Rosnow

1994-1996 Maria Karapelou 2004-2006 Georgia Bushell

1994-1996 Jay Allard 2004-2006 Mark Dreusicke

1995-1996 Robert Donnino 2004-2006 Elizabeth Lewis

1995-1996 Richard Van Rhoads 2005-2006 Lillian Hsu

1995-1996 Sarah Carrigan 2005-2008 Douglas Markant

1995-1997 Paola Mazzoni 2006-2008 Usman Khan

1995-2000 Iris Fischer 2006-2012 Katherine Smith

1996-1997 Sare Akdag 2006-2008 Charles Davidson

1996-2001 Engeat Teh 2006-2010 Jorge Alvarado

1996-1998 Creola Petrescu 2007-2010 Laurel Bobrow

1996-1998 Tanya Kisler 2008-2010 Douglas Terry

1996-1998 Joanna Gainski 2008-2010 Andrew Rausch

1997-1998 Claire Stylianopoulos 2008-2010 Andrew Rausch

1997-2000 Deirdre Farrell 2008-2012 Paula Pelavin

1998-1999 Stephanie Fraone 2008-2013 Padmapriya Srinivasan

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 Allen2010-2014 Talis Swisher

1999-2001 Eric Berry 2012-2014 Kathryn Green

1999-2001 Carlye Griggs 2012-2014 Michelle Giwerc

2000-2001 Lynn Stravinski 2012-2014 Brian Dahlben

2000-2001 Elizabeth David 2012-2014 Eli Fredman

2000-2002 Anita Madan 2013-2014 Charles Yergatian

2000-2002 Sarah Toner 2014-2015 Anni Zhu

2001-2002 Jessica Allen 2014-2016 Laura Levin

2001-2002 Megan Fagan 2014-2016 Dominick Newell

2001-2002 Valerie Rosenberg 2014-2015 Katherine O’Neal

2001-2003 Magdelena Spencer 2015-2016 Xue Gong

2001-2004 Susan Demeo 2015-2018 Sarina Karmacharya

2001-2003 Hal Ersner-Hershfield 2015-2018 Valerie Sydnor

2001-2003 Nicola Sumorok 2016-2018 Nathanial Somes 2002-2003 Laura Wiegand 2016-2018 Sophia Swago

2016- Benjamin Reid

2018- Joshua Goldenberg

2018- Monica Lyons

2018- Annelise Silva

2018- Elizabeth Rizzoni

*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 more than 140 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.

*Year Student Preceptor(s)*

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 E. 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 E. 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 E. 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 Maniscalo 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.

Josh 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 E. Shenton, Ph.D.

Michael Niznikiewicz Kevin Spencer, Ph.D.

Dovid Greene Chandlee Dickey, M.D.

Charles Kochan, III Judith Ford, Ph.D.

Katrik Sreenvasan 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 Sureshbabu Dean Salisbury, Ph.D.

2005 Alexa Irish Martha E. Shenton, Ph.D.

Michael Niznikiewicz Paul Nestor, Ph.D.

*Summer Research Internships, and Research Internships, following end of Stanley Fellowships*

2005 Christopher Webber Martha E. Shenton, Ph.D. (Minority supplement to R01)

Anjuli Singh Chandlee Dickey, M.D. (Undergraduate Student, Tufts University.)

2006 James Fish Martha E. Shenton, Ph.D./KhangUk Lee, M.D.

(High School Student, Cambridge Ridge and Latin, and the Program Success, HMS)

Matthew Isabel Martha E. Shenton, Ph.D. (High School Student, Brooks School, Andover, MA, Class of 2007)

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 Student, Tufts University, Class of 2008)

Jonathan Hendrickson Marek Kubicki, M.D., Ph.D./Martha E. Shenton, Ph.D.

(High School Student, Brooks School, Andover, MA, Class of 2008)

Jacqueline Goldberg James Levitt, M.D./Martha E. Shenton, Ph.D. (Medical

Student, Upstate Medical University College of

Medicine, Class of 2010)

Morgan Circa James Levitt, M.D./Martha E. Shenton, Ph.D.

(Undergraduate Student, West Virginia University, Class of 2009)

John Chakerian Chandlee Dickey, M.D./Martha E. Shenton, Ph.D.

(Undergraduate Student, Stanford University, Class of 2010)

Melissa Mendoza Martha E. Shenton, Ph.D. (High School Student, Windsor School, and

the Human Resources Summer Internship Program, BWH, Class

of 2010)

Francois Budin Sylvain Bouix, Ph.D. (Masters Thesis Student, M.Eng., Computer

Science and Engineering, University of Lyon, France)

2008 Rebecca King Thomas Whitford, Ph.D. (Undergraduate Student, University of Rochester, Rochester, NY, Class of 2010)

Michelle Chiu Zora Kikinis, Ph.D. (High School Student, Brooks School, Andover, MA, Class of 2009)

Eric Melonoka Sylvain Bouix, Ph.D. and Marek Kubicki, M.D., Ph.D. (Undergraduate Student, Brigham Young University)

Jalpa Patel Sylvain Bouix, Ph.D. (Masters Thesis Student, Wayne State University)

James Malcolm Yogesth Rathi, Ph.D. (3rd year Graduate Student in Computer Science

and Electrical Engineering, Georgia Tech)

2009 Rebecca King Thomas Whitford, Ph.D. (Undergraduate Student, University of

Rochester, Rochester, NY, Class of 2010)

Eric Melonokas Sylvain Bouix, Ph.D. and Marek Kubicki, M.D., Ph.D.

(Undergraduate Student, Brigham Young University, Class of 2010)

Priyanka Chilakamarri Jason Schneiderman, Ph.D. (Undergraduate Student, Brandeis

University, Class of 2011)

Sam Burnim Zora Kikinis, Ph.D. (High School Student, The Brooks School, Andover, MA, Class of 2010)

Tali Swisher Thomas Whitford, Ph.D. and Marek Kubicki, M.D., Ph.D.

(Undergraduate Student, Vassar College, Class of 2010)

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, Class of 2008)

Khalima Bolden Martha E. Shenton, Ph.D. and Jason Schneiderman, Ph.D.

(Master’s Thesis Student, Boston University, Department of Psychology, Class of 2010)

2010 Khalima Bolden Martha E. Shenton, Ph.D. and Jason Schneiderman, Ph.D.

(Master’s Thesis Student, Boston University, Department of Psychology, Class of 2010)

Priyanka Chilakamarri Jason Schneiderman, Ph.D. (Undergraduate Student, Brandeis University, Class of 2011)

Andrew Hyatt Zora Kikinis, Ph.D. (Undergraduate Student, Middlebury College, Class of 2012)

Jacob Besen Thomas Whitford, Ph.D. (High School Student, Brooks School, Andover, MA, Class of 2011)

Edward Vargas Sylvain Bouix, Ph.D. (High School Student, Herricks Senior High

School, Class of 2011) (via MIT-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, Class of 2011)

Junhee Lee Sang-Hyuk Lee, M.D., Ph.D. (Medical Student, Seoul National

University College of Medicine, South Korea, Class of 2011)

2011 Jennifer Anderson Marek Kubicki, M.D, Ph.D. (Undergraduate Student, Emmanuel College, Class of 2011)

David King Sylvain Bouix, Ph.D. (Undergraduate Student, University of Rochester, Class of 2014)

Andre Michalowski Marek Kubicki, M.D., Ph.D. (Undergraduate Student, University of

Massachusetts, at Amherst, Class of 2014)

Danielle Pulton Jennifer Fitzsimmons, M.D. (Undergraduate Student, Brandeis University, Class of 2012)

Mariana Shirokova Jim Levitt, M.D. (Undergraduate University of Massachusetts, at

Amherst, Class of 2013)

Felipe Hernandez Sylvain Bouix, Ph.D. (High School Student, Louisiana School for Math, Science, and the Arts, Class of 2012) (via MIT-Research Science Institute)

Shizhi (Simon) Liang Zora Kikinis, Ph.D. (High School Student, Brooks School, Andover, MA, Class of 2012)

Jean Alper Mai-Anh Vu and James Levitt, M.D. (Undergraduate Student, Emmanual College, Class of 2012)

Christian Baumgartner Yogesh Rathi, Ph.D. (Master’s Thesis Student ETH, Zurich, Switzerland, Class of 2012)

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, 2013)

Jessica Zuo Martha E. Shenton, Ph.D./Marek Kubicki, M.D., Ph.D. (Undergraduate Student, Honor’s Thesis Student, Harvard College, Class of 2013)

Neil Houston James Levitt, M.D. (Roanoke College, B.A., post-bac)

2012 Jessica Zuo Martha E. Shenton, Ph.D./Marek Kubicki, M.D., Ph.D. (Undergraduate, Senior Honor’s Thesis Student, Harvard College, Class of 2013)

Marc Muehlmann Inga Koerte, M.D. (Medical Student, Ludwig-Maximillian- University, Munich, Germany, Class of 2013)

David Kaufmann Inga Koerte, M.D. (Medical Student, Ludwig-Maximillian- University, Munich, Germany, Class of 2012)

Elizabeth Hartl Inga Koerte, M.D. (Medical Student, Ludwig-Maximillian- University, Munich, Germany, Class of 2012)

Andre Michalowski Marek Kubicki, M.D., Ph.D. (Undergraduate Student,

University of Massachusetts, at Amherst, Class of 2014)

Chandler Dunn Zora Kikinis, Ph.D., and Jennifer Fitzsimmons, M.D. (High School Student, Brooks School, Andover, MA, Class of 2013)

Sindy Tan Sylvain Bouix, Ph.D. (High School Student, Hunter College High School, Class of 2013)(via Research Science Institute-MIT)

Mucahid Sarisoy James Levitt (Medical Student, Marmara University, School of Medicine, Istanbul, Turkey, Class of 2015)

Yilmaz Satirer Jennifer Fitzsimmons and Martha E. Shenton (Medical Student, Hacettepe University School of Medicine, Ankara, Turkey; 621 rank out of 1.8 million for university entrance exam, Class of 2014)

Hitomi Takahashi Taiga Hosokawa, M.D., Ph.D. (Simmons College, A.B., Class of 2012, magna cum laude)

Nora Karara Inga Koerte, M.D. (Medical Student, University of Bonn, Germany, Class of 2014)

Kang-Ik Cho Martha E. 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, Class of 2013)

Jonathan Duskin Martha E. Shenton, Ph.D., Ofer Pasternak, Ph.D. (Undergraduate in Neuroscience and Philosophy, internship/course credit from Boston University, Class of 2015)

Khatab Yacoub Martha E. Shenton, Ph.D., Brian Dahlben, M.S., Marek Kubicki, M.D., Ph.D. (Post-BA University of Texas)

Nitika Anand Martha E. Shenton, Ph.D. (Undergraduate Student, Brandeis University, Class of 2013)

2013 Michael Mayinger Inga Koerte, M.D. (Medical Student, Ludwig-Maximillian-

University, Munich, Germany, Class of 2014)

Jonathan Duskin Ofer Pasternak, Ph.D., Martha E. Shenton, Ph.D. (Undergraduate in Neuroscience and Philosophy, internship/course credit from Boston University, Class of 2015)

Tommy Tang Zora Kikinis, Ph.D. (High School Student, Brooks School, Andover, MA, Class of 2014)

Anni Zhu Zora Kikinis, Ph.D. (Graduated Franklin and Marshall College, Class of 2013)

Elif Gurdeniz Inga Koerte, M.D. (Medical Student, Cerrahpasa Medical Faculty, Istanbul, Turkey, Class of 2014)

Pedro Rosa Martha E. Shenton, Ph.D. (Medical Student, Sao Paulo Medical School, San Paulo, Brazil, Class of 2014)

Phoebe Cai Sylvain Bouix, Ph.D. (High School Student, Long Island, NY, Class of 2014) (via MIT-Research Science Institute)

Halen Baker Marek Kubicki, M.D., Ph.D. (Undergraduate Student, Boston University, Class of 2014)

Marcia Frimpong Martha E. Shenton, Ph.D. (Undergraduate Student, Wellesley College Class of 2015)

Melissa Coronado Martha E. Shenton, Ph.D., Marek Kubicki, M.D., Ph.D. (Undergraduate Student, Senior Honor’s Thesis Student, Harvard College, Class of 2014)

Caroline Loy Zora Kikinis, Ph.D. (Undergraduate Student, Cornell University, Class of 2015)

Daniel Daniluk Marek Kubicki, M.D., Ph.D. (Undergraduate Student, UMASS, at Amherst, Class of 2015)

Marc Muehlmann Inga Koerte, M.D. (Medical Student Ludwig-Maximillian-University, Munich, Germany, Class of 2013)

Julie Stamm Inga Koerte, M.D., and Martha E. Shenton, Ph.D. (Ph.D. candidate at Boston University School of Medicine, Class of 2015)

2014 Halen Baker Zora Kikinis, Ph.D. (Undergraduate Student, Boston University, Class of 2014)

Jonathan Duskin Ofer Pasternak, Ph.D. (undergraduate in Neuroscience and Philosophy, internship/course credit from Boston University; received a Howard Hughs Medical Institute –HHMI- Summer Lab Experience Summer Stipend, Class of 2015)

Daniel Daniluk Marek Kubicki, M.D., Ph.D. (Undergraduate Student, UMASS, at Amherst, Class of 2015)

Carissa Tuozzo Marek Kubicki, M.D., Ph.D., Amanda Lyall, Ph.D. (Undergraduate Student, Emmanual College, Class of 2016)

Julie Stamm Inga Koerte, M.D., Martha E. Shenton, Ph.D. (Ph.D. candidate at Boston University School of Medicine, Class of 2015)

Marcia Frimpong Martha E. Shenton, Ph.D. (Undergraduate Student, Wellesley College Class of 2015)

Sophi LeRoux Sylvain Bouix, Ph.D. (Master’s Thesis Student, Université Paris-EST Créteil, Advanced Institute of Biosciences of Paris (ISBS), Class of 2015)

Ahmed Maklouf Hesham Hamoda, M.D. (Graduate from Ain Shams Medical School in Cairo, Egypt)

Jakob Hufschmidt Inga Koerte, M.D. (Medical Student, University of Munich, Germany)

Anna Willems Inga Koerte, M.D. (Medical Student, University of Munich, Germany, Scholarship from Cusanus Werk, Germany)

Marc Muehlmann Inga Koerte, M.D. (Medical Student Ludwig-Maximillian-University, Munich, Germany, Class of 2013)

Irem Durgan Ofer Pasternak, Ph.D. (6th Year Medical Student, Istanbul University Turkey)

Elan Baskir Jennifer Fitzsimmons, M.D. (Undergraduate Student, Washington University, Class of 2015)

Isobel Green Inga Koerte, M.D. and Martha E Shenton, Ph.D. (Undergraduate, Harvard University, Class of 2017; Award of Excellence from the National Collegiate Research Conference for poster presentation entitled, “A study of resting and reaching: Investigating the neural signature of developmental dyslexia through resting-state fMRI analysis)

Analiese Fernandes Inga Koerte, M.D. (High School Student, Brooks School, Andover MA, Class of 2015)

Seiji Engelkemier Zora Kikinis, Ph.D. (High School Student, Brooks School, Andover, MA, Class of 2015)

Esmanur Demir Jennifer Fitzsimmons, M.D. (Medical Student, Trakya University School of Medicine, Edime Turkey, Class of 2017)

Madhura Baxi Marek Kubicki, M.D., Ph.D. and Yogesh Rathi, Ph.D. (Master’s Thesis Student, Auburn University, Class of 2015)

Agata Staszalis Marek Kubicki, M.D., Ph.D, Ofer Pasternak, Ph.D. (Master’s Thesis Student in the Masters Degree Program in Computer Science, Lodz University of Technology, Class of 2016)

Yusra Yildrim Peter Savadjiev, Ph.D., Inga Koerte (Medical Student, Şifa University School of Medicine, Class of 2017)

Jenny Wang Sylvain Bouix, Ph.D. (High School Student in North Carolina School

Science and Mathematics, Class of 2015)(via MIT-Research Science

Institute)

Esra Dursun Inga Koerte, M.D., Zora Kikinis, Ph.D. (Medical Student, Marmara University School of Medicine, Istanbul, Turkey, Class of 2018)

Timothy Gebhard Inga Koerte, M.D., Sylvain Bouix, Ph.D. (Undergraduate Student, Karlsruhe Institute of Technology, Class of 2015)

Sung-Jae Lee Martha E. Shenton, Ph.D. (Resident in Psychiatry, Class of 2015,

Bundang CHA Medical Center, CHA University School of Medicine,

Gyeongghi-Do, South Korea)

2015 Jonathan Duskin Ofer Pasternak, Ph.D. (undergraduate in Neuroscience and Philosophy, internship/course credit from Boston University; received a Howard Hughs Medical Institute –HHMI- Summer Lab Experience Summer Stipend, Class of 2015)

Madhura Baxi Marek Kubicki, M.D., Ph.D., Yogesh Rathi, Ph.D. (Master’s Thesis Student, Auburn University, Class of 2015)

Isobel Green Inga Koerte, M.D. and Martha E Shenton, Ph.D. (Undergraduate, Harvard University, Class of 2017; Award of Excellence from the National Collegiate Research Conference for poster presentation entitled, “A study of resting and reaching: Investigating the neural

signature of developmental dyslexia through resting-state fMRI analysis)

Carissa Tuozzo Amanda Lyall (Undergraduate Student, Emmanual College, Class of

2016)

Julie Stamm Inga Koerte, M.D., and Martha E. Shenton, Ph.D. (Ph.D. candidate at Boston University School of Medicine, Class of 2015)

Bryan Berube Inga Koerte, M.D. (Undergraduate Student, Boston University, Class of 2017)

Özge Sönmez Elisabetta Del Re Ph.D. (Medical Student, Istanbul University, Istanbul,

Turkey, Class of 2020)

Mine Merve Yilmaz Elisabetta Del Re, Ph.D. (Medical Student, Hacettepe University,

Ankara, Turkey, Class of 2015)

Gül Fatma Çinar Elisabetta Del Re, Ph.D. (Medical Student, Şifa University, Izmir,

Turkey, Class of 2019)

Anastasiya Melnychuk Amanda Lyall, Ph.D. (Medical Student, Şifa University, Izmir, Turkey,

Class of 2019)

Bëtul Nuraltuntaș Amanda Lyall, Ph.D. (Medical Student, Hacettepe University, Ankara,

Turkey, Class of 2015)

Mana Shams Sylvain Bouix, Ph.D. (High School Student, Per Brahegymnasiet,

Sweden, Class of 2015) (via MIT-Research Science Institute)

Justin Pezzuto Ofer Pasternak, Ph.D. (Harvard University Extension School, Master’s

Thesis Student, Class of 2016)

Côme Carquex Yogesh Rathi, Ph.D. (Master’s Thesis Student INSA, Lyon France,

Class of 2015)

Natalia Chunga-Iturry Marek Kubicki, Ph.D. (Medical Student, UNMSM, Lima Peru, Class of

2015)

Trisa Bhatia Zora Kikinis, Ph.D. (High School Graduate, will be an Undergraduate

Student, Boston University, Class of 2019)

Michael Flanagan Pawel Wrobel (High School Student, Brooks School, Andover, MA,

Class of 2016)

2016 Carissa Tuozzo Amanda Lyall, Ph.D. (Undergraduate Student, Emmanual College, Class of 2016)

Pranav Upadhyayula Lipeng Ning, Ph.D. (Research Science Institute (RSI) Summer Program

at MIT, RSI Scholar Award; High School Student at Illinois

Mathematics and Science Academy, Class of 2017)

Nicole Bramlitt Inga Koerte, M.D. (Harvard Summer School Program; High School student at Exeter High School, Class of 2017)

Sarah Palmer Zora Kikinis, Ph.D. (Harvard Summer School Program; High School Student at Brooks High School, Class of 2017)

Daniel Yaeer Koskas Nikos Makris, M.D., Ph.D. (High School student at Needham High School, Class of 2018)

Anastasia Haidar Elisabetta del Re, Ph.D. (High School student at Newton South High School, Class of 2017)

Brett Jennings Inga Koerte, M.D. (Proctor for Harvard Summer School Program, undergraduate in Human Evolutionary Biology, Harvard College, Class of 2019)

Henry Dumke Amanda Lyall, Ph.D. (undergraduate in Biology, Boston College; received an Eagle Intern Fellowship Program Stipend from Boston College, Class of 2017)

Andrew Marin Nikos Makris, M.D., Ph.D. (undergraduate in Neuroscience, Bowdoin College, Class of 2019)

Zachary Fitzgerald Amanda Lyall, Ph.D. (Medical Student at University of Washington School of Medicine, Class of 2019)

Salvatore Lacava Sylvain Bouix, Ph.D. (Master’s Student in Cognitive Neuroscience, University of Trento, Italy; received an Armenise Fellowship from the Harvard-Armenise Summer Program)

Madhura Baxi Marek Kubicki, M.D., Ph.D. and Yogesh Rathi, Ph.D. (Graduate student in Computational Neuroscience at Boston University)

Mehmet Akif Camkurt Elisabetta del Re, Ph.D. (Psychiatrist at Afsin State Hospital, Turkey)

Vivian Schultz Inga Koerte, M.D. (Medical Student at Albert-Ludwigs-University, Freiburg, Germany, Class of 2019)

Petra Viher Marek Kubicki, M.D., Ph.D. (Graduate School of Health Sciences- Neuroscience, University of Bern, Switzerland, Class of 2017; received an Award to perform research here from the Swiss National Science Foundation)

Lily Charron Zora Kikinis, Ph.D. (High School Student at Windsor High School, Class of 2017)

Milean Quinci Amanda Lyall, Ph.D. (College Student, Emmanual College, Class of 2017)

2017 Anastasia Haidar Elisabetta del Re, Ph.D. (High School student at Newton South High School, Class of 2017)

Daniel Yaeer Koskas Nikos Makris, M.D., Ph.D. (High School student at Needham High School, Class of 2018)

Lily Charron Zora Kikinis, Ph.D. (High School student at Windsor High School, Class of 2017)

Vidushi Somani Yogesh Rathi, Ph.D. (High School student at Lynbrook High School, Class of 2018)

Melany Blanco Elisabetta del Re, Ph.D. (High School student at Brooks High School, Class of 2018)

Abigail Lomibao Inga Koerte, M.D. (Harvard Summer School Program “Becoming a Brain Scientist;” High School student at Downtown Magnets High School, Class of 2018)

Utkarsh Tandon Lipeng Ning, Ph.D. (Research Science Institute –RSI- Summer Program at MIT, RSI Scholar Award; High School student at Cupertino High School, Class of 2018)

Andrew Marin Nikos Makris, M.D., Ph.D. (Undergraduate in Neuroscience, Bowdoin College, Class of 2019)

Milena Quinci Amanda Lyall, Ph.D. (Undergraduate in Psychology, Emmanuel College, Class of 2017)

Olivia Novins Amanda Lyall, Ph.D. (Undergraduate, University of Pennsylvania, Class of 2020)

Ankita Dev Suheyla Cetin Karayumak, Ph.D. (Undergraduate, Brigham Young University, Class of 2019)

Joanna Davis Sylvain Bouix, Ph.D. (Undergraduate in Biomedical Engineering, Cornell University, Class of 2019)

James Robertson Amanda Lyall, Ph.D. (Undergraduate in Statistics, NC State University, Class of 2018)

Daniel Weber Marek Kubicki, Ph.D. (Undergraduate in Math, UMass Amherst, Class of 2019)

Rosanna Veggeberg Inga Koerte, M.D., Ph.D. (Master’s candidate in Clinical Investigation at the School of Medicine, Boston University)

Madhura Baxi, M.S.       Marek Kubicki, M.D., Ph.D. and Yogesh Rathi, Ph.D. (Graduate student in Computational Neuroscience at Boston University)

Eun Kyoung Kang, MD Ann K. Shinn, M.D., MPH. (Graduate student at CHA University Medical School, South Korea; Clinical Resident, Department of Psychiatry, CHA Bundang Medical Center, CHA University)

Felix Naegele Marek Kubicki, M.D., Ph.D. (Medical student and doctoral candidate at The University of Hamburg, Germany)

Phillipp Kinzel Inga Koerte, M.D., Ph.D. (Medical student at Ludwig-Maximilian- University of Munich, Munich, Germany)

Haley Lubeck Inga Koerte, M.D., Ph.D. (Master’s degree candidate, in Clinical and Cognitive Neuroscience, Maastricht University, The Netherlands)

Dana Fein-Schaffer Amanda Lyall, Ph.D. (Undergraduate at Wellesley College, Class of 2019)

Michael-Ange Moravia Inga Koerte, M.D., Ph.D. (High school student, New Mission High School, Class of 2019)

Linette Kwon Amanda Lyall, Ph.D. (Undergraduate at Wellesley College, Class of 2019)

Tim Wiegand Ofer Pasternak, Ph.D. (Undergraduate Ludwig-Maximilians University, Class of 2023)

2018 Linette Kwon Amanda Lyall, Ph.D. (Undergraduate at Wellesley College, Class of 2019)

Armanda Pereira Martha E. Shenton, Ph.D. (University of Minho, EPsi, GUIA, PhD Program in Psychology, Class of 2018)

Alexandra Stanford Amanda Lyall, Ph.D. (Undergrauate at Wellesley College, Class of 2019

Lirianna Valerio Zora Kikinis, Ph.D. (High School Student, Brooks School, Class of 2019)

Caroline Baggeroer Elisabetta Del Re, Ph.D. (Undergraduate, Syracuse University, Class of 2020)

Elisabeth Coffran Sinead Kelly, Ph.D. (Undergraduate, Boston College, Class of 2020)

Blake Andreou Marek Kubicki, M.D., Ph.D. (Undergraduate, Vanderbilt University, Class of 2019)

Meghan Tveit Inga Koerte, M.D., Ph.D. (Undergraduate, Harvard College, Clsss of 2020)

James Manning Ann Shinn, M.D. (Third Year Medical Student, University of Lees, West Yorkshire, England, Funded by EXSEL@Leeds)

Annabella Matheus Elisabetta Del Re, Ph.D. (Harvard Summer School Program “Becoming a Brain Scientist;” Huntington High School, Class of 2019)

Sebastian Endt Yogesh Rathi, Ph.D. (Master’s degree student, Class of 2018, from the Department of Radiology, University Hospital Erlangen, Germany)

Bengisu Solgun Suheyla Cetin Karayumak, Ph.D. (Scholarship: Medical Student, Hacettepe University Faculty of Medicine, Turkey, Class of 2022)

Anika Cheeria Lipeng Ning, Ph.D. (Research Science Institute (RSI) Summer Program at MIT, RSI Scholar, Award, High School Student, Monta Vista High School, Class of 2019)

Jung Moses Koo ??? (Third Year Medical Student, Imperioal College of London, England)

Donald Lyall Sinead Kelly, Ph.D. (Post-doctoral Student, University of Glasgow, SINAPSE Travel Grant)

**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 on “*Temporal Lobe Volume Reduction and Thought Disorder in Schizophrenia*,” at the Panel Group: “Models of Psychosis: Pathophysiology,” *32ndAnnual 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 *147thAnnual 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, *8thAnnual 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*,” *35thAnnual 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 of 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 Schizop*hrenia,” *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 Diso*rder,” *Biological Psychiatry*, Chicago, IL.

Paper presented on the “*Uncinate Fasciculus in Schizophrenia: A Diffusion Tensor Study*,” at *the 153nd Annual Meeting of the American Psychiatric Association*, Chicago, IL.

Paper presented on “*White Matter Abnormalities in Schizophrenia*,” at *the 153nd Annual*

*Meeting of the American Psychiatric Association*, Chicago, IL.

Paper presented on “*Schizophrenia: Progressive Prefrontal Gray Matter Changes*,” at *the 153nd*

*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 153nd 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, Talk entitled, “*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, entitled, “*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, entitled, “*P300 ERP and MRI Asymmetry in First Episode Schizophrenia*.” 2004 *International Congress of Biological Psychiatry*, February 13, 2004, Sydney, Australia.

Paper presented in Symposium, entitled, “*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 Co*urse,”

*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 Dysmorphogenesis 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*, entitled, “*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 Portugal de PsicoPedagogia*, University of Minho, Braga, Portugal. Talk: “*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. Talk, “*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. Talk, “*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 Medicine*, 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*.” *21stEuropean 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 (co-author), “*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 (co-author), “*Diagnosis of Diffuse Axonal Injury with Diffusion Tensor Imaging*,” *3rd Federal Interagency Conference on TBI*, Washington DC, 2011.

Oral presentation (co-author), “*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, Breakout 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 (co-author), “*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 Roentegen 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. March 10, 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.

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

2014 Oral presentation, TBI Neuroimaging Interim Progress Report, *Congressionally Designated Medical Research Program (CDMRP)*, “*Tau Imaging in Chronic Encephalopathy*,” Fort Detrick, Maryland, January 31, 2014.

Invited talk, “*Characterization of Acute Diffusion MRI Abnormalities following Concussion using a Joint Distribution Free-Water Imaging Normative Atlas*.” *International Brain Injury Association Tenth World Congress on Brain Injury (IBIA)*. March 2014. San Francisco, USA.

Invited Speaker (co-author), “*Identification of Atrophy, Excitotoxicity and Gliosis in the White Matter of Retired NFL Players*.” *International Brain Injury Association Tenth World Congress on Brain Injury (IBIA)*. March 2014. San Francisco, USA.

Invited Speaker (co-author), “*White matter microstructure and cortical thickness in former NFL players*.” *International Brain Injury Association Tenth World Congress on Brain Injury (IBIA)*. March 2014. San Francisco, USA.

Chair (Co-Chair with Dr. Robert Stern), Symposium on Chronic Traumatic Encephalopathy, “Advanced Neuroimaging in CE and Repetitive Concussive and Subconcussive Head Trauma” *International Brain Injury Association Tenth World Congress on Brain Injury (IBIA)*. March 2014. San Francisco, USA.

Invited Speaker (co-author), “*Regional Metabolite Profiles in Chronic Sports-Related Concussion*.” *International Brain Injury Association Tenth World Congress on Brain Injury (IBIA)*. March 2014. San Francisco, USA.

Invited Speaker, “*Diffusion Tensor Imaging in Mild Traumatic Brain Injury*.” *Vanderbilt University Medical Center-NICOE TBI Imaging Workshop,* August 29, 2014. Nashville, TN.

Invited presentation, “*New Diffusion Tensor Imaging Methods and their Application to the TRACTS Project*,” December 3, 2014, Harvard Faculty Club, TRACTS program VABHS.

2015 Co-Chair (with Dr. Marek Kubicki), Symposium on Neuroinflammation, White Matter, and Schizophrenia, *15th International Congress on Schizophrenia Research*, March 29, 2005, Colorado Springs, CO.

Invited Presentation, in Symposium on Neuroinflammation, White Matter, and Schizophrenia, “*Diffusion MRI for the Identification of Neuroinflammation in Schizophrenia: Findings and Challenges*,” *15th International Congress on Schizophrenia Research*, March 29, 2005, Colorado Springs, CO.

Invited Presentation at the *MGH Center for Law, Brain, & Behavior*, “*Diffusion Tensor Imaging, Mild Traumatic Brain Injury and its Admissibility as Evidence in Litigation*,” May 12, 2015, Boston, MA.

Invited Speaker, Honors Lecture in Psychology, University of Minho, “*Neuroimaging: MR, Diffusion Tensor Imaging, and PET Imaging in Mild Traumatic Brain Injury*,” September 14, 2015, Braga, Portugal.

Invited Speaker, 2015 Traumatic Brain Injury Workshop, Sponsored by the Center for Computational Neuroscience & Neural Technology, “*Neuroimaging Advances in Mild Traumatic Brain Injury*,” September 18, 2015, Boston University, Boston, MA.

Symposium on “Imaging in Subconcussive Brain Injury,” Invited Speaker, “*Advances in Neuroimaging Mild Traumatic Brain Injury*.” *American Academy of Physical Medicine and Rehabilitation 2015 Annual Assembly*, October 1, 2015, Boston, MA.

2016 Invited Speaker, McLean Imaging Center Speaker Series, “*Neuroimaging: MR, Diffusion Tensor Imaging, and PET Imaging in Mild Traumatic Brain Injury*,” March 9, 2016, Belmont, MA.

Invited Speaker, Neuroscience Grand Rounds in Neurology, Tufts University School of Medicine, “*MR Imaging in Schizophrenia and Mild Traumatic Brain In*jury,” April 14, 2016.

Invited Speaker, *VA National Research Week, VA Boston Healthcare System Symposium: Recent Advances in Understanding and Treating Schizophreni*a. Talk: “*Advances in Neuroimaging Techniques and Their Application to Schizophrenia*,” May 19, 2016.

Invited Speaker, Brigham and Women’s Hospital Radiology Research Symposium: *“Reflecting Back, Advancing Forward.”* Talk:“Neuroimaging Advances in Schizophrenia and Mild Traumatic Brain Injury,” June 3, 2016, Boston, MA.

Invited Speaker, *Chronic Traumatic Encephalopathy (CTE) Conference*. Talk: “Imaging Biomarkers of CTE in Humans.” Boston University School of Medicine, Boston, MA, November 4, 2016.

Invited Speaker, “*Advanced Imaging in Schizophrenia,”* Special Interest Session: Imaging Cognition 2016: Psychosis. *RSNA Annual Meeting*, November 28, 2016, Chicago, Ill.

2017 Oral Presentation, “*The Exents of Extracellular and Brain Tissue Related Abnormalities in Subjects at Clinical High Risk for Psychosis*,” *16th International Congress of Schizophrenia* *Research (ICOSR)*, March 25, 2017, San Diego, CA.

Oral Presentation, “*Frontostriatal Miswiring in Schizo*phrenia”, presented in “Structural Brain Imaging” symposia, *16th International Congress of Schizophrenia* *Research (ICOSR)*, March 27, 2017, San Diego, CA.

Oral Presentation, “*Female Specific Excessive Extracellular Free-Water in Prodromal Schizophrenia*,” presented in “Structural Brain Imaging” symposia, *16th International Congress of Schizophrenia* *Research (ICOSR)*, March 27, 2017, San Diego, CA.

Oral Presentation, “*Changes in Fronto-Thalamic Connectivity are Associated with Prodrome Psychosis in Young Adults with 22q11.2 Syndrome*,” presented in “Structural Brain Imaging” symposia, *16th International Congress of Schizophrenia* *Research (ICOSR)*, March 27, 2017, San Diego, CA.

Invited Speaker, Pre-Conference Symposium “A Picture is Worth a Thousand Words (When there is a Common Language): Overcoming Obstacles in TBI Neuroimaging Research,” Talk: “*Neuroimaging Advances: Mild Traumatic Brain Injury*.” *IBIA 12th World Congress*, New Orleans, March 29, 2017.

Talk, “*Hippocampus and Cingulate Gyrus Volume Reductions are Associated with Neurobehavioral Dysfunction in Formal NFL Players*.” In session entitled “Neurodegeneration and Chronic Traumatic Encephalopathy. *IBIA 12th World Congress*, New Orleans, March 30, 2017.

Talk, “*Increased Gray Matter Fractional Anisotropy in the Left and Right Occipital Lobe in Symptomatic Former Professional Football Players*.” *IBIA 12th World Congress*, New Orleans, March 30, 2017.

Talk, “Age at First Exposure to Repetitive Head Impacts is Associated with Smaller Thalamic Volumes in Former Professional Football Players.” In session entitled “*Neurodegeneration and Chronic Traumatic Encephalopathy*.” *IBIA 12th World Congress*, New Orleans, March 30, 2017.

Invited Talk, Ferenc Jolesz Research Seminar Series, Department *of Radiology, Brigham and Women’s Hospital, “Imaging* in CTE and Repetitive Head Trauma,” October 2, 2017.

2018 Invited Talk, *Center for Brain/Mind Medicine*, Brigham and Women’s Hospital and Harvard Medical School, “*Neuroimaging Advances in Schizophrenia and Mild Traumatic Brain Injury*,” February 21, 2018.

The Peter Bassoe Keynote Lecture entitled, “*Advances in Neuroimaging Applications to Schizophrenia and Mild Traumatic Brain Injury*,” the *American Neuropsychiatric Association*. March 23, 2018, Boston, MA.

Presentation as Part of Panel, *Defense Research Institute* (DRI); Session: “*Traumatic Brain Injury: Battling Back Against Public Perception*”, Panel Presenter, “*Mild Traumatic Brain Injury in the Courtroom: The State of the Science*.” April 26, 2018, Nashville, TN.

Grand Rounds Presentation, Department of Psychiatry, Mount Sinai Medical Institute, “*Advances in Neuroimaging Applications to Schizophrenia and Mild Traumatic Brain Injury,”* NY, NY, May 22, 2018.

**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.

2007 *December 2007:* Dr. Shenton was featured in *The Scientist*, in a special supplement on schizophrenia. Read [article](http://www.the-scientist.com/2007/12/01/s40/1/).

*Winter 2007:* Read [article](http://www.brighamandwomens.org/development/Magazine/articles/schizophrenia.pdf) 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/2008/08aprfbp/08aprfbKubicki/>].

*2008:* Dr. Shenton is also a co-author on the 10thmost 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*. 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.](http://sciencewatch.com/inter/ins/08/08dec20PSY/)

2009 *August 2009:* *Science Watch Names Dr. Shenton as One of the Most Cited Researchers in the Last Decade*: Top Citations for Institutions. Dr. Martha Shenton cited as among the top most cited researchers at Harvard: <http://sciencewatch.com/articles/most-cited-institutions-overall-1999-2009>

*August 2009: Article in the Boston Globe. August 2009:* An article titled “Unfolding the mysteries of the brain” highlighting research progress in understanding cortical development appeared in *The Boston Globe*. Read article [here.](http://www.boston.com/business/articles/2009/08/03/unfolding_the_mysteries_of_the_brain/?page=2)

*2008-2009: William Silen Lifetime Achievement Award for Mentoring.* [Dr. Shenton](http://pnl.bwh.harvard.edu/martha-shenton-ph-d/) was the recipient of the William Silen Lifetime Achievement in Mentoring Award (2008-2009) by Harvard Medical School. See [here](http://archives.focus.hms.harvard.edu/2009/071009/honors.shtml) for recipients of the award. The [award ceremony](http://archives.focus.hms.harvard.edu/2009/071009/honors.shtml)(scroll down to see picture) was held on June 11, 2009 at Harvard Medical School.

*2009: Distinguished Investigator Award from the National Alliance for Research in Schizophrenia and Depression (NARSAD).* [Dr. Shenton](http://pnl.bwh.harvard.edu/martha-shenton-ph-d/) received the Distinguished Investigator Award from the [National Alliance for Research in Schizophrenia and Depression (NARSAD).](http://bbrfoundation.org/sites/bbrf.civicactions.net/files/file-downloads/2009_NARSAD_Annual_Report_for_web.pdf)

2010 *October 2010:* *Article in Atlantic Magazine*. An article on how a different MRI technique used in [Dr. Shenton's](http://www.pnl.bwh.harvard.edu/Martha-Shenton-Ph-d/) lab may help in diagnosing football-induced injuries appeared in *the Atlantic*. Read article [here.](http://www.theatlantic.com/technology/archive/2010/10/new-type-of-brain-imaging-may-diagnose-football-induced-brain-disorders/63472/)

*August 2010: History Channel’s Stan Lee’s Superheros.* [Dr. Shenton](http://pnl.bwh.harvard.edu/people/profiles/shenton.html) 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](http://www.youtube.com/watch?v=wE40JEoNCrk).

2011 *January 2011:* A new book titled [Understanding Neuropsychiatric Disorders](http://www.cambridge.org/gb/knowledge/isbn/item5562961/?site_locale=en_GB) edited by [Drs. Shenton](http://pnl.bwh.harvard.edu/martha-shenton-ph-d/)and [Turetsky](http://www.med.upenn.edu/apps/faculty/index.php/g20000440/c506/p633) is now available from Cambridge University Press.

2012 *February 2012:* [Psychiatry Newsletter Update](http://pnl.bwh.harvard.edu/Psychiatry_2012.pdf) highlights traumatic brain injury studies in the Psychiatry Neuroimaging laboratory including Drs. [Martha Shenton](http://pnl.bwh.harvard.edu/people/profiles/shenton.html), [Ofer Pasternak](http://pnl.bwh.harvard.edu/people/profiles/pasternak.html), and [Alex Lin](http://pnl.bwh.harvard.edu/people/profiles/alexlin.html).

*April 2012:* [Dr. Shenton's](http://pnl.bwh.harvard.edu/people/profiles/shenton.html) [research paper](http://pnl.bwh.harvard.edu/pub/papers_html/shentonSchizophrRes01.html) listed as the [seventh top most downloaded article in 2011](http://top25.sciencedirect.com/journal/09209964?utm_source=EHJ001&utm_campaign=1-3029128821&utm_content=1-3029128826&utm_medium=email&bid=A9Z223F:P39MC2F).

*July 2012 NARSAD Young Investigator Award:* [Dr. Pasternak](http://pnl.bwh.harvard.edu/ofer-pasternak-ph-d/) was awarded the [National Alliance for Research in Schizophrenia and Depression](http://bbrfoundation.org/narsad-young-investigator-grant) (NARSAD) Young Investigator Award of the Brain and Behavior Research Foundation. This was awarded for his research project entitled, “Free-Water as a Novel Biomarker for the Investigation of Inflammation and Degeneration Dynamics in Schizophrenia”, with [Drs. Shenton](http://pnl.bwh.harvard.edu/martha-shenton-ph-d/) and [Kubicki](http://pnl.bwh.harvard.edu/juvenile-justice-facumarek-kubicki-m-d-ph-d-lty-eugene-beresin-md/) as co-mentors.

*November 2012:* [Harvard Medicine News](http://hms.harvard.edu/content/looking-matter) featured Drs. [Martha Shenton](http://pnl.bwh.harvard.edu/people/profiles/shenton.html), [Ross Zafonte](http://www.bu.edu/bostonroc/ross-zafonte-md/), and [Joseph Giacino](http://www.mrri.org/focus-areas/ncrrn/) in a piece describing the utility of [DTI](http://pnl.bwh.harvard.edu/dti.html) in characterization of mild [TBI](http://pnl.bwh.harvard.edu/tbi.html). (See also: [Wounded, Deeply](http://hms.harvard.edu/content/wounded-deeply-0), a video preview of the Autumn 2012 issue of Harvard Medicine magazine, featuring Dr. Shenton.)

*November 2012:* [Dr. Inga Koerte's](http://pnl.bwh.harvard.edu/people/profiles/inga.html) and senior author [Dr. Martha Shenton's](http://pnl.bwh.harvard.edu/people/profiles/shenton.html) [JAMA paper](http://jama.jamanetwork.com/article.aspx?articleid=1391907) (see [Brigham Press Release](http://pnl.bwh.harvard.edu/people/profiles/BWH_Press_Release_Koerte_2012.pdf) and [Ludwig-Maximilians-Universität](http://www.en.uni-muenchen.de/news/newsarchiv/2012/2012_koerte.html)) 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](http://healthland.time.com/2012/11/13/study-soccer-players-without-concussions-still-have-brain-changes/), [US News](http://health.usnews.com/health-news/news/articles/2012/11/13/can-playing-soccer-lead-to-brain-damage), [ABC News](http://abcnews.go.com/Health/soccer-players-show-signs-brain-damage/story?id=17710913) (reposted from [MedPage Today [see video]](http://www.medpagetoday.com/Neurology/GeneralNeurology/35928)), [JAMA](http://media.jamanetwork.com/news-item/also-appearing-in-this-weeks-jama-5/), [The Munich Eye](http://www.themunicheye.com/news/Head-first-into-danger%3F-2374), [Los Angeles Times](http://www.latimes.com/news/science/la-sci-soccer-brain-injury-20121114,0,292116.story), [Healthline](http://www.healthline.com/health-blogs/healthline-connects/brain-trauma-professional-soccer-playser-111312), [ABC7Chicago](http://abclocal.go.com/wls/story?section=news/health&id=8884313), [Doctors Lounge](http://www.doctorslounge.com/index.php/news/pb/33594), [The Week Magazine](http://theweek.com/article/index/236380/do-soccer-players-experience-brain-damage-too), [Harvard Medicine News](http://hms.harvard.edu/content/does-playing-soccer-change-brain), [Medical Daily](http://www.medicaldaily.com/articles/13125/20121114/soccer-players-without-head-injuries-still-brain.htm), and [Elite Daily](http://elitedaily.com/elite/2012/study-heading-a-soccer-ball-longterm-brain-damage/?utm_source=rss&utm_medium=rss&utm_campaign=study-heading-a-soccer-ball-longterm-brain-damage). See also: <http://healthhub.brighamandwomens.org/tag/martha-shenton>.

*November 2012:* *Cleveland Clinic Center for Brain Health CTE Conference Series.* Drs. [Martha Shenton](http://pnl.bwh.harvard.edu/martha-shenton-ph-d/), [Inga Koerte](http://pnl.bwh.harvard.edu/inga-koerte-m-d/) and [Robert Stern](http://www.bu.edu/alzresearch/team/faculty/stern/) were featured in [Part 2](http://www.alzforum.org/new/detail.asp?id=3326), [Part 5](http://www.alzforum.org/new/detail.asp?id=3332) and [Part 6](http://www.alzforum.org/new/detail.asp?id=3333) of the six part CTE Conference series report. The article highlights the cohort study, “Diagnosing and Evaluating Traumatic Encephalopathy using Clinical Tests” (DETECT) which is led by Drs. Stern and Shenton. The study is the first CTE program funded by the NIH and hopes to develop a research diagnostic criteria for chronic traumatic encephalopathy. ([Read a PDF of the entire series here.](http://pnl.bwh.harvard.edu/wp-content/uploads/2014/09/CTEseries2012.pdf))

*December 2012:* *Ice Hockey Players Show Deficits in White Matter After One Season*. Led by first author [Dr. Inga Koerte's](http://pnl.bwh.harvard.edu/people/profiles/inga.html) and senior author [Dr. Martha Shenton](http://pnl.bwh.harvard.edu/people/profiles/shenton.html), published findings on concussions and white matter integrity in hockey players in the [Journal of Neurosurgery (full text)](http://thejns.org/doi/full/10.3171/2012.10.FOCUS12303). This high impact paper was

covered in the [New York Times](http://www.nytimes.com/2012/11/30/sports/hockey/hockey-coaches-defy-doctors-on-concussions-study-finds.html?_r=0), [SlapShot (New York Times featurette)](http://slapshot.blogs.nytimes.com/2012/11/30/study-shows-possible-brain-damage-caused-by-subconcussive-blows/), [The Globe and Mail](http://www.theglobeandmail.com/sports/hockey/significant-underreporting-of-concussions-found-in-hockey/article5831334/), [Vancouver Sun](http://www.vancouversun.com/health/Concussions+male+female+varsity+hockey+players+more+common+than/7630888/story.html), and on [CJAD Talk Radio (hear interview with Dr. Paul Echlin)](http://www.cjad.com/Blog/HabsNews/blogentry.aspx?BlogEntryID=10473151).

*December 2012: 2012 Lloyd Braga Endowed Chair.* [Dr. Shenton](http://pnl.bwh.harvard.edu/martha-shenton-ph-d/)was awarded the [2012 Lloyd Braga Endowed Chair](http://www.fclb.uminho.pt/Default.aspx?tabid=4&pageid=56&lang=pt-PT) from the University of Minho, Braga, Portugal. (See a video clip [here](https://www.facebook.com/video.php?v=10151320257889472&video_source=pages_finch_main_video).)

2013 *2013 to the present: Expert Testimony* for Traumatic Brain Injury Cases where Diffusion Tensor Imaging and Other Advanced Neuroimaging Techniques are Employed.

*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.](http://www.alzforum.org/pap/annotation.asp?powID=142265)

*January 2013: Head trauma in Soccer Players.* [Latitude News](http://www.latitudenews.com/story/like-nfl-soccer-needs-to-tackle-problem-of-brain-damage-head-on/) featured [Dr. Inga Koerte](http://pnl.bwh.harvard.edu/people/profiles/inga.html) and [Dr. Ross Zafonte](http://www.bu.edu/bostonroc/ross-zafonte-md/) 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](http://healthhub.brighamandwomens.org/tag/martha-shenton).

*March 2013:* In an interview with [Imaging in Medicine Journal](http://pnl.bwh.harvard.edu/news/Shenton-Interview-2013.pdf), Dr. [Martha Shenton](http://pnl.bwh.harvard.edu/people/profiles/shenton.html) 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](http://pnl.bwh.harvard.edu/news/Science-2013-Underwood-1367-1.pdf), Dr. [Martha Shenton](http://pnl.bwh.harvard.edu/people/profiles/shenton.html) 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](http://pnl.bwh.harvard.edu/people/profiles/shenton.html), [Inga Koerte](http://pnl.bwh.harvard.edu/people/profiles/inga.html) and [Ross Zafonte](http://www.bu.edu/bostonroc/ross-zafonte-md/)'s high impact [JAMA paper](http://jama.jamanetwork.com/article.aspx?articleid=1391907) on sub-concussive hits experienced by soccer players was highlighted in [“Sueddeutsche Zeitung”](http://www.sueddeutsche.de/gesundheit/hirntrauma-kurzer-kopfstoss-langes-leid-1.1622543), a high-profile newspaper in Germany; and in [Neurology Today](http://pnl.bwh.harvard.edu/news/Neuroimaging_of_pro_soccer_players.pdf).

*April 2013:* *What Heterogeneity Breeds: A Diverse Workplace in the Psychiatry Neuroimaging Laboratory*. The BWH Psychiatry Neuroimaging Laboratory was this month’s feature story in [BWH Clinical and Research News](http://www.brighamandwomens.org/about_bwh/publicaffairs/news/publications/DisplayCRN.aspx?articleid=2136). 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.

*April 2013:* *Sports-Related Head Injuries and Memory*. Drs. [Inga Koerte](http://pnl.bwh.harvard.edu/inga-koerte-m-d/) and [Martha Shenton’](http://pnl.bwh.harvard.edu/martha-shenton-ph-d/)s influential paper on brain trauma in soccer players continues to make headlines. Recently, they were featured in the German Center of Research and Innovation [newsletter](http://archive.constantcontact.com/fs185/1103326741996/archive/1113233765623.html).

*May 2013:* *Fatal Acceleration.* The PNL was featured in [ZEIT](http://www.zeit.de/2013/22/gehirnerschuetterung-folgen-sport), Germany’s most prestigious weekly newspaper. The article discusses how even minor brain injuries can have fatal consequences. It particularly highlights Drs. [Inga Koerte](http://pnl.bwh.harvard.edu/inga-koerte-m-d/) and [Martha Shenton](http://pnl.bwh.harvard.edu/martha-shenton-ph-d/)‘s research on brain trauma in soccer players as a result of “headers”.

*June 2013:* *Headers Linked to Memory Deficits in Soccer Players*. Drs. [Martha Shenton](http://pnl.bwh.harvard.edu/martha-shenton-ph-d/) and [Inga Koerte](http://pnl.bwh.harvard.edu/inga-koerte-m-d/) discussed the brain abnormalities associated with “headers” in a recent article in [Science News](https://www.sciencenews.org/article/headers-linked-memory-deficit-soccer-players).

*July 2013:* *A Brain Gone Bad*. Journalist Paul Voosen describes the PNL’s study on chronic head trauma, detailing the experience of an NFL player who participated in the study. Click [here](http://chronicle.com/article/Hard-HitsTough-Questions/140167/?cid=cr&utm_source=cr&utm_medium=en) to read about Patient 53 and his time with us at the Psychiatry Neuroimaging Laboratory.

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](http://thejns.org/) (Click for [Part 1](http://pnl.bwh.harvard.edu/news/JNS_Part1.pdf), [Part 2](http://pnl.bwh.harvard.edu/news/JNS_Part2.pdf), and [Part 3](http://pnl.bwh.harvard.edu/news/JNS_Part3.pdf).) by Drs. [Martha Shenton](http://pnl.bwh.harvard.edu/people/profiles/shenton.html), [Ofer Pasternak](http://pnl.bwh.harvard.edu/people/profiles/pasternak.html), [Inga Koerte](http://pnl.bwh.harvard.edu/people/profiles/inga.html), [Sylvain Bouix](http://pnl.bwh.harvard.edu/people/profiles/bouix.html) , [Takeshi Sasaki](http://pnl.bwh.harvard.edu/people/profiles/takeshi.html), [Marek Kubicki](http://pnl.bwh.harvard.edu/people/profiles/kubicki.html), [Peter Savadjiev](http://pnl.bwh.harvard.edu/people/profiles/savadjiev.html), [Michael Mayinger](http://pnl.bwh.harvard.edu/people/profiles/mayinger.html), [Marc Muehlmann](http://pnl.bwh.harvard.edu/people/profiles/marc.html) and research assistant [Eli Fredman](http://pnl.bwh.harvard.edu/people/profiles/fredman.html) has garnered international media attention and been featured in the [New York Times](http://www.nytimes.com/2014/02/04/sports/hockey/study-finds-changes-in-brains-of-hockey-players-who-had-concussions.html?hpw&rref=health&_r=3), [The Globe and Mail](http://www.theglobeandmail.com/sports/new-research-shows-that-even-first-head-injury-changes-the-brain/article16680448/), The Sports Network, [Fox News](http://www.foxnews.com/health/2014/02/04/concussions-cause-change-in-brain-matter-inflammation.html), and The Calgary Herald. This was also featured in Brain and Behavior Research Foundation where Drs. Martha Shenton and Ofer Pasternak were featured as two NARSAD investigators, NARSAD Distinguished and Young Investigator, respectively (see [Brain and Behavior Research Foundation](http://bbrfoundation.org/brain-matters-discoveries/new-york-times-features-narsad-grant-research-on-brain-injury-to-athletes))

*March 2014:* *Testimony before the United States House of Representatives, House Energy and Commerce Committee, Subcommittee on Commerce, Manufacturing, and Trade, at a hearing entitled “Improving Sports Safety: A Multifaceted Approach*”, Rayburn House Office Building, Washington, D.C., March 13, 2014, <http://www.c-span.org/video/?318281-2/sports-safety-brain-injuries-scientific-panel> (Panel two begins at 1.44:49 and Dr. Shenton’s testimony begins at 2.23:38)

*May 2014*: “Ban Heading in Youth Soccer,” by Derrick Z. Jackson, Opinion in Sunday Boston Globe article where[Dr. Inga Koerte's](http://pnl.bwh.harvard.edu/people/profiles/inga.html) and [Dr. Martha Shenton](http://pnl.bwh.harvard.edu/people/profiles/shenton.html) are cited for their research in reporting alterations in white matter in elite soccer players who have experienced subconcussive blows to the head but not concussion: <http://www.bostonglobe.com/opinion/2014/05/17/ban-heading-youth-soccer/F0jPt3oMlfajNfuphDFO8J/story.html> (see also above under *November 2012*, JAMA publication).

*June 2014: List of Top 20 Articles*, in the Domain of Article 20954428, since its publication (2010): [http://biomedupdater.com/](http://biomedupdater.com/?&sttflpg=74404fb6dcda2fa7cd98cd5d9127176c8231f950c83ae8e2).

*July 2014: VA HSR&D CYBERSEMINAR*: Mild TBI Diagnosis and Management Strategies. Diffusion Tensor Imaging Findings in Mild Traumatic Brain Injury. <http://www.hsrd.research.va.gov/for_researchers/cyber_seminars/archives/video_archive.cfm?SessionID=867>.

*September 2014: AANS Neurosurgeon*. Sports-Related mTBI: A Public Health Ethical Imperative Act. <http://www.aansneurosurgeon.org/features/sport-related-mtbi-a-public-health-ethical-imperative-to-act/>.

2015 *January 2015: BioMedUpdater: “Who is publishing in my Domain?” Top Articles Cited since 2012:* Drs. [Shenton](http://pnl.bwh.harvard.edu/martha-shenton-ph-d/), [Whitford](http://www.psy.unsw.edu.au/contacts-people/academic-staff/dr-thomas-whitford), and [Kubicki](http://pnl.bwh.harvard.edu/juvenile-justice-facumarek-kubicki-m-d-ph-d-lty-eugene-beresin-md/)’s paper: “[Structural neuroimaging in schizophrenia: from methods to insights to treatments](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3181976/)” (2010) placed first on BioMedUpdater’s top articles since 2010 list.  See the entire list [here](http://pnl.bwh.harvard.edu/wp-content/uploads/2015/02/biomedupdater-com-2.pdf).

*February 2, 2015:* Quoted on an article entitled “Concussion case: An Unsettling Wait, in [ColumbiaSportsJournalism.com](http://columbiasportsjournalism.com/2015/02/01/concussion-case-an-unsettling-wait)/.

*August 10, 2015:* Altered brain development among former NFL players, study suggests the influence of

on the brain of development, reported in [Science Daily](http://www.sciencedaily.com/releases/2015/08/150810123612.htm).

*August 11, 2015:* A study by Drs. [Julie Stamm](https://www.researchgate.net/profile/Julie_Stamm), [Inga Koerte](http://pnl.bwh.harvard.edu/inga-koerte-m-d/), [Robert Stern](http://www.bu.edu/alzresearch/about-us/team/faculty/stern/), and [Martha Shenton](http://pnl.bwh.harvard.edu/martha-shenton-ph-d/) on the effects of early-age football on brain development has been making headlines. This influential research, published in the [Journal of Neurotrauma](http://online.liebertpub.com/doi/10.1089/neu.2014.3822), has been featured in the

[Boston Globe](http://www.bostonglobe.com/2015/08/10/study-finds-altered-brain-development-some-former-nfl-players-who-started-playing-before-age/T47bInHeNsKSUSYWa4nIHI/story.html?utm_source=social&utm_medium=twitter&utm_campaign=prbuexperts), [Science Daily](http://www.sciencedaily.com/releases/2015/08/150810123612.htm), [PBS](http://www.pbs.org/wgbh/pages/frontline/sports/league-of-denial/study-of-former-nfl-players-shows-risks-for-brain-from-youth-football/), and [Redorbit](http://www.redorbit.com/news/health/1113407634/pre-teen-football-linked-to-more-severe-brain-changes-in-nfl-players-081115/).

*September 2015: Paper Co-Authored by PNL Investigators Wins 2014 Nelson Butter’s Award.* A paper authored by [Rael T. Lange](https://www.researchgate.net/researcher/39987481_Rael_T_Lange), [William J. Panenka](http://neuroscience.ubc.ca/people/Panenka), [Jason R. Shewchuk](https://www.researchgate.net/researcher/2028944952_Jason_R_Shewchuk), [Manraj K. S. Heran](http://www.vancouverimaging.com/our-team/dr-manraj-raju-k-s-heran/), [Jeffery R](http://www.vchri.ca/researchers/jeff-brubacher)  [Brubacher](http://www.vchri.ca/researchers/jeff-brubacher), [Sylvain Bouix](http://pnl.bwh.harvard.edu/sylvain-bouix-ph-d-2/), [Ryan Eckbo](http://pnl.bwh.harvard.edu/ryan-eckbo/), [Martha E. Shenton](http://pnl.bwh.harvard.edu/martha-shenton-ph-d/), and [Grant L. Iverson](http://www.massgeneral.org/doctors/doctor.aspx?id=19624) has won the Nelson Butters Award for Research Contributions to Clinical Neuropsychology for 2014. This award is annually given to the most influential scholarly paper published in [*Archives of Clinical Neuropsychology*](http://www.ncbi.nlm.nih.gov/pubmed/25416729)*.*The

paper, Diffusion Tensor Imaging Findings and Postconcussion Symptom Reporting Six-Weeks Following Mild Traumatic Brain Injury, published in 2015 (paper accepted in 2014), can be found [here](http://www.ncbi.nlm.nih.gov/pubmed/25416729).

*September 2015:*Drs. [Shenton](http://pnl.bwh.harvard.edu/martha-shenton-ph-d/) and [Pasternak](http://pnl.bwh.harvard.edu/ofer-pasternak-ph-d/) contributed to research that led to a junior scientist awarded medal, the “[Johann Peter Süßmilch-Medal 2015](http://www.gmds.de/aktuelles/aktuell_einzeln.php?we_objectID=6088),” to [Dr. Klaus Herman Maier-Hein](https://www.researchgate.net/profile/Klaus_Maier-Hein) by the German Society of Medical Informatics, Biometry, and Epidemiology (GMDS). This award is the highest award given by the GMDS. Dr. Klaus Herman Maier-Hein was lead author on the research that led to this

award. The research focused on white matter degeneration that precedes the onset of dementia, which was published in the journal [Alzheimer's Forum](http://www.ncbi.nlm.nih.gov/pubmed/25035154).

*December 22, 2015*: Dr. [Shenton](http://pnl.bwh.harvard.edu/martha-shenton-ph-d/) is one of 4 principal investigators, along with Dr. [Robert Stern](http://www.bu.edu/alzresearch/about-us/team/faculty/stern/) from Boston University, [Dr. Jeffry Cummings](http://myclevelandclinic.org/staff_directory/staff_display?doctorid=14517) of the Cleveland Clinic, and [Dr. Eric Reiman](http://banneralz.org/why-bai/our-leadership.aspx) of Banner Alzheimer’s Institute, have been awarded a $16 million grant from the National Institutes of Health/National Institute of Neurological Disorders and Stroke (NIH/NINDS) to develop methods for diagnosing chronic traumatic encephalopathy (CTE) during life. CTE, a neurodegenerative disease often found in professional football players, boxers, and other athletes who have a history of brain trauma, currently be diagnosed only by autopsy. The announcement of this award has received a great deal of attention in the press: [Press Release](http://www.bu.edu/today/2015/robert-stern-cte-research/), [WBUR](http://www.wbur.org/2015/12/22/nfl-cte-brain-study-funding), [ESPN](http://espn.go.com/espn/otl/story/_/id/14417386/nfl-pulls-funding-boston-university-head-trauma-study-concerns-researcher).

*December 2015:*[Dr. Martha Shenton](http://pnl.bwh.harvard.edu/martha-shenton-ph-d/) speaks to Boston University’s WBUR-FM ([WBUR](http://www.wbur.org/2015/12/22/nfl-cte-brain-study-funding)) about the symptoms and risk of Chronic Traumatic Encephalopathy following the announcement of a large, multi- million dollar NIH grant that will study this disorder. This grant was initially expected to be funded by the National Football League. Dr. Shenton is one of four principal investigators with the other principal investigators being [Drs. Robert Stern](http://www.bu.edu/alzresearch/about-us/team/faculty/stern/), [Cummings](http://my.clevelandclinic.org/staff_directory/staff_display?doctorid=14517), and [Reiman](http://azalz.org/staff/eric-m-reiman-m-d/).

*December 2015:* [NFL Backs Away From Funding a Boston University Brain Study; NIH to Fund It](http://espn.go.com/espn/otl/story/_/id/14417386/nfl-pulls-funding-boston-university-head-trauma)  [Instead](http://espn.go.com/espn/otl/story/_/id/14417386/nfl-pulls-funding-boston-university-head-trauma). ESPN reporters tackle the controversy that a $30 million dollar donation from the National Football League will no longer be used to fund a new Chronic Traumatic Encephalopathy (CTE) grant.

[Dr. Martha Shenton](http://pnl.bwh.harvard.edu/martha-shenton-ph-d/) is one of four Principal Investigators, the others being [Drs. Robert Stern](http://www.bu.edu/alzresearch/about-us/team/faculty/stern/), [Cummings](http://my.clevelandclinic.org/staff_directory/staff_display?doctorid=14517), and [Reiman](http://azalz.org/staff/eric-m-reiman-m-d/), on this unprecedented multi-center NIH supported grant, which will investigate CTE in former NFL players and college athletes.

*December 2015:*[16 Million for Brain Research, but $0 from the NFL](http://www.nytimes.com/2015/12/23/sports/football/grant-of-nearly-16-million-for-cte-researchers.html?_r=0) The New York Times offers perspective on the National Institute of Health’s decision to directly fund a new Chronic Traumatic Encephalopathy grant, on which [Dr. Martha Shenton](http://pnl.bwh.harvard.edu/martha-shenton-ph-d/) is a Principal Investigator, instead of using National Football League money. Other principal investigators are: [Drs. Robert Stern](http://www.bu.edu/alzresearch/about-us/team/faculty/stern/), [Cummings](http://my.clevelandclinic.org/staff_directory/staff_display?doctorid=14517), and [Reiman](http://azalz.org/staff/eric-m-reiman-m-d/).

*December 2015*: [Boston University Reports on the New NIH/NINDS Grant Awarded to Develop](http://www.bu.edu/news/2015/12/22/nihninds-grant-awarded-to-develop-methods-for-diagnosing-chronic-traumatic-encephalopathy-cte-during-life/)  [Methods for Diagnosing Chronic Traumatic Encephalopathy During Life](http://www.bu.edu/news/2015/12/22/nihninds-grant-awarded-to-develop-methods-for-diagnosing-chronic-traumatic-encephalopathy-cte-during-life/)**.** Boston University Public Relations discusses the new grant awarded to four Principal Investigators, [Drs. Robert Stern](http://www.bu.edu/alzresearch/about-us/team/faculty/stern/), [Cummings](http://my.clevelandclinic.org/staff_directory/staff_display?doctorid=14517), [Reiman](http://azalz.org/staff/eric-m-reiman-m-d/), and [Martha Shenton](http://pnl.bwh.harvard.edu/martha-shenton-ph-d/), that will fund a new seven-year, multi-center study focused on Chronic Traumatic Encephalopathy diagnosis and risk factor identification.

2016 *January 4, 2016*: Dr. [Shenton](http://pnl.bwh.harvard.edu/martha-shenton-ph-d/) is featured on Brigham and Women’s “[Awards, Honors and Grants](http://www.brighamandwomens.org/About_BWH/publicaffairs/news/awards/Award_Honor.aspx?sub=0&PageID=2254)” News Page for the recent grant she was awarded together with investigators from Boston University, the Cleveland Clinic and Banner Alzheimer’s Institute to study Chronic Traumatic Encephalopathy.

*January 2016:*[The Real Science Behind Concussions](http://pnl.bwh.harvard.edu/wp-content/uploads/2016/06/labequipmentCTEarticle.pdf). The scientific journal *Laboratory Imaging*’s news [Cover Story](http://pnl.bwh.harvard.edu/wp-content/uploads/2016/06/labequipmentCTEarticle.pdf) reviews novel, state of the art imaging techniques that can be used to study diseases in the living brain. The article discusses how these imaging techniques have led to new insights into Chronic Traumatic Encephalopathy, and Dr. [Martha Shenton](http://pnl.bwh.harvard.edu/martha-shenton-ph-d/) is interviewed, explaining how these techniques will be used in the new “Diagnose CTE” grant.

*Winter 2016*: The most recent issue of “[Psychiatry Advances](http://pnl.bwh.harvard.edu/wp-content/uploads/2016/03/Psych-Advances-2016.pdf)” details Drs. [Martha Shenton](http://pnl.bwh.harvard.edu/martha-shenton-ph-d/), [Inga Koerte](http://pnl.bwh.harvard.edu/inga-koerte-m-d/) and Julie Stamm’s recent imaging study on former NFL players, and discusses other technological imaging advances made by members of the lab Drs. [Yogesh Rathi](http://pnl.bwh.harvard.edu/yogesh-rathi-ph-d/), [Ofer Pasternak](http://pnl.bwh.harvard.edu/ofer-pasternak-ph-d/) and [Peter Savadjiev.](http://pnl.bwh.harvard.edu/peter-savadjiev-ph-d/)

*June 2, 2016:* [WBUR News and Radio Station LIVE Interview: “Massive Study of Degenerative](http://commonhealth.wbur.org/2016/06/diagnosing-cte)  Brain Disease to Begin. During the first annual investigator meeting for the new “Diagnose CTE” grant, Boston’s WBUR conducted an [interview](http://commonhealth.wbur.org/2016/06/diagnosing-cte) with the study’s contact Principal Investigator Robert Stern, as well as with the former NFL player [Tim Fox](http://archive.patriots.com/alumni/index.cfm?ac=alumnibiosdetail&bio=3391), who is helping support and advocate for the research. Drs. [Cummings](http://my.clevelandclinic.org/staff_directory/staff_display?doctorid=14517), [Reiman](http://azalz.org/staff/eric-m-reiman-m-d/), and [Shenton](http://pnl.bwh.harvard.edu/martha-shenton-ph-d/) were also mentioned in this important new study aimed at detecting CTE in living former NFL players and former college football players. Hear the live interview [here](http://commonhealth.wbur.org/2016/06/diagnosing-cte) with Stern and Fox as they describe the merits of this study and how it will help people like [Tim Fox](http://archive.patriots.com/alumni/index.cfm?ac=alumnibiosdetail&bio=3391).

*June 2, 2016:* [CTE Research Moves On, Even Without the NFL’s Money](http://espn.go.com/nfl/story/_/id/15886811/cte-research-going-ahead-funding-issues-nfl).The new grant coined “Diagnose CTE” had its first annual investigator meeting on June 1st and 2nd of 2016, despite an initial setback that occurred when the NFL pulled their funding from the grant. [Dr. Martha Shenton](http://pnl.bwh.harvard.edu/martha-shenton-ph-d/) and the Psychiatry Neuroimaging Lab will be involved in neuroimaging aspects of this grant CTE-Research covered a [story](http://espn.go.com/nfl/story/_/id/15886811/cte-research-going-ahead-funding-issues-nfl) on the grant, its goals, and the “top brain scientists” in charge of the study that was widely cited across the news, being shared by US News & World Report, ESPN, Fox News, Boston Herald, USA Today, Yahoo, Business Insider, and countless other news sources.

*June 2, 2016:*[Principal Investigators for New Chronic Traumatic Encephalopathy Grant Meet as Their Study Begins](http://pnl.bwh.harvard.edu/wp-content/uploads/2016/06/CTEPIMeeting.jpg).The new seven year, 16 million dollar grant entitled “Chronic Traumatic Encephalopathy: Detection, Diagnosis, Course, and Risk Factors” had its first annual investigator meeting on June 1st and

*June 2, 2016:* The four principal investigators (PI) on this grant met at Boston University School of Medicine along with site investigators and staff from around the country. The Principal Investigators are: [Robert Stern](http://www.bu.edu/alzresearch/about-us/team/faculty/stern/),Ph.D., the contact PI, and, listed alphabetically,[Jeffrey Cummings](http://my.clevelandclinic.org/staff_directory/staff_display?doctorid=14517)**,** M.D.,[Eric Reiman](http://azalz.org/staff/eric-m-reiman-m-d/), M.D., and [Martha Shenton](http://pnl.bwh.harvard.edu/martha-shenton-ph-d/), Ph.D. – pictured[CTE PI Meeting](http://pnl.bwh.harvard.edu/wp-content/uploads/2016/06/CTEPIMeeting.jpg) at this meeting.

*June 3, 2016*; [BU Today](http://www.bu.edu/today/2016/cte-investigators-launch-study/)interviews contact Principal Investigator [Dr. Robert Stern](http://www.bu.edu/alzresearch/about-us/team/faculty/stern/), as well as the other PIs, Drs. [Cummings](http://my.clevelandclinic.org/staff_directory/staff_display?doctorid=14517), [Reiman](http://azalz.org/staff/eric-m-reiman-m-d/), and [Shenton](http://pnl.bwh.harvard.edu/martha-shenton-ph-d/) and former NFL player [Tim Fox](http://archive.patriots.com/alumni/index.cfm?ac=alumnibiosdetail&bio=3391). The interview includes a description of the 50 scientists from BU MED and the school of public health, the Cleveland Clinic, the Banner Alzheimer’s Institute, the Mayo Clinic and Brigham and Women’s Hospital, and other major

institutions around the country who gathered together on Wednesday, June 1st to launch their landmark, seven-year, $16 million [National Institutes of Health](https://www.nih.gov/) (NIH) and National Institute of Neurological Disorders and Stroke (NINDS)–funded study aimed at diagnosing CTE, a degenerative brain disease, during life.

*June 6, 2016:*[Invaluable Answers to Come From the Diagnose CTE Study](http://www.usatoday.com/story/sports/columnist/nancy-armour/2016/06/05/nfl-cte-study-boston-university/85450496/). A recent [article](http://www.usatoday.com/story/sports/columnist/nancy-armour/2016/06/05/nfl-cte-study-boston-university/85450496/) by USA TODAY describes how developing a diagnostic test for Chronic Traumatic Encephalopathy will make additional breakthroughs possible, such as understanding the disease’s underlying pathology and developing treatments for it. Drs. [Robert Stern](http://www.bu.edu/alzresearch/about-us/team/faculty/stern/) and [Martha Shenton](http://pnl.bwh.harvard.edu/martha-shenton-ph-d/) contribute to the article and explain their excitement to begin the new “Diagnose CTE” study.

*June 10, 2016:* [Brigham and Women’s Hospital “Awards, Honors and Grants” Page Features Dr.](http://www.brighamandwomens.org/About_BWH/publicaffairs/news/awards/Award_Honor.aspx?sub=0&PageID=2372)  [Martha Shenton for Human Connectome Award](http://www.brighamandwomens.org/About_BWH/publicaffairs/news/awards/Award_Honor.aspx?sub=0&PageID=2372). Dr. [Martha Shenton](http://pnl.bwh.harvard.edu/martha-shenton-ph-d/)is featured on Brigham and Women’s “Awards, Honors, and Grants” [News Page](http://www.brighamandwomens.org/About_BWH/publicaffairs/news/awards/Award_Honor.aspx?sub=0&PageID=2372). Dr. Shenton recently received an award from the National Institute of Mental Health for $5.35 million to fund research focused on studying neural connections in early psychosis. This research effort is part of the Human Connectome Project. Dr. Breier is a multiple PI on this project and Drs. [Larry Seidman](http://mghcme.org/faculty/faculty-detail/larry_seidman), [Dost Ongur](http://www.mcleanhospital.org/biography/dost-ongur), and [Daphne Holt](https://www.nmr.mgh.harvard.edu/user/6129) are site principal investigators on this project.

*Jul*y 2016: [The Brigham Research Institute](http://www.bwhresearch.org/answers-in-cte-study-will-overshadow-controversy/" \t "_blank) shared an article originally published in [USA Today](http://www.usatoday.com/story/sports/columnist/nancy-armour/2016/06/05/nfl-cte-study-boston-university/85450496/" \t "_blank), highlighting Dr. [Martha Shenton](http://pnl.bwh.harvard.edu/martha-shenton-ph-d/" \t "_blank)’s important involvement in research at Brigham and Women’s Hospital. The article looks optimistically at the new DIAGNOSE CTE study, and at the breakthroughs it will lead to in understanding the disorder, its diagnosis, and potential treatments. This superior understanding will minimize the controversy surrounding the NFL pulling its expected funding from the study.

*December 2016:* The U.S. Department of Defense’s Congressionally Directed Medical Research Programs (CDMRP) funded The Post-Traumatic Stress Disorder and Traumatic Brain Injury Clinical Consortium where Dr. [Martha Shenton](http://pnl.bwh.harvard.edu/martha-shenton-ph-d/) has been the lead on the neuroimaging aspects of this 10 site clinical consortium to understand and to treat those afflicted with PTSD and traumatic brain injury. An [article](http://cdmrp.army.mil/phtbi/research_highlights/16_Dec_intrust_highlight) is featured on their [home page](http://cdmrp.army.mil/" \t "_blank), which discusses the The Injury and Traumatic Stress (INTRuST) study for PTSD and TBI, and the advancements that have been made in acquiring and analyzing structural, DWI and SWI neuroimages for this study. The PNL has been instrumental in developing and employing the imaging tools discussed in this article. A list of published research articles related to the INTRuST project is also included in the article for further exploration.

2017 *February 2017*: The United Kingdom’s Professional Football Association Faces Pressure to Fund New Soccer Research Following Findings From Inga Koerte’s Study.A study conducted by [Dr. Inga Koerte](http://pnl.bwh.harvard.edu/inga-koerte-m-d/" \t "_blank) on German football players was recently brought to the attention of the UK’s Professional Football Association (PFA) by individuals hoping that the PFA will fund independent research on the effects heading in soccer on the brain. [Dr. Koerte](http://pnl.bwh.harvard.edu/inga-koerte-m-d/" \t "_blank) and [Dr. Martha Shenton](http://pnl.bwh.harvard.edu/martha-shenton-ph-d/" \t "_blank) discuss the study, which found white matter alterations in the brains of professional soccer players, in this [Independent News Article](http://www.independent.co.uk/sport/football/news-and-comment/dementia-in-football-brain-formation-harvard-research-footballers-premier-league-a7578381.html" \t "_blank).

2018 March 23, 2018: Bassoe Lecture, “**Advances in Neuroimaging Applications to Schizophrenia and Mild Traumatic Brain Injury.” 2018 Annual Meeting of** the *American Neuropsychiatric Association*: <http://pnl.bwh.harvard.edu/education/seminars/>

**Part II. REPORT OF SCHOLARSHIP**

**ORIGINAL RESEARCH ARTICLES (\* = denotes past or present mentee/trainee)**

(**Google Scholar for all years = 106**)(**H-Index Web of Science for all years = 80**)

(PMID: <http://www.ncbi.nlm.nih.gov/pubmed/?term=Shenton+ME+or+Shenton+M>)

1. Holzman PS, **Shenton ME**, and Solovay MR. Quality of thought disorder in differential diagnosis. *Schizophr*

*Bull* 1986;12(3):360-371. PMID: [3764357](http://www.ncbi.nlm.nih.gov/pubmed/3764357) [[full text](http://schizophreniabulletin.oxfordjournals.org/content/12/3/360.full.pdf)]

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](http://www.ncbi.nlm.nih.gov/pubmed/3764364) [[full text](http://schizophreniabulletin.oxfordjournals.org/content/12/3/483.full.pdf)]

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](http://www.ncbi.nlm.nih.gov/pubmed/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](http://www.ncbi.nlm.nih.gov/pubmed/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](http://www.ncbi.nlm.nih.gov/pubmed/3480194)

6. Faux SF, Torello MW, McCarley RW, **Shenton ME**, Duffy FH. P300 topographic alterations in schizophrenia:

A replication study. *Electroencephalogr Clin Neurophysiol Suppl* 1987;40:688-694. PMID: [3480195](http://www.ncbi.nlm.nih.gov/pubmed/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](http://www.ncbi.nlm.nih.gov/pubmed/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](http://www.ncbi.nlm.nih.gov/pubmed/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 Neurosci* 1988;39(1-2):117-135. PMID: [3384564](http://www.ncbi.nlm.nih.gov/pubmed/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](http://www.ncbi.nlm.nih.gov/pubmed/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](http://www.ncbi.nlm.nih.gov/pubmed/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](http://www.ncbi.nlm.nih.gov/pubmed/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](http://www.ncbi.nlm.nih.gov/pubmed/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](http://www.ncbi.nlm.nih.gov/pubmed/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 Clin Neurophysiol* 1990;75(5):378-391. PMID: [1692273](http://www.ncbi.nlm.nih.gov/pubmed/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](http://www.ncbi.nlm.nih.gov/pubmed/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](http://www.ncbi.nlm.nih.gov/pubmed/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](http://www.ncbi.nlm.nih.gov/pubmed/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](http://www.ncbi.nlm.nih.gov/pubmed/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](http://www.ncbi.nlm.nih.gov/pubmed/1640954%20) [[full text](http://www.nejm.org/doi/pdf/10.1056/NEJM199208273270905)] [**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](http://www.ncbi.nlm.nih.gov/pubmed/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](http://www.ncbi.nlm.nih.gov/pubmed/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](http://www.ncbi.nlm.nih.gov/pubmed/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 Clin Neurophysiol* 1993;88(1):32-41. PMID: [7681389](http://www.ncbi.nlm.nih.gov/pubmed/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](http://www.ncbi.nlm.nih.gov/pubmed/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](http://www.ncbi.nlm.nih.gov/pubmed/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](http://www.ncbi.nlm.nih.gov/pubmed/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: J Consul Clin Psychol* 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: [8260443](http://www.ncbi.nlm.nih.gov/pubmed/?term=Schizophr+Res+1993%3B10(3)%3A247-257)

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](http://www.ncbi.nlm.nih.gov/pubmed/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 amnestic syndrome. *Electroencephalogr Clin Neurophysiol* 1993;87(6):394-402. PMID: [7508372](http://www.ncbi.nlm.nih.gov/pubmed/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](http://www.ncbi.nlm.nih.gov/pubmed/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](http://www.ncbi.nlm.nih.gov/pubmed/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. *Neurosci Letters* 1994;182(1):7-12. PMID: [7891892](http://www.ncbi.nlm.nih.gov/pubmed/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](http://www.ncbi.nlm.nih.gov/pubmed/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](http://www.ncbi.nlm.nih.gov/pubmed/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](http://www.ncbi.nlm.nih.gov/pubmed/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](http://www.ncbi.nlm.nih.gov/pubmed/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](http://www.ncbi.nlm.nih.gov/pubmed/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](http://www.ncbi.nlm.nih.gov/pubmed/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](http://www.spl.harvard.edu/archive/spl-pre2007/pages/papers/leventon/cvpr96/paper.pdf)]

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](http://pnl.bwh.harvard.edu/pub/pdfs/kikinis_1996TransVisCompGraph.pdf)]

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](http://www.ncbi.nlm.nih.gov/pubmed/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: [8931911](http://www.ncbi.nlm.nih.gov/pubmed/8931911) [**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](http://www.ncbi.nlm.nih.gov/pubmed/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](http://www.ncbi.nlm.nih.gov/pubmed/9137119)

58. Näf 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](http://pnl.bwh.harvard.edu/pub/papers/naf_1997CompVisionImg.pdf)]

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](http://www.ncbi.nlm.nih.gov/pubmed/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](http://www.ncbi.nlm.nih.gov/pubmed/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: [9477932](http://www.ncbi.nlm.nih.gov/pubmed/9477932)

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](http://www.ncbi.nlm.nih.gov/pubmed/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](http://www.ncbi.nlm.nih.gov/pubmed/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](http://www.ncbi.nlm.nih.gov/pubmed/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: [9545997](http://www.ncbi.nlm.nih.gov/pubmed/9545997)

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](http://www.ncbi.nlm.nih.gov/pubmed/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 co registered with cortical surfaces derived from magnetic resonance images. *J Clin Neurophysiology* 1998;15(4):344-350. PMID: [9736468](http://www.ncbi.nlm.nih.gov/pubmed/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](http://www.ncbi.nlm.nih.gov/pubmed/9766770) [[full text](http://ajp.psychiatryonline.org/data/Journals/AJP/3693/1384.pdf)]

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](http://www.ncbi.nlm.nih.gov/pubmed/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](http://www.ncbi.nlm.nih.gov/pubmed/9734556) [[full text](http://ajp.psychiatryonline.org/data/Journals/AJP/3692/1281.pdf)]

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](http://www.ncbi.nlm.nih.gov/pubmed/10646759) [[full text](http://people.csail.mit.edu/welg/papers/Experimentation1998.pdf)]

75. \*Salisbury DF, **Shenton ME**, McCarley RW. P300 topography differs in schizophrenia and manic psychosis. *Biol Psychiatry* 1999;45(1):98-106. PMID: [9894581](http://www.ncbi.nlm.nih.gov/pubmed/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](http://www.ncbi.nlm.nih.gov/pubmed/10025438) [[full text](http://archpsyc.jamanetwork.com/article.aspx?articleid=204722)]

77. McCarley RW, Wible CG, \*Frumin M, \*Hirayasu Y, \*Levitt JJ, \*Fischer IA, **Shenton ME**. MRI anatomy of schizophrenia. *Biol Psychiatry* 1999;45(9):1099-1119. PMID: [10331102](http://www.ncbi.nlm.nih.gov/pubmed/10331102)

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: [10356620](http://www.ncbi.nlm.nih.gov/pubmed/10356620)

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: [10401458](http://www.ncbi.nlm.nih.gov/pubmed/10401458)

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: [10401451](http://www.ncbi.nlm.nih.gov/pubmed/10401451)

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: [10401463](http://www.ncbi.nlm.nih.gov/pubmed/10401463)

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. *Psychophysiol* 1999;36(3):388-398. PMID: [10352563](http://www.ncbi.nlm.nih.gov/pubmed/10352563)

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](http://www.ncbi.nlm.nih.gov/pubmed/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: [10565499](http://www.ncbi.nlm.nih.gov/pubmed/10565499)

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: [10553736](http://www.ncbi.nlm.nih.gov/pubmed/10553736)

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](http://www.ncbi.nlm.nih.gov/pubmed/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](http://cafe.spl.harvard.edu/publications/item/viewpdf/929/2512)]

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: [10618012](http://www.ncbi.nlm.nih.gov/pubmed/10618012)

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: [10698820](http://www.ncbi.nlm.nih.gov/pubmed/10698820)

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: [11032982](http://www.ncbi.nlm.nih.gov/pubmed/11032982)

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: [10784472](http://www.ncbi.nlm.nih.gov/pubmed/10784472)

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: [10784473](http://www.ncbi.nlm.nih.gov/pubmed/10784473)

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):618-619. [Letter to the editor]. PMID: [10839342](http://www.ncbi.nlm.nih.gov/pubmed/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: [10891040](http://www.ncbi.nlm.nih.gov/pubmed/10891040)

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. *Psychophysiol* 2000;37(4):456-463. PMID: [10934904](http://www.ncbi.nlm.nih.gov/pubmed/10934904)

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: [11163548](http://www.ncbi.nlm.nih.gov/pubmed/11163548)

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: [11343862](http://www.ncbi.nlm.nih.gov/pubmed/11343862) [**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](http://www.spl.harvard.edu/publications/item/viewpdf/892/2511)]

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](http://www.ncbi.nlm.nih.gov/pubmed/11278200) [[full text](http://cercor.oxfordjournals.org/content/11/4/374.full.pdf)]

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](http://ajp.psychiatryonline.org/data/Journals/AJP/3725/938.pdf)

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](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2650488/pdf/nihms92544.pdf)

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](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2819102/pdf/nihms170397.pdf)

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 co registered 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](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2845153/pdf/nihms186582.pdf)

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 Neurosurg* 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](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2849104/pdf/nihms186598.pdf)

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](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2845854/pdf/nihms186611.pdf)

108. \*Dickey CC, McCarley RW, **Shenton ME**. The brain in schizotypal personality disorder: A review of structural MRI and CT findings. *Harvard Rev Psychiatry* 2002;10(1):1-15. PMCID: [PMC2854016](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2854016/pdf/nihms186500.pdf)

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](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2845169/pdf/nihms186603.pdf)

110. \*Salisbury DF, DeSantis MA, **Shenton ME**, McCarley RW. The effect of background noise on P300 to suprathreshold stimuli. *Psychophysiol* 2002;39(1):111-115. PMCID: [PMC2647509](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2647509/pdf/nihms-92539.pdf)

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](http://www.ajnr.org/content/23/1/67.full.pdf)

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](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2650489/pdf/nihms92534.pdf)

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](http://ajp.psychiatryonline.org/data/Journals/AJP/3736/813.pdf)

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](http://www.ncbi.nlm.nih.gov/pubmed/11926932) [[full text](http://archpsyc.jamanetwork.com/article.aspx?articleid=206235)]

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](http://ajp.psychiatryonline.org/data/Journals/AJP/3738/1190.pdf)

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](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2824647/pdf/nihms170403.pdf) [**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](http://ajp.psychiatryonline.org/data/Journals/AJP/3736/866.pdf)

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](http://www.ncbi.nlm.nih.gov/pubmed/12150644) [[full text](http://archpsyc.jamanetwork.com/article.aspx?articleid=206586)]

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](http://www.ncbi.nlm.nih.gov/pubmed/12215076) [[full text](http://archpsyc.jamanetwork.com/article.aspx?articleid=206663)]

120. McInerney T, Hamarneh G, **Shenton M**, Terzopoulos D. Deformable organisms for automatic medical image analysis. *Med Image Analysis* 2002;6(3):251-266. PMCID: [PMC2845173](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2845173/pdf/nihms-186577.pdf) [**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](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2845171/pdf/nihms-186580.pdf)

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](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2819093/pdf/nihms170404.pdf)

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](http://ajp.psychiatryonline.org/data/Journals/AJP/3740/1521.pdf)

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](http://ajp.psychiatryonline.org/data/Journals/AJP/3741/1767.pdf)

125. O’Donnell BF, \*Potts GF, Nestor PG, Stylianopoulos KC, **Shenton ME**, McCarley RW. Spatial frequency discrimination in schizophrenia. *J Ab Psych* 2002;111(4):620-625. PMCID: [PMC2848254](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2848254/pdf/nihms188684.pdf)

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. PMCID: [PMC2845166](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2845166/pdf/nihms-186496.pdf)

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 Rev Psychiatry* 2002;10(6):324-336. PMCID: [PMC2853779](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2853779/pdf/nihms186574.pdf)

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. PMCID: [PMC2845847](http://ajp.psychiatryonline.org/data/Journals/AJP/3744/156.pdf)

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](http://www.ncbi.nlm.nih.gov/pubmed/12695311) [[full text](http://archpsyc.jamanetwork.com/article.aspx?articleid=207335)]

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. PMCID: [PMC2901861](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2901861/pdf/nihms-213637.pdf)

131. \*Spencer KM, Nestor PG, \*Niznikiewicz MA, \*Salisbury DF, **Shenton ME**, McCarley RW. Abnormal neural synchrony in schizophrenia. *J Neurosci* 2003;23(19):7407-7411. PMCID: [PMC2848257](http://www.jneurosci.org/content/23/19/7407.full.pdf)

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. PMCID: [PMC2848253](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2848253/pdf/nihms-188600.pdf)

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](http://www.ncbi.nlm.nih.gov/pubmed/14609882) [[full text](http://archpsyc.jamanetwork.com/article.aspx?articleid=207971)]

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. PMCID: [PMC2811885](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2811885/pdf/nihms166519.pdf)

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) PMCID: [PMC2806222](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2806222/pdf/nihms166512.pdf)

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. PMCID: [PMC2806220](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2806220/pdf/nihms166517.pdf)

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. PMCID: [PMC2845846](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2845846/pdf/nihms186864.pdf)

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. PMCID: [PMC2849103](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2849103/pdf/nihms188625.pdf)

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. PMCID: [PMC2826718](http://ajp.psychiatryonline.org/data/Journals/AJP/3755/2198.pdf)

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. PMCID: [PMC2794421](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2794421/pdf/nihms162174.pdf)

141. \*Kubicki M, Maier SE, Westin CF, Mamata H, \*Ersner-Hershfield 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. *Acad Radiol* 2004;11(2):224-232. PMCID: [PMC2793336](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2793336/pdf/nihms162111.pdf)

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. *Biol Psychiatry* 2004;55(2):177-184. PMCID: [PMC2793335](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2793335/pdf/nihms162180.pdf)

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. *Biol Psychiatry* 2004;55(6):656-658. PMCID: [PMC2794416](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2794416/pdf/nihms162099.pdf)

144. \*Salisbury DF, Griggs CB, **Shenton ME**, McCarley RW. The NoGo P300 ‘anteriorization’ effect and response inhibition. *Clin Neurophysiol* 2004;115(7):1550-1558. PMCID: [PMC2706017](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2706017/pdf/nihms-92533.pdf)

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. *Psychophysiol* 2004;41(3):367-371. PMCID: [PMC2794422](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2794422/pdf/nihms162178.pdf)

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. PMCID: [PMC2794419](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2794419/pdf/nihms162183.pdf) [**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. PMCID: [PMC2793337](http://ajp.psychiatryonline.org/data/Journals/AJP/3764/1603.pdf)

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. PMCID: [PMC2813857](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2813857/pdf/nihms162128.pdf)

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. PMCID: [PMC2790923](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2790923/pdf/nihms-162173.pdf) [**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. PMCID: [PMC2798804](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2798804/pdf/nihms162126.pdf)

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. PMCID: [PMC2811876](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2811876/pdf/nihms162098.pdf)

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. PMCID: [PMC2789267](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2789267/pdf/nihms-162094.pdf) [**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. PMCID: [PMC535363](http://www.pnas.org/content/101/49/17288.full.pdf)

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. PMCID: [PMC3296487](http://www.ncbi.nlm.nih.gov/pmc/articles/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. PMCID: [PMC2768070](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2768070/pdf/nihms-152306.pdf)

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. PMCID: [PMC2768063](http://ajp.psychiatryonline.org/data/Journals/AJP/3990/65.pdf)

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. PMCID: [PMC2772126](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2772126/pdf/nihms152323.pdf)

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. PMCID: [PMC2770436](http://ajp.psychiatryonline.org/data/Journals/AJP/3997/599.pdf)

159. Nestor PG, Piech R, \*Allen C, \*Niznikiewicz M, **Shenton ME**, McCarley RW. Retrieval-induced forgetting in schizophrenia. *Schizophr Res* 2005;75:199-209. PMCID: [PMC2772129](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2772129/pdf/nihms152330.pdf)

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. PMCID: [PMC2768051](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2768051/pdf/nihms-152331.pdf)

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. PMCID: [PMC2766930](http://ajp.psychiatryonline.org/data/Journals/AJP/4015/1539.pdf)

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. PMCID: [PMC2768055](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2768055/pdf/nihms152338.pdf)

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. PMCID: [PMC2766931](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2766931/pdf/nihms152339.pdf)

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. PMCID: [PMC2768048](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2768048/pdf/nihms152340.pdf)

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. PMCID: [PMC2768113](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2768113/pdf/nihms152341.pdf)

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 Comput Assist Interv* 2005;8(Pt 1):310-318. PMCID: [PMC2784666](http://www.ncbi.nlm.nih.gov/pmc/articles/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](http://www.ncbi.nlm.nih.gov/pmc/articles/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 sub serving face perception in schizophrenia. *Am J Psychiatry* 2006;163:455-462. PMCID: [PMC2773688](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2773688/pdf/nihms152342.pdf)

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](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2768044/pdf/nihms-152344.pdf)

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](http://www.ajnr.org/content/27/5/1032.full.pdf)

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](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2768597/pdf/nihms-152587.pdf)

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](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2768064/pdf/nihms152464.pdf)

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](http://ajp.psychiatryonline.org/data/Journals/AJP/3787/06aj2103.PDF)

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](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2785042/pdf/nihms152469.pdf)

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](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2768053/pdf/nihms-152473.pdf)

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](http://www.ncbi.nlm.nih.gov/pubmed/17015811) [[full text](http://archpsyc.jamanetwork.com/article.aspx?articleid=209889)]

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](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2770249/pdf/nihms152483.pdf)

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](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3062073/pdf/nihms-152629.pdf)

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](http://www.ncbi.nlm.nih.gov/pmc/articles/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](http://www.ncbi.nlm.nih.gov/pmc/articles/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](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2768067/pdf/nihms-152488.pdf)

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](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2768134/pdf/nihms-152492.pdf) [**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/2008/08aprfbp/08aprfbpKubicki/>]

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](http://brain.oxfordjournals.org/content/130/3/693.full.pdf)

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](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1906862/pdf/nihms19719.pdf)

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](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1885480/pdf/nihms19500.pdf)

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](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2777663/pdf/nihms152514.pdf)

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](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2788774/pdf/nihms-161047.pdf)

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](http://www.ncbi.nlm.nih.gov/pubmed/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](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2396445/pdf/nihms22698.pdf)

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](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2903200/pdf/nihms162192.pdf)

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](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1876710/pdf/nihms19589.pdf)

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](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2702211/pdf/nihms27369.pdf)

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](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2768473/pdf/nihms-152546.pdf)

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](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2423493/pdf/nihms-31594.pdf) [**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](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2768050/pdf/nihms-152547.pdf)

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: [17586477](http://www.ncbi.nlm.nih.gov/pubmed/17586477)

197. Balci SK, Golland P**, Shenton M**, Wells WM. Free-Form B-spline deformation model for group wise registration. *Med Image Comput Comput Assist Interv* 2007;10(WS):23-30. PMID: [20224762](http://www.ncbi.nlm.nih.gov/pubmed/20224762)

198. \*Niethammer M, Reuter M, Wolter FE, \*Bouix S, Peinecke N, \*Koo MS, **Shenton ME**. Global medical shape analysis using the Laplace-Beltrami spectrum. *Med Image Comput Comput Assist Interv* 2007;10(Pt 1):850-857. PMID: [18051138](http://www.ncbi.nlm.nih.gov/pubmed/18051138)

199. \*Niethammer M, \*Bouix S, Aja-Fernández S, Westin CF, **Shenton ME**. Outlier rejection for diffusion weighted imaging. *Med Image Comput Ass Interv* 2007;10(Pt 1):161-168. PMID: [18051055](http://www.ncbi.nlm.nih.gov/pubmed/18051055)

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: [20224763](http://www.ncbi.nlm.nih.gov/pubmed/20224763)

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](http://www.na-mic.org/publications/item/viewpdf/1091/3022)]

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: [20407623](http://www.ncbi.nlm.nih.gov/pubmed/20407623)

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: [17825801](http://www.ncbi.nlm.nih.gov/pubmed/17825801)

204. \*Spencer KM, \*Niznikiewicz MA, **Shenton ME**, McCarley RW. Sensory-evoked gamma oscillations in chronic schizophrenia. *Biol Psychiatry* 2008;63:744-747. PMID: [18083143](http://www.ncbi.nlm.nih.gov/pubmed/18083143)

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: [18331167](http://www.ncbi.nlm.nih.gov/pubmed/18331167)

206. \*Rosenberger G, \*Kubicki M, Nestor PG, \*Connor E, \*Bushell GB, \*Markant D, \*Niznikiewicz M, Westin CF, Kikinis R, Saykin A, 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: [18504117](http://www.ncbi.nlm.nih.gov/pubmed/18504117)

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: [18606948](http://www.ncbi.nlm.nih.gov/pubmed/18606948)

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: [18056163](http://www.ncbi.nlm.nih.gov/pubmed/18056163)

209. 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. PMCID: [18450168](http://www.ncbi.nlm.nih.gov/pubmed/18450168)

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: [17884348](http://www.ncbi.nlm.nih.gov/pubmed/17884348)

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: [18400208](http://www.ncbi.nlm.nih.gov/pubmed/18400208)

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: [18555666](http://www.ncbi.nlm.nih.gov/pubmed/18555666)

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;10:1389-1403. PMID: [18815091](http://www.ncbi.nlm.nih.gov/pubmed/18815091)

214. \*Sampaio A, Sousa N, \*Férnandez M, Vasconcelos C, **Shenton ME**, Gonçalves Ó. MRI assessment of superior temporal gyrus in Williams syndrome. *Cogn Beh Neurol* 2008;21(3):150-156. PMID: [18797257](http://www.ncbi.nlm.nih.gov/pubmed/18797257)

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: [18829262](http://www.ncbi.nlm.nih.gov/pubmed/18829262)

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: [18982632](http://www.ncbi.nlm.nih.gov/pubmed/18982632)

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: [18979833](http://www.ncbi.nlm.nih.gov/pubmed/18979833)

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: [18982628](http://www.ncbi.nlm.nih.gov/pubmed/18982628)

219. \*Lee K, 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: [19135872](http://www.ncbi.nlm.nih.gov/pubmed/1913572)

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;106(4):1279-1284. PMID: [19164577](http://www.ncbi.nlm.nih.gov/pubmed/19164577)

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: [19159690](http://www.ncbi.nlm.nih.gov/pubmed/19159690)

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: [19046624](http://www.ncbi.nlm.ncbi.nih.gov/pubmed/19046624)

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: [19328656](http://www.ncbi.nlm.nih.gov/pubmed/19328656)

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](http://www.ncbi.nlm.nih.gov/pubmed/19327968)

225. Malcolm JG, **Shenton ME**, \*Rathi Y. Neural tractography using an unscented Kalman filter. *Inf Process Med Imaging* 2009;21:126-138. PMID: [19694258](http://www.ncbi.nlm.nih.gov/pubmed/19694258)

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. PMID: [19524408](http://www.ncbi.nlm.nih.gov/pubmed/19524408)

227. \*Rathi Y, Michailovich O, **Shenton ME**, \*Bouix S. Directional functions for orientation distribution estimation. *Med Image Anal* 2009;13(3):432-444. PMID: [19269242](http://www.ncbi.nlm.nih.gov/pubmed/19269242)

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;115:290-292. PMCID: [19464150](http://www.ncbi.nlm.nih.gov/pubmed/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](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2832589/pdf/nihms152586.pdf)

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. PMID: [19328654](http://www.ncbi.nlm.nih.gov/pubmed/19328654)

231. \*Oh JS, \*Kubicki M, \*Rosenberger G, \*Bouix S, \*Levitt JJ, McCarley RW, Westin C-F, **Shenton ME**. Thalamo-frontal white matter alterations in chronic schizophrenia: A quantitative diffusion tractography study. *Human Brain Mapp* 2009;30(11):3812-3825. PMID: [19449328](http://www.ncbi.nlm.nih.gov/pubmed/19449328)

232. \*Kubicki M, \*Niznikiewicz M, \*Connor E, \*Ungar L, Nestor P, \*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 Beh* 2009;3(2):191-201. PMID: [20556231](http://www.ncbi.nlm.nih.gov/pubmed/20556231)

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 Beh* 2009;3(3):240-5. PMID: [22005988](http://www.ncbi.nlm.nih.gov/pubmed/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](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2892818/pdf/nihms210476.pdf) (**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. PMID: [20426073](http://www.ncbi.nlm.nih.gov/pubmed/20426073)

236. Reuter M, Franz-Erichwolter, **Shenton ME**, Niethammer M. Laplace-Beltrami eigenvalues and topological features of eigenfunctions for statistical shape analysis. Comput Aided Des 2009;41(10):739-755. PMID:

[20161035](http://www.ncbi.nlm.nih.gov/pubmed/20161035)

237. Malcolm JG, Michailovich O, \*Bouix S, Westin CF, **Shenton ME**, \*Rathi Y. A filtered approach to neural tractography using the Watson directional function. *Med Image Anal* 2010;14:58-59. PMID: [19914856](http://www.ncbi.nlm.nih.gov/pubmed/19914856)

238. \*Savadjiev P, Kindlmann GL, \*Bouix S, **Shenton ME**, Westin CF. Local white matter geometry from diffusion tensor gradients. *NeuroImage* 2010;49(4):3175-3186. PMID: [19896542](http://www.ncbi.nlm.nih.gov/pubmed/19896542)

239. 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. PMID: [20063953](http://www.ncbi.nlm.nih.gov/pubmed/20063953)

240. \*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](http://smartech.gatech.edu/bitstream/handle/1853/35885/2010_JOC_001.pdf?sequence=1)]

241. \*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. PMID: [20237131](http://www.ncbi.nlm.nih.gov/pubmed/20237131)

242. \*Sampaio A, Sousa N, \*Férnandez M, Vasconelos C, **Shenton ME**, Gonçalves ÓF. Williams’ syndrome and memory: A neuroanatomical and cognitive approach. *J Autism Dev Dis* 2010;40(7):870-877. PMID: [20101451](http://www.ncbi.nlm.nih.gov/pubmed/20101451)

243. \*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. *Biol Psychiatry* 2010;68(1):70-77. PMID: [20494336](http://www.ncbi.nlm.nih.gov/pubmed/20494336) [**Featured on the Cover of Biological Psychiatry.**]

244. \*Rathi Y, Malcolm J, Michailovich O, Westin CF, **Shenton ME**, \*Bouix S. Tensor-kernels for simultaneous fiber model estimation and tractography. *Magn Reson Med* 2010;64(1):138-148. PMID: [20572129](http://www.ncbi.nlm.nih.gov/pubmed/20572129)

245. Malcolm J, **Shenton ME**, \*Rathi Y. Filtered multi-tensor tractography. *IEEE Trans Med Imaging* 2010;29(9):1664-1675. PMID: [20805043](http://www.ncbi.nlm.nih.gov/pubmed/20805043)

246. \*Nguyen AD, **Shenton ME**, \*Levitt JJ. Olfactory dysfunction in schizophrenia: A review of neuroanatomy and psychophysiological measurements. *Harvard Rev Psychiatry* 2010;5:279-292. PMID: [20825265](http://www.ncbi.nlm.nih.gov/pubmed/20825265)

247. \*Kikinis Z, Fallon JH, \*Niznikiewicz M, Nestor PG, \*Davidson C, \*Bobrow L, \*Pelavin P, Fischl B, Yendiki 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. PMID: [20822884](http://www.ncbi.nlm.nih.gov/pubmed/20822884)

248. \*Dickey CC, Morocz IA, Minney D, \*Niznikiewicz M, Volgmaier M, Panych LP, \*Khan U, \*Zacks R, \*Terry DP, **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. PMID: [20362418](http://www.ncbi.nlm.nih.gov/pubmed/20362418)

249. \*Levitt JJ, \*Kubicki M, Nestor PG, \*Ersner-Herschfied 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* 2010;184(3):143-150. PMID: [21055906](http://www.ncbi.nlm.nih.gov/pubmed/21055906)

250. \*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. PMID: [20879320](http://www.ncbi.nlm.nih.gov/pubmed/20879320)

251. \*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. PMID: [20879287](http://www.ncbi.nlm.nih.gov/pubmed/20879287)

252. \*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. (+Denotes equal last authorship.) PMCID: [PMC3006645](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3006645/pdf/nihms253864.pdf)

253. \*Spencer KM, Nestor PG, Valdman O, \*Niznikiewicz MA, **Shenton ME**, McCarley RW. Enhanced facilitation of spatial attention in schizophrenia. *Neuropsychol* 2011;25(1):76-85. PMID: [20919764](http://www.ncbi.nlm.nih.gov/pubmed/20919764)

254. \*Kubicki M, \*Alvarado JL, Westin CF, \*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(4):1657-1664. PMID: [21256966](http://www.ncbi.nlm.nih.gov/pubmed/21256966)

255. Melonakos ED, **Shenton ME**, \*Rathi Y, \*Terry DP, \*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. PMID: [21684124](http://www.ncbi.nlm.nih.gov/pubmed/21684124)

256. \*Rathi R, \*Kubicki M, \*Bouix S, Westin CF, \*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. PMID: [21277725](http://www.ncbi.nlm.nih.gov/pubmed/21277725)

257. \*Whitford TJ, \*Savadjiev P, \*Kubicki M, O’Donnell LJ, \*Terry DP, \*Bouix S, Westin CF, \*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. PMID: [21831601](http://www.ncbi.nlm.nih.gov/pubmed/21831601)

258. \*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](http://www.ncbi.nlm.nih.gov/pubmed/21561738)

259. 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](http://www.ncbi.nlm.nih.gov/pubmed/21851457)

260. \*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. PMID: [21761667](http://www.ncbi.nlm.nih.gov/pubmed/21761667)

261. \*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. PMID: [21640557](http://www.ncbi.nlm.nih.gov/pubmed/21640557)

262. Gavett BE, Cantu RC, **Shenton M**, \*Lin AP, Nowinsi CJ, McKee AC, Stern RA. Clinical appraisal of chronic traumatic encephalopathy: Current perspectives and future directions. *Curr Opin Neurol* 2011;24(6):525-531. PMID: [22045219](http://www.ncbi.nlm.nih.gov/pubmed/22045219)

263. \*Koerte I, \*Pelavin P, Kirmess B, Fuchs T, Berweck S, Laubender RP, Borggraefe I, Schroeder AS, Danek 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. PMID: [21121906](http://www.ncbi.nlm.nih.gov/pubmed/21121906)

264. \*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](http://www.ncbi.nlm.nih.gov/pubmed/21995013)

265. \*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 Behav* 2011;5(4):252-61. PMID: [21728040](http://www.ncbi.nlm.nih.gov/pubmed/21728040)

266. Capitão L, \*Sampaio A, Sampaio C, Vasconcelos C, \*Férnandez M, Garayzábal E, **Shenton ME**, Gonçalves OF MRI amygdala volume in Williams syndrome. *Res Dev Dis* 2011;32(6):2767-2772. PMID: [21752593](http://www.ncbi.nlm.nih.gov/pubmed/21752593)

267. \*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](http://www.ncbi.nlm.nih.gov/pubmed/20663254)

268. Xu H, Haroutunian V, Bartzokis G, **Shenton ME**. Oligodendrocytes and schizophrenia (editorial). *Schizophr Res Treatment* 2011;2011:249768. [PMID:](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3420671/) [22937262](http://www.ncbi.nlm.nih.gov/pubmed/22937262)

269. \*Whitford TJ, \*Kubicki M, **Shenton ME**. Diffusion tensor imaging, structural connectivity, and schizophrenia. *Schizophr Res Treatment* 2011;2011:709523. [PMID:](http://www.ncbi.nlm.nih.gov/pubmed) [22937272](http://www.ncbi.nlm.nih.gov/pubmed/22937272)

270. \*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: [20363050](http://www.ncbi.nlm.nih.gov/pubmed/20363050)

271. Gooding DC, Coleman MJ, Roberts SA, **Shenton ME**, Levy DL, Erlenmeyer-Kimling L. Thought disorder in offspring of schizophrenic parents: Findings from the New York high-risk project. *Schizophr Bull* 2012;38(2):263-271. PMID: [20554785](http://www.ncbi.nlm.nih.gov/pubmed/20554785)

272. 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? *World J Biol Psychiatry* 2012;(2):153-158. PMID: [21623667](http://www.ncbi.nlm.nih.gov/pubmed/21623667)

273. \*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: [21924364](http://www.ncbi.nlm.nih.gov/pubmed/21924364)

274. \*Whitford TJ, Ford JM, Mathalon DH, \*Kubicki M, **Shenton ME**. Schizophrenia, myelination, and delayed corollary discharges: A hypothesis. *Schizophr Bull* 2012;38(3):486-495. PMID: [20855415](http://www.ncbi.nlm.nih.gov/pubmed/20855415)

275. \*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](http://www.ncbi.nlm.nih.gov/pubmed/22019073)

276. \*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: [22244184](http://www.ncbi.nlm.nih.gov/pubmed/?term=Whitford+TJ%2C+Wood+SJ%2C+Yung+A%2C+Cocchi+L)

277. \*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](http://www.ncbi.nlm.nih.gov/pubmed/21922600)

278. \*Rosenberger G, Nestor P, \*Oh JS, \*Levitt JJ, \*Kindleman G, \*Bouix S, \*Fitzsimmons J, \*Niznikiewicz M, Westin CF, Kikinis R, McCarley RW, **Shenton ME**, \*Kubicki M. Anterior limb of the internal capsule in schizophrenia: A diffusion tensor tractography study. *Brain Imaging Behav* 2012;6(3):417-425. PMID: [22415192](http://www.ncbi.nlm.nih.gov/pubmed/22415192)

279. 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: [22664957](http://www.ncbi.nlm.nih.gov/pubmed/?term=Musen+G%2C+Jacobson+AM%2C+Bolo+NR)

280. **Shenton ME**, \*Hamoda HM, \*Schneiderman JS, \*Bouix S, \*Pasternak O, \*Rathi Y, \*Vu M-A, \*Purohit MP, Helmer K, \*Koerte I, \*Lin AP, Westin CF, 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 Behav* 2012;6(2):137-192. [**Most Downloaded Article for this Journal; figure featured on cover**] PMID: [22438191](http://www.ncbi.nlm.nih.gov/pubmed/22438191)

281. \*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 Behav* 2012;6(2):103-107. PMID: [22706729](http://www.ncbi.nlm.nih.gov/pubmed/22706729)

282. 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 Beh* 2012;6(2):244-254. PMID: [22552850](http://www.ncbi.nlm.nih.gov/pubmed/22552850)

283. \*Kikinis Z, \*Asami T, \*Bouix S, Finn CT, \*Ballinger T, Tworog-Dube E, Kucherlapati R, Kikinis R, **Shenton ME**, Kubicki M. Reduced fractional anisotropy and axial diffusivity in white matter in 22q11.2 deletion syndrome: A pilot study. *Schizophr Res* 2012;141(1):35-39. PMID: [22863550](http://www.ncbi.nlm.nih.gov/pubmed/?term=kikinis+Z%2C+Asami+T%2C+Bouix+S%2C+Finn+CT)

284. Francis AN, Seidman LJ, Jabbar GA, Mesholam-Gately R, Thermenos HW, Juelich R, Proal A, **Shenton ME**, \*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. PMID: [22892286](http://www.ncbi.nlm.nih.gov/pubmed/?term=Francis+AN%2C+Seidman+LJ%2C+Jabbar+GA)

285. 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. PMID: [22831773](http://www.ncbi.nlm.nih.gov/pubmed/?term=Gao+Y%2C+Kikinis+R%2C+Boix+S%2C)

286. \*Pasternak O, Westin C-F, \*Bouix S, Seidman LS, \*Goldstein JM, Woo TU, Petryshen TL, Mesholam-Gately 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](http://www.ncbi.nlm.nih.gov/pubmed/23197727) [**Figure featured in this week in the journal**.]

287. \*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](http://www.ncbi.nlm.nih.gov/pubmed/23150002)

288. +\*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. *Neurosurg Focus (JNS)* 2012;33(6):E3:1-7. (+Denotes equal first authorship.) PMID: [23199426](http://www.ncbi.nlm.nih.gov/pubmed/23199426) [[full text](http://thejns.org/doi/pdfplus/10.3171/2012.10.FOCUS12303)]

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](http://www.ncbi.nlm.nih.gov/pubmed/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;July 218(4):951-968*.* PMID: [22782432](http://www.ncbi.nlm.nih.gov/pubmed/22782432)

291. \*Voineskos AN, Felsky D, Kovacevic N, Tiwari AK, Zaj C, Chakravarty MM, Lobaugh NL, **Shenton ME**, Rajji TK, Miranda D, Pollack BG, Mulsant BH, McIntosh AR, Kennedy JL. Oligodendrocyte genes, white matter tract integrity, and cognition in schizophrenia. *Cerebral Cortex* 2013;23(9):2044-2057. PMID: [22772651](http://www.ncbi.nlm.nih.gov/pubmed/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. *Soc Cogn Affect Neurosci* 2013;8(4):460-467. PMID: [22345366](http://www.ncbi.nlm.nih.gov/pubmed/22345366)

293. +\*Sampaio A, +\*Bouix S, Sousa N, Vasconcelos C, \*Férnandez M, **Shenton ME**, Gonçalves OF. Morphometry of corpus callosum in Williams’s 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, Mesholam-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](http://www.ncbi.nlm.nih.gov/pubmed/23290268) [**Certificate of recognition for one of the 5 most cited papers published in *Schizophrenis Research* between 2014-2015 awarded in 2016**].

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 Beh* 2013;7(1):68-76*.* PMID: [23011383](http://www.ncbi.nlm.nih.gov/pubmed/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](http://www.ncbi.nlm.nih.gov/pubmed/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](http://www.ncbi.nlm.nih.gov/pubmed/23290607)

298. \*Quan M, \*Lee SH, \*Kubicki M, \*Kikinis Z, \*Rathi Y, Seidman LJ, Mesholam-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](http://www.ncbi.nlm.nih.gov/pubmed/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](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3760333/)

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](http://www.ncbi.nlm.nih.gov/pubmed/23507356)

301. \*Hoogenboom WS, Perlis RH, Smoller JW, Zeng-Treitler Q, Gainer VS, Murphy SN, Churchill SE, Kohane IS, **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* 2013;211(3):202-213. PMID: [23149041](http://www.ncbi.nlm.nih.gov/pubmed/23149041)

302. \*Clemm von Hohenberg C, Schocke MF, \*Wigand MC, Nachbauer W, Guttmann CRG, \*Kubicki M, **Shenton ME**, Boesch, Egger K. Radial diffusivity in the cerebella peduncles correlates with clinical severity in Friedreich ataxia. *Neurol Sci* 2013;34(8):1459-1462. PMID: [23640016](http://www.ncbi.nlm.nih.gov/pubmed/23640016)

303. +\*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 equal first authorship.) PMID: [23776631](http://www.ncbi.nlm.nih.gov/pubmed/?term=bouix+plosOne) [**Top 10% most cited papers in this journal.**]

304. \*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, Mulert C, CNTNAP2 polymorphisms and structural brain connectivity: A diffusion-tensor imaging study. *J Psychiatr Res* 2013;47(10):1349-1356. PMID: [23871450](http://www.ncbi.nlm.nih.gov/pubmed/?term=clemm+von+hohenberg+2013+J+psyvhiatr+Res)

305. \*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 Re*s 2013;145(1- 3):11-19. PMID: [23380548](file://C:\Users\Marty\AppData\Local\Temp\WWW.NCBI.NIM.NIH.GOV\PUBMED\23380548)

306. \*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. PMID: [23800617](http://www.ncbi.nlm.nih.gov/pubmed/23800617)

307. \*Wasserman D, Makris N, \*Rathi Y, **Shenton ME**, 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;647-654.

PMID: [24505722](http://www.ncbi.nlm.nih.gov/pubmed/24505722)

308. Makris N, Preti MG, \*Wasserman D, \*Rathi Y, Papadimetriou 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 Beh* 2013;7(3):335-352. PMID: [23686576](http://www.ncbi.nlm.nih.gov/pubmed/?term=23686576)

309. Gao Y, \*Bouix S, **Shenton M**, Tannenbaum A. Sparse texture active contour. *IEEE Trans Image Process* 2013;10:3866-3878. PMID: [23799695](http://www.ncbi.nlm.nih.gov/pubmed/?term=23799695)

310. \*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 Beh* 2013;7(3):316-325. PMID: [23612843](http://www.ncbi.nlm.nih.gov/pubmed/?term=23612843)

311. Thermenos HW, Whitfield-Gabrieli S, Seidman LJ, Kuperberg G, Juelich RJ, Divatia S, Riley C, Jabbar GA, **Shenton ME**, \*Kubicki M, Manschreck T, Keshavan M, Delisi LE. Altered language network activity in young people at familial high-risk for schizophrenia. *Schizophr Res* 2013;151(1-3):229-237. PMID: [24176576](http://www.ncbi.nlm.nih.gov/pubmed/24176576)

312. Francis AN, Seidman LJ, Tandon N, **Shenton ME**, Thermenos HW, Mesholam-Gately RI, Van Elst 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* 2013;151(1-3):154-157. PMID: [24144441](http://www.ncbi.nlm.nih.gov/pubmed/?term=24144441)

313. \*von Hohenberg CC, \*Pasternak O, \*Kubicki M, \*Ballinger T, \*Vu MA, \*Swisher T, \*Green K, \*GiwercM, \*Dahlben B, \*Goldstein JM, Woo TU, 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* 2014; 40(4):895-903. PMID: [23737549](http://www.ncbi.nlm.nih.gov/pubmed/?term=23437549)

314. \*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* 2014;15(2):122-134. PMID: [22540406](http://www.ncbi.nlm.nih.gov/pubmed/22540406)

315. +\*Egger K, +\*von Hohenberg CC, Schocke MF, Guttmann 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 Neuroimaging* 2014;24(5):504-508. (+Denotes equal first authorship.) PMID: [24015771](http://www.ncbi.nlm.nih.gov/pubmed/?term=24015771)

316. \*Savadjiev P, \*Whitford TJ, Hough ME, ClemmVon Hohenberg C, \*Bouix S, Westin CF, **Shenton ME**, Crow TJ, James AC, \*Kubicki M. Sexually dimorphic white matter geometry abnormalities in adolescent onset schizophrenia. *Cerebral Cortex* 2014;24(5):1389-1396. PMID: [23307635](http://www.ncbi.nlm.nih.gov/pubmed/23307635)

317. \*Ohtani T, \*Levitt JJ, Nestor PG, \*Kawashima T, \*Asami T, **Shenton ME**, \*Niznikiewicz M, McCarley RW. Prefrontal cortex volume deficit in schizophrenia: A new look using 3T MRI with manual parcellation. *Schizophr Res* 2014;152(1):184-190. PMID: [24280350](http://www.ncbi.nlm.nih.gov/pubmed/?term=24280350)

318. Perlstein MD, Chohan MR, Coman IL, Antshel KM, 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* 2014;152(1):117-123. PMID: [24321711](http://www.ncbi.nlm.nih.gov/pubmed/?term=24321711)

319. \*Pasternak O, \*Koerte IK, \*Bouix S, \*Fredman E, \*Sasaki T, Mayinger M, Helmer KG, Johnson AM, Holmes JD, Forwell LA, Skopelja EN, +**Shenton ME**, +Echlin PS. Hockey Concussion Education Project, Part 2. Microstructural white matter alterations in acutely concussed ice hockey players: a longitudinal free-water study. *J Neurosurg* 2014;120(4):873-881. PMID: [24490785](http://www.ncbi.nlm.nih.gov/pubmed/?term=24490785) (+Denotes equal last authorship).

320. \*Sasaki T, \*Pasternak O, Mayinger M, Muelmann M, \*Savadjiev P, \*Bouix S, \*Kubicki M, \*Fredman E, \*Dahlben B, Helmer KG, Johnson AM, Holmes JD, Forwell LA, Skopelja EN, **Shenton ME**, +Echlin PS, +\*Koerte IK. Hockey Concussion Education Project, Part 3. White matter microstructure in ice hockey players with a history of concussion: A diffusion tensor imaging study. *J Neurosurg* 2014;120(4):882-990. PMID: [24471841](http://www.ncbi.nlm.nih.gov/pubmed/?term=24471841) (+Denotes equal last authorship).

321. Helmer KG, \*Pasternak O, \*Fredman E, Preciado R, \*Koerte IK, \*Sasaki T, Mayinger M, Johnson AM, Holmes JD, Forwell LA, Skopelja EN, **+Shenton ME**, +Echlin PS. Hockey Concussion Education Project, Part 1.

Susceptibility-weighted imaging study in male and female ice hockey players over a single season, Part 3. Clinical article. *J Neurosurg* 2014;120(4):864-872. PMID: [24490839](http://www.ncbi.nlm.nih.gov/pubmed/?term=24490839) (+Denotes equal last authorship).

322. +Hüttlova J, +\*Kikinis Z, Kerkovsky M, \*Bouix S, \*Vu M-A, Makris N, **Shenton ME**, Kasparek T. Abnormalities in myelination in patients with schizophrenia and deficits in movement sequencing. *Cerebellum* 2014;13(4):415-424. PMID: [24550129](http://www.ncbi.nlm.nih.gov/pubmed/?term=24550129) (+Denotes equal first authorship).

323. Woodberry KA, Serur RA, Hallinan SB, Mesholam-Gately RI, Giuliano AJ, Wojcik JD. Keshavan MS,

Frazier JA, \*Goldstein JM, **Shenton ME**, McCarley RW, Seidman LJ. Frequency and pattern of

childhood symptom onset reported by first episode schizophrenia and clinical high risk youth. *Schizophr Res*

2014;158(1-3):45-51. PMID: [24924404](http://www.ncbi.nlm.nih.gov/pubmed/?term=24924404)

324. +Ng TSC, +\*Lin AP, \*Koerte IK, \*Pasternak O, Liao H, Merugumala S, \*Bouix S, **Shenton ME**. Neuroimaging

in repetitive brain trauma. *Alzheimer’s Res Ther* 2014;6(1):10. PMID: [25031630](http://www.ncbi.nlm.nih.gov/pubmed/?term=25031630) (+Denotes equal first authorship).

325. \*Hoogenboom 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* 2014;63(2):728-738. PMID: [24203723](http://www.ncbi.nlm.nih.gov/pubmed/?term=24203723)

326. \*Del Re E, Bergen SE, Mesholam-Gately R, \*Niznikiewicz MA, \*Goldstein JM, Woo TU, **Shenton ME**, Seidman LJ, McCarley RW, Petryshen TL. Analysis of schizophrenia-related genes and electrophysiological measures reveals ZNF804A association with amplitude of P300b elicited by novel sounds. *Trans Psychiatry* 2014;4:e346. PMID: [24424392](http://www.ncbi.nlm.nih.gov/pubmed/?term=24424392)

327. \*Rathi Y, \*Pasternak O, \*Savadjiev P, Michailovich O, \*Bouix S, \*Kubicki M, Westin CF, **Shenton ME**. Gray matter alterations in early aging: A diffusion magnetic resonance imaging study. *Hum Brain Mapp* 2014;35(8):3841-3856. PMID: [24382651](http://www.ncbi.nlm.nih.gov/pubmed/?term=24382651)

328. \*Rathi Y, Ning L, Michailovich O, Liao H, Gagoski B, Grant PE, **Shenton ME**, Stern R, Westin CF, Lin A. Maximum entropy estimation of glutamate and glutamine in MR spectroscopic imaging. *Med Image Comput Comput Assist Interv* 2014;17(2):749-756. PMID: [25485447](http://www.ncbi.nlm.nih.gov/pubmed/25485447)

329. Pietersen CY, Mauney SA, Kim SS, Passeri E, Lim MP, Rooney RJ, \*Goldstein JM, Petreyshen TL, Seidman LF, **Shenton ME**, McCarley RW, Sonttag K-C, Woo T-U W. Molecular profiles of parvalbumin-immunoreactive neurons in the superior temporal cortex in schizophrenia. *J Neurogenet* 2014;28(1-2):70-85. PMID: [24628518](http://www.ncbi.nlm.nih.gov/pubmed/24628518)

330. Pietersen CY, Mauney SA, Kim SS, Lim MP, Rooney RJ, \*Goldstein JM, Petryshen TL, Seidman LJ, **Shenton ME**, McCarley RW, Sonntag K-S, Woo T-UW. Molecular profiles of pyramidal neurons in the superior temporal cortex in schizophrenia. *J Neurogenet* 2014;28(1-2):53-69. PMID: [24702465](http://www.ncbi.nlm.nih.gov/pubmed//term=24702465)

331. \*Whitford TJ, \*Lee SW, \*Oh JS, de Luis-Garcia R, \*Savadjiev P, \*Alvarado JL, Westin CF, \*Niznikiewicz M,

Nestor PG, McCarley RW, \*Kubicki M, **Shenton ME**. Localized abnormalities in the cingulum bundle in patients

with schizophrenia: A diffusion tensor tractography study. *Neuroimage Clin* 2014;5:93-99. PMID: [25003032](http://www.ncbi.nlm.nih.gov/pubmed/?term=25003032)

332. \*Asami T, \*Lee SH, \*Bouix S, \*Rathi Y, \*Whitford TJ, \*Niznikiewicz M, Nestor P, McCarley RW, **Shenton**

**ME**, \*Kubicki M. Cerebral white matter abnormalities and their associations with negative but not positive symptoms of schizophrenia. *Psychiatr Res* 2014;222(1-2):52-59. PMID: [24650453](http://www.ncbi.nlm.nih.gov/pubmed/?term=24650453)

333. Marder TJ, Flores VL, Bolo NR, Hoogenboom WS, Simonson DC, Jacobson AM, Foote SE, **Shenton ME**,

Sperling RA, Musen G. Task-induced brain activity patterns in type 2 diabetes: A potential biomarker of cognitive decline. *Diabetes* 2014;63(9):3112-3119. PMID: [24705405](http://www.ncbi.nlm.nih.gov/pubmed/?term=24705405)

334. Juenger H, \*Koerte IK, \*Muehlmann M, \*Mayinger M, Mall V, Krägeloh-Mann I, **Shenton ME**, Berweck S, Staudt M, Heinen F. Microstructure of transcallosal motor fibers reflects type of cortical (re-)organization in congenital hemiparesis. *Eur J Paediatr Neurol* (EJNP) 2014;18:691-697. PMID: [24993149](http://www.ncbi.nlm.nih.gov/pubmed/?term=24993149)

335. Echlin PS, Johnson JM, Holmes JD, Tichenoff A, Gray S, Gatavackas H, Walsh J, Middlebro T, Blignaut A, MacIntyre M, Anderson C, \*Fredman E, \*Mayinger M, Skopelja EN, \*Sasaki T, \*Bouix S, \*Pasternak O, Helmer KG, \*Koerte IK, **Shenton ME**, Forwell LA. The Sport Concussion Education Project. A brief report on an educational initiative: from concept to curriculum. *J Neurosurg* 2014;121(6):1331-1336. PMID: [25280091](http://www.ncbi.nlm.nih.gov/pubmed/?term=25280091)

336. Nestor PG, Choate V, \*Niznikiewicz M, Levitt JJ, **Shenton ME**, McCarley RW. Neuropsychology of reward learning and negative symptoms in schizophrenia. *Schizophr Res* 2014;159(2-3):506-508. PMID: [25261881](http://www.ncbi.nlm.nih.gov/pubmed/?term=25261881)

337. **Shenton ME**, \*Kubicki M, Makris N. Understanding alterations in brain connectivity in attention-deficit/hyperactivity disorder using imaging connectomes. *Biol Psychiatry* 2014;76(8):601-602. PMID: [25262232](http://www.ncbi.nlm.nih.gov/pubmed/25262232)

338. Mirzaalian-Dastardi H, Pierrefu A, \*Pasternak O, \*Savadjiev P, \*Bouix S, \*Kubicki M, Westin CF, **Shenton ME**, \*Rathi Y. Harmonizing diffusion MRI data across multiple sites and scanners. *Med Image Comput Comput Assist Interv* (MICCAI). 2015;12-19. PMID: [27754499](https://www.ncbi.nlm.nih.gov/pubmed/2775499)

339. \*Wigand M, \*Kubicki M, \*von Hohenberg CC, 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. *World J Biol Psychiatry* 2015;16(1):31-44. PMID: [25224883](http://www.ncbi.nlm.nih.gov/pubmed/?term=25224883)

340. \*Whitford TJ, \*Kubicki M, \*Pelavin PE, \*Lucia D, \*Schneiderman JS, Pantelis C, McCarley RW, **Shenton ME**. Cingulum bundle integrity associated with delusions of control in schizophrenia. *Schizophr Res* 2015;161(1):36-41. PMID: [25311780](http://www.ncbi.nlm.nih.gov/pubmed/?term=25311780)

341. Kates WR, Olszewski AK, Gnirke MH, \*Kikinis Z, Nelson J, Antshel KM, Fremont W, Radoeva PD, Middleton FA, **Shenton ME**, Coman IL. White matter micro structural abnormalities of the cingulum bundle in youths with 22q11.2 deletion syndrome: Associations with medication, neuropsychological function, and prodromal symptoms of psychosis. *Schizophr Res* 2015;161(1):76-84. PMID: [25066496](http://www.ncbi.nlm.nih.gov/pubmed/?term=25055496)

342. Mandl RCW, \*Pasternak O, Cahn W, \*Kubicki M, Kahn RS, **Shenton ME**, Hulshoff Pol HE. Comparing free water imaging and magnetization transfer measurements in schizophrenia. *Schizophr Res* 2015;161(1):126-132. PMID: [25454797](http://www.ncbi.nlm.nih.gov/pubmed/?term=25454797)

343. Lange RT, \*Panenka WJ, Shewchuk JR, Heran MKS, Brubacher JR, \*Bouix S, \*Eckbo R, **Shenton ME**, Iverson GL. Diffusion tensor imaging findings and post concussion symptom reporting six weeks following mild traumatic brain injury. *Arch Clin Neuropsychol* 2015;30(1):7-25. PMID: [25416729](http://www.ncbi.nlm.nih.gov/pubmed/?term=25416729) [**Nelson Butters Award for Research Contributions to Clinical Neuropsychology. This award is for the most influential scholarly paper published in Arch Clin Neuropsychol for the year 2014 – paper accepted in 2014.**]

344. Maier-Hein KH, Westin C-F, **Shenton ME**, Weiner MW, Raj A, Thomann P, Kikinis R, Stieljes B, \*Pasternak O. Widespread white matter degeneration preceding the onset of dementia. *Alzheimers & Dement* 2015;11(5):485-493. PMID: [25035154](http://www.ncbi.nlm.nih.gov/pubmed/?term=25035154) (**Maier-Hein, Junior Scientist Awarded Medal “Johann Peter Süßmilch-Medal 2015”, the highest award from the German Society of Medical Informatics, Biometry, and Epidemiology – GMDS.**)

345. +\*Koerte IK, +\*Lin AP, Willem A, Muehlmann M, Hufschmidt J, Coleman MJ, \*Green I, Liao H, \*Tate DF, Wilde EA, \*Pasternak O, \*Bouix S, \*Rathi Y, Bigler ED, Stern RA, **Shenton ME**. A review of neuroimaging findings in repetitive brain trauma. *Brain Pathology* 2015;25(3):318-349 PMID; [25904047](http://www.ncbi.nlm.nih.gov/pubmed/25904047) (+Denotes equal first authorship).

346. Yang JC, Papadimitriou G, \*Eckbo R, \*Yeterian EH, Liang L Dougherty DD, \*Bouix S, \*Rathi Y, **Shenton M**, \*Kubicki M, Eskandar EN, Makris N. Multi-tensor investigation of orbitofrontal cortex tracts affecting subcaudate tractotomy. *Brain Imaging Beh* 2015;9(2):342-352. PMID: [25103312](http://www.ncbi.nlm.nih.gov/pubmed/25103312)

347. \*Del Re EC, \*Spencer KM, Oibe N, Mesholam-Gately R, \*Goldstein J, **Shenton ME**, Petryshen T, Seidman LJ McCarley RW, \*Niznikiewicz MA. Clinical high risk and first episode schizophrenia: Auditory event-related potentials. *Psychiatr Res: Neuroimaging* 2015;231(2):126-133. PMID: [25557063](http://www.ncbi.nlm.nih.gov/pubmed/25557063)

348. Oribe N, Hirano Y, Kanba S, \*Del Re E, Seidman L, Mesholam-Gately R, \*Goldstein J, **Shenton ME**, Spencer KM, McCarley RW, Niznikiewicz M. Progressive reduction of visual P300 amplitude in patients with first episode schizophrenia: An ERP study. *Schizophr Bull* 2015;41(2):460-470. PMID [2491476](http://www.ncbi.nlm.nih.gov/pubmed?%20term=2491476)

349. \*Kubicki M, **Shenton ME**. Editorial to special issue on “white matter pathology.” *Schizophr Res* 2015;161(1):1-3. PMID [25541300](http://www.ncbi.nlm.nih.gov/pubmed/25541300)

350. **+\***Koerte IK, **+**\*Lin AP, Muehlmann M, Merugumala S, Liao H, Starr T, Kaufmann D, Mayinger M, Staffing D, Fisch B, Karsh S, Keinen F, Ertl-Wagner B, Reiser M, Stern RA, Zafonte R, **Shenton ME**. Altered neurochemistry in former professional soccer players without a history of concussion. *J Neurotrauma* 2015;32(17):1287-1293. PMID: [25843317](http://www.ncbi.nlm.nih.gov/pubmed/25843317) (+Denotes equal first authorship).

351. Wilde ED, \*Bouix S, \*Tate DF, \*Lin AP, Newsome MR, Taylor BA, Stone JR. Montier J, Gandy SE, Biekman B, **Shenton ME**, York G. Advanced neuroimaging applied to veterans and service personnel with traumatic brain injury: state of the art and potential benefits. *Brain Imaging Beh* 2015;9(3):367-402. PMID: [26350144](http://www.ncbi.nlm.nih.gov/pubmed/?term=2350144)

352. \*Purohit MP, Sherman L, Zafonte RD, Davis RB, \*Giwerc MY, **Shenton ME**, Yeh GY. Neuropsychiatric Symptoms and Expenditure on Complementary and Alternative Medicine. *J Clin Psychiatry* 2015 Jul: 76:(7):e870-6.doi:10.4088/JCP.13m08682 PMID: [26231014](http://www.ncbi.nlm.nih.gov/pubmed/26231014)

353. \*Panenka WJ, Lange RT, \*Bouix S, Shewchuk JR, Manraj KS, Hearan MKS, Brubacher JR, \*Eckbo R, **Shenton ME**, Iverson GL. Neuropsychological outcome and diffusion tensor imaging in complicated versus uncomplicated mild traumatic injury. *PLOS ONE* 2015;Apr 27;10(4):e0122746. doi: PMID: [25915776](http://www.ncbi.nlm.nih.gov/pubmed/25915776)

354. Kulkarni P, Kenke W, Finklestein SP, Barchet TM, Ren JM, Davenport M, **Shenton ME**, \*Kikinis Z, Nedelman M, Ferris CF. Use of anisotropy, 3D segmented atlas, and computational analysis to identify gray matter subcortical lesions common to concussive injury from different sites on the cortex. *PLOS One* 2015 May 8;10(5):e0125748. doi: 10.1371/journal.pone.0125748. eCollection 2015. PMID: [25955025](http://www.ncbi.nlm.nih.gov/pubmed/?=25955025)

355. Nestor P, \*Nakamura M, \*Niznikiewicz MA, \*Levitt JA, \*Newell DT, **Shenton ME**, McCarley RW. Attentional control and intelligence: MRI orbital frontal gray matter and neuropsychological correlates. *Beh Neurology* 2015; 354186. PMID: [26101457](http://www.ncbi.nl.nih.gov/pubmed/26101457)

356. \*Stamm JM, \*Koerte IK, Muehlmann M, \*Pasternak O, Bourlas AP, Baugh CM, \*Giwerc MY, \*Zhu A, \*Coleman MJ, \*Bouix S, Fritts NG, Martin BM, Chaisson C, McClean MD, \*Lin AP, Cantu RC, Tripodis Y, +Stern RA, +**Shenton ME**. Age at first exposure to football is associated with altered corpus callosum white matter microstructure in former professional football players. *J Neurotrauma* 2015;32(22):1768-1776. PMID: [26200068](http://www.ncbi.nlm.nih.gov/pubmed/26200068) (+Denotes equal last authorship.) [**Featured Article in Journal of Neurotrauma.**]

357. Wintermark M, Coombs L, Druzgal TJ, Field AS, Fillippi CG, Hicks R, Horton R, Liu YW, Law M, Mukerjee P, Norbash A, Riedy G, Sanelli PC, Stone JR, Sze G, Tilin M, Whitlow CT, Wilde EA, York G, Provenzale JM, American College of Radiology Head Injury Institute. (**Shenton M**, one of many collaborators.) Traumatic brain injury imaging research roadmap. *AJNR Am J Neuroradiol* 2015;March, 36(3):E12-13. Doi: 10.3174/AJNR.A4254, epub 2015 Feb 2015. PMID: 25655872

358. \*Del Re EC, \*Konishi J, \*Bouix S, Blokland AM, Mesholam-Gately RI, \*Goldstein J, \*Kubicki M, Wojcik J, \*Pasternak O, Seidman LJ, Petryshen T, \*Hirayasu H, \*Niznikiewicz M, **Shenton ME**, McCarley RW. Enlarged Lateral Ventricles Inversely Correlate with Reduced Corpus Callosum Central Volume in First Episode Schizophrenia: Association with Functional Measures. *Brain Imag Beh* 2016;10(4):1264-1273. PMID: [26678596](http://www.ncbi.nlm.nih.gov/pubmed/2678596)

359. Bergamino M, \*Pasternak O, Farmer M, **Shenton ME**, Hamilton JP. Applying a free-water correction to diffusion imaging data uncovers stress-related neural pathology in depression. *NeuroImage: Clinical* 2015;10:336-342. PMID: [27006903](https://www.ncbi.nlm.nih.gov/27006903)

360. Ning L, Setsompop K, Michailovich O, Makris N, **Shenton ME**, Westin C-F, \*Rathi Y. A joint compressed- sensing and super-resolution approach for very high-resolution diffusion imaging. *NeuroImage* 2016;125:386- 400. PMID: [26505296](http://www.ncbi.nlm.nih.gov/pubmed/?term=shenton+me+shenton+m+2015)

361. +\*Del Re E, +Gao Y, \*Eckbo R, Petryshen TL, Blokland GA, Seidman LJ, \*Konishi J, \*Goldstein JM, McCarley RW, **Shenton ME**, \*Bouix S. A new MRI masking technique based on multi -atlas brain segmentation in controls and schizophrenia: a rapid and viable alternative to manual masking. *J Neuroimaging* 2016;26:28-36. PMID: [26585545](http://www.ncbi.nlm.nih.gov/pubmed/?term=shenton+ME+Shenton+m+2015) (+Denotes equal first authorship).

362. Mirzaalian H, Ning L, \*Savadjiev P, \*Pasternak O, \*Bouix S, Michailovich O, Grant G, Marx CE, Morey RA, Flashman LA, George MS, McAllister TW, Andaluz N, Shutter L, Coimbra R, Zafonte RD, Coleman MJ, \*Kubicki M, Westin CF, Stein MB, **Shenton ME**, \*Rathi Y. Inter-site and inter-scanner diffusion MRI data harmonization. *NeuroImage* 2016;135:311-323. PMID: [27138209](http://www.ncbi.nlm.nih.gov/pubmed/27138209)

363. Wassermann D, Makris N, \*Rathi Y, **Shenton M**, Kikinis R, \*Kubicki M, Westin C-F. The White Matter Query Language: A Novel Approach for Describing Human White Matter Anatomy. *Brain Struct Funct* 2016; 221(9):4705-4721 PMID: [26754839](http://www.ncbi.nlm.nih.gov/pubmed/26754839)

364. **+**\*Koerte IK, +Hufschmidt J, Muehlmann M, Tripodis Y, \*Stamm JM, \*Pasternak O, \*Giwerc MY, \*Coleman MJ, Baugh CM, Fritts NG, Heinen F, Lin A, ++Stern RA, ++**Shenton ME**. Cavum septi pellucidi in symptomatic former professional football players. *J Neurotrauma* 2016;33(4):346-353. PMID: [26414478](http://www.ncbi.nlm.nih.gov/pubmed/?term=Shenton+me+Shenton+m+2015) (**+**Denotes equal first authorship; +Denotes equal first authorship; **++**Denotes equal last authorship).

365. \*Cho KI, **Shenton ME**, \*Kubicki M, Jung WH, Lee TY, Yun JY, Kim SN, \*Kwon JS. Altered thalmo-cortical white matter connectivity: Probabilistic tractography student in clinical-high risk for psychosis and first episode schizophrenia. *Schizophr Bull* 2016;42(3):723-731. PMID: [26598740](http://www.ncbi.nlm.nih.gov/pubmed/?term=shenton+me+or+shenton+m)

366. \*Lee SH, \*Niznikiewicz M, \*Asami T, \*Otsuka T, \*Salisbury DF, **Shenton ME**, McCarley RW. Initial and progressive gray matter abnormalities in insular and temporal pole in first-episode schizophrenia contrasted with first-episode affective psychosis. *Schizophr Bull* 2016;42(3):790-801. PMID: [26675295](http://www.ncbi.nlm.nih.gov/pubmed/26675295)

367. \*Koerte IK, Mayinger M, Muehlmann M, Kaufmann D, \*Lin AP, Steffinger D, Fisch B, Rauchmann B-S, Immier S, Karch S, Heinen FR, Erti-Wagner B, Reiser M, Stern RA, Zafonte R, **Shenton ME**. Cortical thinning in former professional soccer players. *Brain Imaging Beh* 2016;10(3):792-798. PMID: [26286826](http://www.ncbi.nlm.nih.gov/pubmed/26286826)

368. \*Koerte IK, Willems A, Muehlmann M, Moll K, Cornell S, Pixner S, Steffinger D, Keeser D, Heinen F, \*Kubicki M, **Shenton ME**, Ertl-Wagner B, Shulte-Körne G. Mathematical abilities in dyslexic children: A diffusion tensor imaging study. *Brain Imaging Beh* 2016;10(3):8781-791. PMID: [26286825](http://www.ncbi.nlm.nih.gov/pubmed/26286825)

369. \*Pasternak O, \*Kubicki M, **Shenton ME**. In vivo imaging of neuroinflammation in schizophrenia. *Schizophr Res* 2016;173(3):200-2012. PMID: [26048294](http://www.ncbi.nlm.nih.gov/pubmed/26048294)

370. Yoshimi A, Suda A, Hayano F, \*Nakamura M, Aoyama-Uehara K, \*Konishi J, \*Asami T, Khisida I, Kawanishi C, Inoue T, McCarley RW, **Shenton ME**, \*Hirayasu Y. Effects of NRG1 genotypes on orbitofrontal sulcogyral patterns in Japanese patients with schizophrenia. *Psychiatr Clin Neurosi* 2016;70(7):261-268. PMID: [26909665](http://www.ncbi.nlm.nih.gov/pubmed/?term=26909665)

371. \*Lyall AE, \*Savadjiev P, **Shenton ME**, \*Kubicki M. Insights into the brain: Neuroimaging of brain development and maturation. *J Neuroimaging in Psychiatr & Neurolog* 2016;1(1):10-19. PMID: [28620654](http://www.ncbi.nlm.nih.gov/pubmed/?term=28620654)

372. Thermenos HW, Juelich RJ, DiChiara SR, Mesholam-Gately RI, Woodberry KA, Wojcik J, Makris N, Keshavan MS, Whitfield-Gabrieli S, Woo TU, Petryshen TL, \*Goldstein JM, **Shenton ME**, McCarley RW, Seidman LJ.

Hyperactivity of caudate, parahippocampal, and prefrontal regions during working memory in never-medicated persons at clinical-high risk for psychosis. *Schizophr Res* 2016;173(1-2):1-12. PMID: [26965745](http://www.ncbi.nlm.nih.gov/pubmed/26965745)

373. \*Seitz J, \*Zuo JX,  \*Lyall AE, Makris N, \*Kikinis Z, \*Bouix S, \*Pasternak O, \*Fredman E, Duskin J, \*Goldstein JM, Petryshen TL, Mesholam-Gately RI, Wojcik J, McCarley RW, Seidman LJ, **Shenton ME**, \*Koerte IK, \*Kubicki M. Tractography analysis of 5 white matter bundles and their clinical and cognitive correlates in early-course schizophrenia.*Schizophr Bull*2016;42(3):762-771. PMID: [27009248](http://www.ncbi.nlm.nih.gov/pubmed/27009248)

374. \*Tate DF, Wade BS, Velez CS, Drennon AM, Bolzenius J, Gutman BA, Thompson PM, Lewis JD, Wilde EA, Bigler ED, **Shenton ME**, Ritter JL, York GE. Volumetric and shape analyses of subcortical structure in United States service members with mild traumatic brain injury. *J Neurol* 2016; 263(10):2065-2079. PMID: [27435967](http://www.ncbi.nlm.nih.gov/pubmed/?term=27435967)

375. Oestreich LKL, \*Pasternak O, **Shenton ME**, \*Kubicki M, Gong X, Australian Schizophrenia Research Bank, McCarthy-Jones S, \*Whitford TJ. Abnormal white matter microstructure and increased extracellular free-water in the cingulum bundle associated with delusions in chronic schizophrenia. *NeuroImage:Clin* 2016;12:405-414. PMID: [27622137](https://www.ncbi.nlm.nih.gov/pubmed/?term=27622137)

376. \*Lee JS, Kim CY, Joo YH, \*Newell D, \*Bouix S, **Shenton ME**, \*Kubicki M. Increased diffusivity in gray matter in recent onset schizophrenia is associated with clinical symptoms and social cognition. *Schizophr Res* 2016;176(2-3):144-150. PMID: [27554199](https://www.ncib.nlm.nih.gov/pubmed/?term=27554199)

377. \*Ohtani T, Nestor PG, \*Bouix S, \*Newell D, Melanakos ED, McCarley RW, **Shenton ME**, \*Kubicki M. Exploring the neural substrates of attentional control and human intelligence: Diffusion tensor imaging of prefrontal white matter tractography in healthy cognition. *Neuroscience* 2017;341:52-60. PMID: [27840231](http://www.ncbi.nlm.nih.gov/pubmed/?term=27840231)

378. \*Kelly S, Jahanshad N, Zalesky A, Kochunov P, Agartz I, Alloza C, Andreassen OA, Arango C, Banaj N, \*Bouix S, Bousman CA, Brouwer RM, Bruggemann J, Bustillo J, Cahn W, Calhoun V, Cannon D, Carr V, Catts S, Chen J, Chen JX, Chen X, Chiapponi C, Cho KK, Ciullo V, Corvin AS, Crespo-Facorro B, Cropley V, De Rossi P, Diaz-Caneja CM, Dickie EW, Ehrlich S, Fan FM, Faskowitz J, Fatouros-Bergman H, Flyckt L, Ford JM, Fouche JP, Fukunaga M, Gill M, Glahn DC, Gollub R, Goudzwaard ED, Guo H, Gur RE, Gur RC, Gurholt TP, Hashimoto R, Hatton SN, Henskens FA, Hibar DP, Hickie IB, Hong LE, Horacek J, Howells FM, Hulshoff Pol HE, Hyde CL, Isaev D, Jablensky A, Jansen PR, Janssen J, Jönsson EG, Jung LA, Kahn RS, \*Kikinis Z, Liu K, Klauser P, Knöchel C, \*Kubicki M, Lagopoulos J, Langen C, Lawrie S, Lenroot RK, Lim KO, Lopez-Jaramillo C, \*Lyall A, Magnotta V, Mandl RCW, Mathalon DH, McCarley RW, McCarthy-Jones S, McDonald C, McEwen S, McIntosh A, Melicher T, Mesholam-Gately RI, Michie PT, Mowry B, Mueller BA, Newell DT, O'Donnell P, Oertel-Knöchel V, Oestreich L, Paciga SA, Pantelis C, \*Pasternak O, Pearlson G, Pellicano GR, Pereira A, Pineda Zapata J, Piras F, Potkin SG, Preda A, Rasser PE, Roalf DR, Roiz R, Roos A, Rotenberg D, Satterthwaite TD, \*Savadjiev P, Schall U, Scott RJ, Seal ML, Seidman LJ, Shannon Weickert C, Whelan CD, **Shenton ME**, \*Kwon JS, Spalletta G, Spaniel F, Sprooten E, Stäblein M, Stein DJ, Sundram S, Tan Y, Tan S, Tang S, Temmingh HS, Westlye LT, Tønnesen S, Tordesillas-Gutierrez D, Doan NT, Vaidya J, van Haren NEM, Vargas CD, Vecchio D, Velakoulis D, Voineskos A, Voyvodic JQ, Wang Z, Wan P, Wei D, Weickert TW, Whalley H, White T, \*Whitford TJ, Wojcik JD, Xiang H, Xie Z, Yamamori H, Yang F, Yao N, Zhang G, Zhao J, van Erp TGM, Turner J, Thompson PM, Donohoe G. Widespread white matter microstructural differences in schizophrenia across 4322 individuals: Results from the ENIGMA Schizophrenia DTI Working Group. *Mol Psychiatry* 2017; Oct 17. doi: 10.1038/mp.2017.170. [Epub ahead of print] PMID: [29038599](https://www.ncbi.nlm.nih.gov/pubmed/29038599)

379. Tylee DS, \*Kikinis Z, Quinn TP, Antshel KM, Fremont W, Tahir MA, \*Zhu A, \*Gong X, Glatt SJ, Coman IL, **Shenton ME**, Kates WR, Makris M. Machine-learning classification of 22q11.2 deletion syndrome: A diffusion tensor imaging study. *NeuroImage Clinical* 2017;15:832-842. PMID: [28761808](https://www.ncbi.nlm.nih.gov/pubmed/28761808)

380. \*Bouix S, \*Swago S, West JD, \*Pasternak O, Breier A, **Shenton ME**. Evaluting acquisition time of rfMRI in the Human Connectome Project for Early Psychosis. How much is enough? *Intern Workshop on Connectomics in Neuroimaging* 2017;108-115.

381. Oestreich LKL, \*Lyall AE, \*Pasternak O, \*Kikinis Z, \*Newell DT, \*Savadjiev P, \*Bouix S, **Shenton ME**, \*Kubicki M, Australian Schizophrenia Research Bank, \*Whitfored TJ, McCarthy-Jones, S. Characterizing white matter changes in chronic schizophrenia: A free-water imaging multi-site study. *Schizophr Res* 2017;189:153- 161. PMID: [28190639](https://www.ncbi.nlm.nih.gov/pubmed/?term=28190639)

382. Olszewski AK, \*Kikinis Z, Gonzalez C, Coman I, Makris N, Gong X, \*Rathi Y, \*Zou A, Antshel KM, Fremont W, \*Kubicki MR, \*Bouix S, **Shenton ME**, Kates W. The social brain network in 22q11.2 deletion syndrome: A diffusion tensor imaging study. *Behav Brain Functions* 2017 Feb 16;13(1):4. doi: 10.1186/s12993-017- 0122-7. PMID: [28209179](https://www.ncbinlm.nihgov.pubmed/?term=28209179); PMCID: [PMC5314621](https://www.ncbi.nlm.nih.gov/pubmed/?term=PMC5314621)

383. \*Koerte IK, Nichols E, Tripodis Y, Schultz V, Lehner S, Igninoba R, Chuang AZ, Mayinger M, Klier Em, Muelhmann M, Kaufmann D, \*LePage C, Heiner F, Schulte-Körne G, Zafonte R, **Shenton ME**, Sereno A. Impaired cognitive performance in youth athletes exposed to repetitive head impacts. *J Neurotrauma* 2017; 34(16):2389-2395. PMID: [28381107](https://www.ncbi.nlm.nih.gov/pubmed/?term=2828117); PMCID: [PMC5563858](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5563858/)

384. \*Levitt JJ, Nestor PG, \*Levin L, \*Pelevin P, Lin PA-C, \*Kubicki M, McCarley RW, **Shenton ME**, \*Rathi Y. Reduced structural connectivity in frontostriatal white matter tracts in the associative loop in schizophrenia. *Am J Psychiatry* 2017;Nov 1:174(11):1102-1111. PMID: [28945119](https://www.ncbi.nlm.nih.gov/pubmed/28945119)

385. \*Kikinis Z, Muehlmann M, \*Pasternak O, Peled S, Kulkarni P, Ferris C, \*Bouix S, \*Rathi Y, \*Koerte IK, Pieper S, Yarmarkovich A, Porter CL, Kristal BS, **Shenton ME**. Diffusion imaging of mild traumatic brain injury in the inpact accelerated rodent model: A pilot study. *Brain Injury* 2017;31(10):1376-1381. PMID: [28627942](https://www.ncbi.nlm.nih.gov/pubmed/?term=28627942)

386. Alosco ML, \*Koerte IK, Tripodis Y, Mariani M, Chua AS, Jarnagin J, Rahimpour Y, Puzo, C, Healy RC, Martin B, Chaisson CE, Cantu RC, Au R, McClean M, McKee AC, \*Lin AP, **Shenton ME**, Killiany RJ, Stern RA. White matter signal abnormalities in former National Football League players. *Alzheimer’s Dement (Amst.)* 2017;10:56-65. PMID: [29201991](https://www.ncbi.nlm.nih.gov/pubmed/29201991)

387. Joo SW, Chon MW, \*Rathi Y, **Shenton ME**, \*Kubicki M, \*Lee J. Abnormal asymmetry of white matter tracts between ventral posterior cingulate cortex and middle temporal gyrus in recent-onset schizophrenia. *Schizophr Res* 2017; [10.1016/j.schres.2017.05.008](https://doi.org/10.1016/j.schres.2017.05.008); PMID: [28506703](https://www.ncbi.nlm.nih.gov/pubmed/?term=28506703)

388. \*Kelly S, Jahanshad N, Hibar DP, Agartz I, Alloza C, Andreassen O, Arango C, \*Bouix S, Bousman C, Brouwer R, Bruggemann J, Calhoun V, Cannon D, Carr V, Castrillón G, Catts S, Chiapponi C, Ik KK, Corvin A, Crespo-Facorro B, Cropley V, De Rossi P, Dickie E, Doan NT, Ehrlich S, Fatouros-Bergman H, Flyckt L, Fouche J-P, Fukunaga M, Gill M, Glahn D, Gollub RL, Gur RC, Hashimoto R, Hatton S, Henskens F, Hickie I, Hong LE, Horacek J, Howells F, Hulshoff Pol H, Seidman LJ, Jablensky A, Jansen P, Janssen J, Jönsson E, \*Kikinis Z, Kirra L, Klauser P, Knöchel C, Kochonov P, \*Kubicki M, \*Kwon JS, Lagopoulos J, Langen C, Lawrie S, Lenroot R, Lopezjaramillo C, Lyall AE, Magnotta V, Mandl R, McCarley RW, McCarthy-Jones S, Michie PT, Mowry B, Newell D, Oertel-Knochel V, Oestreich L, Pantelis C, \*Pasternak O, Pearlson G, Pereira A, Pineda J, Piras F, Rasser P, Roalf D, Rois R, Rotenberg D, Satterhwaite T, Savadjiev P, Schall U, Scott R, Seal M, Shannon-Weickert S, **Shenton ME**, Spalletta G, Spaniel F, Stäblein M, Stein D, Sundram S, Tordesillas D, Vargas CD, Velakoulis D, \*Voineskos A, Weickert TW, Westlye LT, Whalley H, White T, \*Whitford TJ, Wojcik J, Yamamori H, Zalesky A, Zhao J, van Erp T, Turner J, Thompson PM, Donohue G. ENIGMA-Schizophrenia DTI: Meta-analysis of FA measures in 3,031 cases and controls from 14 countries. *Human Brain Mapping (OHBM)* 2017.

389. \*Kikinis Z, \*Cho KIK, Coman IL, Radoeva PD, \*Bouix S, Tang Y, \*Eckbo R, Makris N, \*Kwon JS, \*Kubicki M, Antshel KM, Fremont W, +**Shenton ME**, +Kates WR. Abnormalities in brain white matter in adolescents with 22q11.2 deletion syndrome and psychotic symptoms. *Brain Imag and Beh* (In Press) (+ denotes equal last authorship).

390. Nestor P, \*Otani T, \*Levitt JJ, \*Newell DT, **Shenton ME**, \*Niznikiewicz M, McCarley RW. Prefrontal lobe gray matter, cognitive control and episodic memory in healthy controls. *AIMS Neuroscience* 2017 (In Press).

391. Makris N, \*Zhu A, Papadimitriou GM, Mouradian P, Ng I, Scaccianoce E, Baselli G, Baglio F, **Shenton ME**, \*Rathi Y, Dickerson B, Yeterian E, \*Kubicki M. Mapping temporo-parietal and temporo-occipital cortico-cortical connections of the human middle longitudinal fascicle in subject-specific, probabilistic, and stereotaxic Talairach spaces. *Brain Imaging Beh* 2017 (In Press).

392. \*Konishi J, \*Del Re E, \*Bouix S, Blokland GAM, Meshalom-Gately R, Woodberry K, \*Niznikiewicz M, \*Goldstein J, \*Hirayasu Y, Petryshen TL, Seidman LJ, McCarley RW. Abnormal relationships between local and global brain measures in subjects at clinical high risk for psychosis: A pilot study. *Brain Imag and Beh* 2017 doi: 10.1007/s11682-017-9758-z. PMID: [28815390](http://www.ncbi.nlm.nih.gov/pubmed/?term=28815390)

393. +Mayinger MC, +Merchant-Borna K, Hufschmidt J, Muehlmann M, Weir IR, Rauchmann BS, **Shenton ME**, ++\*Koerte IK, ++Bazarian JJ. White matter alterations in college football players: A longitudinal diffusion tensor imaging Study. *Brain Imaging Beh* 2017, Jan 14. doi: 10.1007/s11682-017-9672-4. [Epub ahead of print]. (+Denotes equal first authorship; ++Denotes equal last authorship). PMID: [28092023](https://www.ncbi.nlm.nih.gov/pubmed/?term=28092023)

394. \*Sollmann N\*\*, Echlin PS\*\*, Schultz V, Viher PV, \*Lyall AE, Tripodis Y, Kaufmann D, Hartl E, Kinzel P, Forwell LA, Johnson AM, Skopelja EN, \*Lepage C, \*Bouix S, \*Pasternak O, \*Lin AP, **Shenton ME**+, \*Koerte IK+. Sex differences in white matter alterations following repetitive subconcussive head impacts in collegiate ice hockey players. *Neuroimage: Clinical* 2018;17:642-649. PMID: [29204342](https://www.ncbi.nlm.nih.gov/pubmed/29204342) (\*\*shared first authorship, +shared senior authorship)

395. McCarthy-Jones S, Oestreich, LKL, \*Lyall AE, \*Kikinis Z, \*Newell DT, \*Savadjiev P, **Shenton ME**, \*Kubicki M, Australian Schizophrenia Research Bank, \*Pasternak O, \*Whitford, TJ. Childhood adversity associated with white matter alteration in the corpus callosum, corona radiata, and uncinate fasciculus of psychiatrically healthy adults. *Brain Imag and Beh* 2018; 12:449-458. PMID: [28341872](https://www.ncbi.nlm.nih.gov/pubmed/?term=PMID%3A+28341872)

396. \*Saito Y, \*Kubicki M, \*Koerte I, \*Otsuka T, \*Rathi Y, \*Pasternak O, \*Bouix S, \*Eckbo R, \*Kikinis Z, \*Von Hohneberg CC, Roppongi T, \*Del Re E, \*Asami T, \*Lee S-H, \*Karmacharya S, Mesholam-Gately R, Seidman LJ, \*Levitt J, McCarley RW, **Shenton ME**, \*Niznikiewicz MA. Impaired white matter connectivity between regions containing mirror neurons, and relationship to negative symptom and social cognition in patients with first-episode schizophrenia. *Brain Imaging Beh* 2018;12(1):229-237. PMID: [28247157](https://www.ncbi.nlm.nih.gov/pubmed/?term=28247157)

397. SchultzV, Stern RA, Tripodis Y, \*Stamm J, Wrobel P, \*LePage C, Weir I, \*Guenette JP, Chua A, Alosco ML, Baugh CM, Fritts N, Martin B, Chaisson CE, \*Coleman MJ, \*Lin AP, \*Pasternak O, +**Shenton ME**, +\*Koerte IK. Age at first exposure to repetitibe head impacts is associated with smaller thalamic volumes in former professional American football players. *J Neurotrauma* 2018;35(2):278-285. (+Denotes equal authorship). PMID: [28990457](http://www.ncbi.nlm.nih.gov/pubmed/?term=28990457)

398. Mirzaalian H, Ning L, \*Savadjiev P, \*Pasternak O, \*Bouix S, Michailovich O, \*Karmacharya S, Grant G, Marx CE, Morey RA, Flashman LA, George MS, McCallister TW, Andaluz N, Shutter, Coimbra R, Zafonte RD, \*Coleman MJ, \*Kubicki M, Westin C-F, Stein MB, **Shenton ME**, \*Rathi Y. Multi-site harmonization of diffusion MRI data in a registration frame. *Brain Image Beh* 2018;12(1):284-295. PMID: [28176263](http://www.ncbi.nlm.nih.gov/pubmed/?term=28176263)

399. \*Guenette JP, **Shenton ME**, \*Koerte IK. Imaging of concussion in young athletes. *Neuroimag Clin N Am* 2018; 28:43-53. PMID: [29157852](https://www.ncbi.nlm.nih.gov/pubmed/29157852)

400. \*Seitz J, \*Rathi Y, \*Lyall A, \*Pasternak O, \*del Re E, \*Niznikiewicz M, Nestor P, Seidman LJ, McCarley RW, **Shenton ME**, \*Koerte IK, \*Kubicki M. Gray matter microstructure in schizophrenia. *Brain Imag and Beh* 2018;12:54-63. PMID: [28102528](https://www.ncbi.nlm.nih.gov/pubmed/?term=28102528)

401. \*Pasternak O, \*Kelly S, \*Sydnor VJ, **Shenton ME**. Advances in microstructural diffusion neuroimaging for psychiatric disorders. *NeuroImage* (In Press).

402. Nestor PG, \*Niznikiewicz M, Hassler VC, \*Newell DT, **Shenton ME**, McCarley RW. Neuropsychology of the social brain hypothesis of schizophrenia: Symptoms, personality and MRI correlates. *J Neuroimag Psychiatr & Neurology* (In Press) <https://doi.org/10.17756/jnpn.2017-013>.

403. \*LePage C, de Pierrefu A, \*Koerte IK, \*Coleman MJ, \*Pasternak O, Grant G, Marx C, Morey R, Flashman L, George MS, McAllister TW, Andaluz N, Shutter L, Coimbra R, Zafonte RD, Stein MB, **Shenton ME**, \*Bouix S. White matter abnormalities in mild traumatic brain injury with and without post-traumatic stress disorder: A subject-specific diffusion tensor imaging study. *Brain Imag* *and Beh* 2018; 12(3):850-881. PMID: [28676987](https://www.ncbi.nlm.nih.gov/pubmed/28676987)

404. \*LePage C, Muehlmann M, Tripodis Y, Hufschmidt J, \*Stamm J, Green K, Wrobel P, Schultz V, Weir I, Alosco ML, Baugh C, Fritts NA, Martin BM, Chaisson C, Coleman MJ, \*Lin AP, Pasternak O, Makris N, Stern RA,

**+Shenton ME, +**\*Koerte IK. Reduced hippocampus and cingulate gyrus volumes are associated with neurobehavioral dysfunction in former NFL players. *J Neurotrauma* (In Press). (+Denotes equal authorship).

405. \*Kubicki M, Baxi M, \*Pasternak O, Tang Y, \*Karmacharya S, Chunga N, \*Lyall AE, \*Rathi Y, \*Eckbo R, \*Bouix S, Mortazavi F, Papadimitriou G, **Shenton ME**, Westin CF, Killiany R, Makris N, Rosene D. Lifespan trajectories of white matter changes in rhesus monkeys. *Cerebral Cortex* (In Press).

406. Blokland GAM**, \***del Re EC, Mesholam-Gately RI, Jovicich J, Trampush JW, Keshavan MS, DeLisi LE, Walters JTR, Turner JA, Malhotra AK, Lencz T, **Shenton ME**, \*Voineskos AN, Rujescu D, Giegling I, Kahn RS, Roffman JL, Holt DJ, Ehrlich S, \*Kikinis Z, Dazzan P, Murray RM, Di Forti M, Lee J, Sim K, Lam M, Wolthusen RPF, de Zwarte SMC, Walton E, Cosgrove D, Kelly S, Maleki N, Osieki L, Picchioni MM, Bramon E, Russo M, David AS, Mondelli V, Reinders AATS, Falcone MA, Hartmann AM, Konte B, Morris DW, Gill M, Corvin AP, Cahn W, Ho NF, Liu JJ, Keefe RSE, Gollub RL, Manoach DS, Calhoun VD, Schulz SC, Sponheim SR, Goff DC, Buka SL, Cherkerzian S, Thermenos HW, \*Kubicki M, Nestor PG, Dickie EW, Vassos E, Ciufolini S, Reis Marques T, Crossley NA, Purcell SM, Smoller JW, van Haren NEM, Toulopoulou T, Donohoe G, \*Goldstein JM, Seidman LJ, McCarley RW, Petryshen TL. The Genetics of Endophenotypes of Neurofunction to Understand Schizophrenia [GENUS] consortium: A collaborative cognitive and neuroimaging genetics project. *Schizophr Research* 2017 (In Press). PMID: [28982554](http://www.ncbi.nlm.nih.gov/pubmed/?term=28982554)

407. \*Lyall AE, \*Savadjiev P, \*del Re E, \*Seitz J, O’Donnell LJ, Westin C-F, Mesholam-Gately RI, Petryshen T, Wojcik JD, Nestor P, \*Niznikiewicz M, \*Goldstein J, +Seidman LJ, McCarley RW, **Shenton ME**, \*Kubicki M. Utilizing mutual information analysis to explore the relationship between gray and white matter structural pathologies in schizophrenia. *Schizophr Bull* (In Press).(+Deceased September 7, 2017)

408. \*Karmacharya S, Gagoski B, \*Ning L, Vyas R, Cheng HH, Soul J, Newberger J, **Shenton ME**, \*Rathi Y, Grant PE. Advanced Diffusion Imaging for Assessing Normal White Matter Development in Neonates and Characterizing Aberrant Development in Congenital Heart Disease. *NeuroImage: Clinical* (In Press).

409. +\*Hamoda HM, +Makhlouf AT, \*Fitzsimmons J, \*Rathi Y, Makris N, Mesholam-Gately RI, Wojcik J, \*Goldstein J, ++McCarley RW, +++Seidman LJ, \*Kubicki M, **Shenton ME**. Abnormalities in thalmo-cortical connections in patients with first-episode schizophrenia: A two-tensor tractography study. *Brain Imag and Beh* 2018; <https://doi.org/10.1007/s11682-018-98628>)(+=equal shared authorship; ++deceased May 27, 2017; +++deceased September 7, 2017).

410. \*Ohtani T, \*del Re E, \*Levitt JJ, \*Niznikiewicz M, \*Konishi J, \*Asami t, \*Kawashima T, Roppongi T, Nestor PG, **Shenton ME**, \*Salisbury DF, McCarley RW+. Progressive symptom-associated prefrontal volume loss occurs in first-episode schizophrenia but not in affective psychosis. *Brain Structure and Function* 2018; <https://doi.org/10.1007/s00429-018-1634-0>

411. Valera E, Cao A, \*Pasternak O, **Shenton ME**, \*Kubicki M, Makris N, Adra N. White matter correlates of mild traumatic brain injuries in women subjected to intimate-partner violence: A preliminary study. *J Neurotrauma* 2018; Jun 6. Doi: 10.1089/neu.2018.5734 [Epub ahead of print]. PMID: [29873292](https://www.ncbi.nlm.nih.gov/pubmed/29873292)

412. Zhang T, Li H, \*Tang Y, \*Niznikiewicz M, **Shenton ME**, Keshavan MS, Stone WS, ++McCarley RW, +++Seidman LJ, Wang J. Validating the predictive accuracy of the NAPLS-2 psychosis risk calculator in a clinical high-risk sample from the SHARP (Shanghai At Risk for Psychosis) program. *Am J Psychiatry* (In Press)(++deceased May 27, 2017; +++deceased September 7, 2017).

413. \*Lee J, Chon MW, Kim H, \*Rathi Y, \*Bouix S, **Shenton ME**, \*Kubicki M. Diagnostic value of structural and diffusion imaging measures in schizophrenia. *NeuroImage Clin* 2018;18:467-474. PMID: [29876254](https://www.ncbi.nlm.nih.gov/pubmed/29876254)

414. \*Guenette JP, Stern RA, Tripois Y, Chu AS, Schultz V, \*Sydnor VJ, \*Somes N, \*Karmacharya S, \*Lepage C, Wrobel P, Alosco ML, Martin BM, Chaisson CE, Coleman MJ, \*Lin AP, \*Pasternak O, Makris N, **Shenton ME**, \*Koerte IK. Automated vs manual segmentation of brain region volumes in former football players. *NeuroImage Clin* 2018;17:888-896.PMID: [29876273](https://www.ncbi.nlm.nih.gov/pubmed/29876273)

415. \*Higger M, **Shenton M**, \*Bouix S. Pairwise, ordinal outlier detection of traumatic brain injuries. Brainlesion 2018;10670:100-110. PMCID: [29932171](https://www.ncbi.nlm.nih.gov/pubmed/29932171)

416. \*Pasternak O, \*Kelly S, \*Sydnor VJ, **Shenton ME**. Advances in microstructural diffusion neuroimaging for psychiatric disorders. *NeuroImage* (In press).

**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](http://link.springer.com/chapter/10.1007%2FBFb0033752?LI=true)]

10. Gerig G, Martin J, Kikinis R, Kuebler O, **Shenton ME**, Jolesz FA. Unsupervised segmentation of 3-D dual-echo MR Head data. In: Butterworth, Special Edition of Image and Vision 35 Computing, 1992, p. 349-360.

11. 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.

12. 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.

13. \*Niznikiewicz MA, Seidman LF, \*Dickey CC, \*Solinger J, **Shenton** **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.

14. 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.

15. 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 CVRMED* 1997:477-486.

16. 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 Assist Inter* 1998; 720-731. (In: Lecture Notes in Computer Science, Eds. Wells WM, Colchester A, and Delp S, Springer-Verlag, 1998.)

17. \*Potts GF, Wible CG, **Shenton ME**, Weinstein DM, \*Fisher I, Leventon ME, Gugino LD, McCarley RW. Localization of visual cortex with co registered functional magnetic resonance imaging, bioelectrically modeled cortical visual evoked potential, and transcranial magnetic stimulation induced visual suppression. *J Cogn Neurosci* (Suppl.), p.42, 1998.

18. Golland P, Grimson WEL, **Shenton ME**, Kikinis R. Small sampling size learning for shape analysis of anatomical structures. *Med Image Comput Comput Assist Interv* 2000; 1935:72-78. [[full text](http://people.csail.mit.edu/polina/papers/Golland_MICCAI2000.pdf)]

19. 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.

20. Golland P, Grimson WEL, **Shenton ME**, Kikinis R. Deformation analysis for shape based classification. *IPMI* 2001; 517-530. [[full text](http://pnl.bwh.harvard.edu/pub/pdfs/golland_ipmi01.pdf)]

21. O’Donnell L, Westin CF, Grimson WEL, Ruiz-Alzola J, **Shenton ME**, Kikinis R. Phase-based user-steered image segmentation. *Med Image Comput Comput Assist Interv* 2001; 1022-1030. [[full text](http://lmi.bwh.harvard.edu/papers/pdfs/2001/odonnellMICCAI01.pdf)]

22. 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 Assist Interv* 2001; 2208:1352-1353. [[full text](http://www.spl.harvard.edu/archive/spl-pre2007/pages/papers/ferrant/miccai2001/ferrant-miccai2001.pdf)]

23. Gerig G, Styner M, **Shenton ME**, Lieberman JA. Shape versus size: Improved understanding of the morphology of brain structures. *Med Image Comput Comput Assist Interv* 2001; 2208:24-32. [full text]

24. Rexilius R, Warfield SK, Guttmann CRG, Wei X, Benson R, Wolfson L, **Shenton ME**, Handels H, Kikinis R. A novel nonrigid registration algorithm and applications. *Med Image Comput Comput Assist Interv* 2001; 2208:923-931. [[full text](http://pnl.bwh.harvard.edu/pub/pdfs/rexilius_miccai2001.pdf)]

25. Timoner SJ, Golland P, Kikinis R, **Shenton ME**, Grimson WEL, Wells WM III. Performance issues in shape classification. *Med Image Comput Comput Assist Interv* 2002; 2488:355-362. [[full text](http://people.csail.mit.edu/samson/papers/timoner_miccai_02.pdf)]

26. 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 Assist Interv* 2002; 2488:508-515. [[full text](http://www.spl.harvard.edu/archive/spl-pre2007/pages/papers/polina/polina-miccai2002.pdf)]

27. 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 Assist Interv* 2002; 2488:564-572. [[full text](http://www.spl.harvard.edu/archive/spl-pre2007/pages/projects/segmentation/stat/old/pohl_miccai02.pdf)]

28. 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 Assist Interv* 2004; 3217:393-401. [[full text](http://nac.spl.harvard.edu/publications/item/viewpdf/654/1850)]

29. \*Bouix S, \*Ungar L, \*Dickey CC, McCarley RW, **Shenton ME**. Evaluating Automatic Brain Tissue Classifiers. *Med Image Comput Comput Assist Interv* 2004; 3217:1038-1039. [[full text](http://www.spl.harvard.edu/archive/spl-pre2007/pages/papers/bouix/04-MICCAI-segmentation.pdf)]

30. \*Brun A, Knutsson H, \*Park HJ, **Shenton M**, Westin CF. Clustering fiber traces using normalized cuts. *Med Image Comput Comput Assist Interv* 2004; 3217:368-375. PMCID: [PMC3296487](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3296487/pdf/nihms162106.pdf)

31. 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. PMCID: [PMC2791903](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2791903/pdf/nihms160477.pdf)

32. 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 Assist Interv* 2004; 3217:266-273. [[full text](http://www.spl.harvard.edu/publications/item/viewpdf/657/1859)]

33. \*Park H, **Shenton ME**, Westin CF. An analysis tool for quantification of Diffusion Tensor MRI. *Med Image Comput Comput Assist Interv* 2004; 3217:1089-1090. [[full text](http://www.ncigt.org/publications/item/viewpdf/656/1856)]

34.\*Niethammer M, Estepar RSJ, \*Bouix S, **Shenton ME**, Westin CF. On Diffusion Tensor Estimation. *IEEE Engineering in Medicine and Biology Society* 2006;2622-2625. PMCID: [PMC2791793](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2791793/pdf/nihms-152474.pdf)

35. 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 Assist Interv* 2006; 1071:242-25. [[full text](http://www.insight-journal.org/download/viewpdf/101/1435/bitstream)]

36. 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. PMCID: [PMC2768065](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2768065/pdf/nihms-152491.pdf)

37. 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. PMCID: [19888446](http://www.ncbi.nlm.nih.gov/pubmed/19888446)

38. \*Rathi Y, Michailovich O, \*Bouix S, **Shenton ME**. Directional Functions for Orientation Distribution Estimation. In: *International Symposium on Biomedical Imaging* 2008; 927-930. [[Abstract](http://ieeexplore.ieee.org/xpl/login.jsp?tp=&arnumber=4541149&url=http%3A%2F%2Fieeexplore.ieee.org%2Fxpls%2Fabs_all.jsp%3Farnumber%3D4541149)]

39. \*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 6914-6916. [[Abstract](http://proceedings.spiedigitallibrary.org/proceeding.aspx?articleid=828212)]

40. \*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; pp.1-10. [[full text](http://mplab.ucsd.edu/wp-content/uploads/cvpr2008/WorkShops/data/papers/014.pdf)]

41. 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](http://ieeexplore.ieee.org/xpl/login.jsp?tp=&arnumber=4541152&url=http%3A%2F%2Fieeexplore.ieee.org%2Fxpls%2Fabs_all.jsp%3Farnumber%3D4541152)]

42. Malcolm J, \*Rathi Y, **Shenton ME**, Tannenbaum A. Label space: A coupled multishape representation. *Med Imag Comp Comput Assist Interv* (MICCAI), pp. 416-424. Springer, 2008.

43. \*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. PMCID: [PMC2719648](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2719648/pdf/1471-2202-10-85.pdf)

44. Malcolm JG, **Shenton ME**, \*Rathi Y. Two-tensor tractography using a constrained filter. *Med Image Comput Comput Assist Interv* 2009; 12(Pt1):894-902. PMCID: [PMC2893231](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2893231/pdf/nihms208694.pdf) (Oral presentation.)

45. Malcolm J, **Shenton ME**, \*Rathi Y. Neural Tractography Using An Unscented Kalman Filter. In: *Information Processing in Medical Imaging (IPMI)*, 2009, pp.126-138. PMCID: [PMC2768602](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2768602/pdf/nihms-152567.pdf) (Oral presentation.)

46. Malcolm J, **Shenton ME**, \*Rathi Y. Validation on a Physical Phantom: Two tensor tractography. In: *Workshop on Diffusion Modeling and Fiber Cup. MICCAI*, 2009. [[full text](http://smartech.gatech.edu/bitstream/handle/1853/31227/2009_miccai_malcolm_02.pdf)]

47. 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](http://smartech.gatech.edu/bitstream/handle/1853/31228/2009_miccai_malcolm_03.pdf)]

48. \*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](http://cds.ismrm.org/protected/09MProceedings/files/03549.pdf)] [[PowerPoint](http://jgmalcolm.com/pubs/others/rathi_watson_slides.pdf)]

49. \*Rathi Y, Malcolm J, \*Bouix S, Westin C-F, **Shenton ME**. Disease Classification: A probabilistic Approach. In: *International Symposium on Biomedical Imaging* 2010; 1235-1248. [[full text](http://lmi.bwh.harvard.edu/papers/pdfs/2010/rathiISBI2010.pdf)]

50. \*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(Pt1):657-665. PMCID: [PMC3091029](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3091029/pdf/nihms285101.pdf)

51. \*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](http://cds.ismrm.org/protected/10MProceedings/files/4019_4118.pdf)]

52. \*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](http://cds.ismrm.org/protected/10MProceedings/files/2430_2438.pdf)]

53. \*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.

54. \*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.

55. \*Savadjiev P, \*Rathi Y, Malcolm JG, **Shenton ME**, Westin C-F. A geometry-based particle filtering approach to white matter tractography. *Med Image Comput Comput Assist Interv* (MICCAI) 2010; 6362:233-240.

56. \*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. PMCID: [PMC3140022](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3140022/)

57. \*Rathi Y, Michailovich O, \*Bouix S, **Shenton ME**, Westin C-F. Sparse multi-shell diffusion imaging, *Med Image Comput Comput Assist Inter* (MICCAI), 2011.

58. Baumgartner C, Michailovich O, \*Pasternak O, \*Bouix S, \*Levitt J, **Shenton ME**, Westin C-F, Rathi Y. A unified tractography framework for comparing diffusion models in clinical scans. In: *Workshop on Computational Diffusion MRI (CDMRI)*, 2012, pp.27-32.

59. \*Savadjiev P, \*Rathi Y, **Shenton ME**, \*Bouix S, Westin C-F. Multi-scale characterization of white matter tract geometry. In: I*nternational Society for Magnetic Resonance in Medicine Conference* (Melbourne,

Australia), May, 2012, pp.34-41.

60. \*Pasternak O, **Shenton ME**, Westin C-F. Estimation of extracellular volume from regularized multi-shell diffusion MRI. In: *Med Image Comput Comput Assist Inter* (MICCAI), Part II LNCS; 2012. 7511: 305–312.

61. \*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.

62. \*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.

63. 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, 2014; 6:10.

**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](http://psycnet.apa.org/psycinfo/1985-98434-012)]

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](http://link.springer.com/chapter/10.1007%2FBFb0033752?LI=true)]

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](http://ebooks.cambridge.org/chapter.jsf?bid=CBO9780511664052&cid=CBO9780511664052A014)]

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](http://www.spl.harvard.edu/archive/spl-pre2007/pages/papers/maier/Maier_DTI_2001.pdf)]

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](http://www.spl.harvard.edu/archive/spl-pre2007/pages/papers/niznikiewicz/Niznik_Schiz_Rev_2003.pdf)]

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](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2768599/pdf/nihms-152550.pdf)

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](http://www.hcs.harvard.edu/~epihc/currentissue/shenton.pdf)]

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: [18450168](http://www.ncbi.nlm.nih.gov/pubmed/18450168)

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/Academic Press; 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: [20954428](http://www.ncbi.nlm.nih.gov/pubmed/20954428)

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: *Understanding Neuropsychiatric Disorders: Insights from Neuroimaging.* (Editors: **M.E. Shenton** and B.I. Turetsky), Cambridge University Press; 2011, 1-29.

24. **Shenton ME**. Interview: Understanding Schizophrenia and traumatic brain injury using MRI. *Imaging Med* 2013; 5(2):111-118.

25. **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, [Alzheimer's Forum](http://www.alzform.org/pap/annotation.asp?powID=142265)

26. \*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](http://www.ncbi.nlm.nih.gov/pubmed/23324948)

27. \*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.

28. \*Kubicki M, **Shenton ME**. Diffusion tensor imaging findings and their implications in schizophrenia. *Curr Opin* *Psychiatry* 2014; 27(3):179-184. PMID: [24613986](http://www.ncbi.nlm.nih.gov/pubmed/24613986)

29.         \*Kubicki M, Westin CF, Pasternak O, **Shenton ME**. Diffusion Tensor Imaging and Its Application to Schizophrenia and Related Disorders. *In: Diffusion MRI: From Quantitative Measurement to In-Vivo*

*Neuroanatomy*. (2nd Edition, Editors: Heidi Johansen-Berg, Timothy E. J. Behrens), Elsevier/Academic Press, 2014.

30. Mulert C, **Shenton ME** (Editors). *MRI in Psychiatry*. Springer, Berlin, Heidelberg, Germany, 2014. [**Top 25% most downloaded eBooks for Springer eBook Collection.**]

31. \*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.* (Editors: C-F Westin, A Vilanova, B Burgeth), Springer, Berlin, Heidelberg, German, 2014, pp. 249-270.

32. \*Rathi Y, **Shenton ME**, Westin C-F. Preliminary findings in diagnostic prediction of schizophrenia using diffusion tensor imaging. In: *Visualization and Processing of Tensors and Higher Order Descriptors for Multi-Valued Data*, pp. 313-324. Springer Berlin Heidelberg, 2014.

33. \*Whitford TJ, \*Kubicki M, **Shenton ME**. Diffusion tensor imaging, structural connectivity and schizophrenia. *US Radiology* (In Press).

34. \*Koerte I, \*Lin A, \*Mayinger M, Rauchmann B, Stern RA, **Shenton ME**. Imaging of post-traumatic cognitive disorders. In: Kanekar Sangam (Ed) *Imaging of Neurodegenerative Diseases*. Chapter 32. Pp. 284-294/ Thieme Verlag, Publishers, 2014.

35. **Shenton ME**, \*Kubicki M, and Makris N. Commentary: Understanding alterations in brain connectivity in attention-deficit/hyperactivity disorder using imaging connectomics. *Biol Psychiatry* 2014; 76:601-602.

36. \*Koerte I, \*Hufschmidt J, \*Muehlmann M, \*Lin AP, **Shenton ME**. Advanced neuroimaging of mild traumatic brain injury (Chapter 13). In: Laskowitz D, Grant G: (Editors) *Frontiers in Neuroscience - Translational Research in Traumatic Brain Injury*. Boca Raton (FL): CRC Press, Taylor & Francis Group. Chapter 13. 2016; pp. 277-297. PMID: [26583173](http://www.ncbi.nlm.nih.gov/pubmed/26583173)

37. \*Lyall A, \*Kubicki M, **Shenton ME**. Structural Brain Imaging in Schizophrenia. In: *Kaplan and Sadock’s Comprehensive Textbook of Psychiatry* (Tenth Edition): Edited by Benjamin J. Sadock, M.D., Virginia A. Sadock, M.D., and Pedro Ruiz, M.D., Lippincott Williams, and Wilkins, 2017:1463-1475.

38. **Shenton ME**, \*Koerte IK. Imaging Biomarkers of CTE In Vivo. In: Budson AE, McKee AC, Cantu RC, Stern RA (Editors). *Chronic Encephalopathy: Proceedings of the Boston University Alzheimer’s Disease Center Conference*. Elsevier Press, 2017;141-153.

39. **Shenton ME**, Fairbanks M. In Memoriam: Robert W McCarley – Pre-eminent Researcher, Mentor, and Friend. *Neuropsychopharmacology* 2017;42(12):2468-2469. PMID: [29016255](http://www.ncbi.nlm.nih.gov/pubmed/29016255)

40. \*Guenette JP, **Shenton ME**, \*Koerte IK. Imagimg of Concussion in Young Athletes. In: Bonfante E, Riascos R (Editors), Mukherji SK (Consulting Editor). *Neuroimaging Clinics of North America:* *Imaging of Brain Concussion*. Elsevier Press, 2018;28(1):43-53.

**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: (>800 presented at professional meetings)**