Harvard Medical School/Harvard School of Dental Medicine
Curriculum Vitae

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Place of Birth: Beacon, NY

Education

09/88-05/92	B.A.	Psychology	Siena College, Loudonville, New York
08/93-08/96	A.M.	Clinical Psychology	University of Illinois at Urbana-Champaign
08/93-07/99	Ph.D.	Major: Clinical Psychology; Minor: Biological Psychology (PhD and thesis advisor: Howard Berenbaum, PhD)	University of Illinois at Urbana-Champaign

Postdoctoral Training

09/00-06/02	Clinical Research Training Program	Psychiatry (preceptor: Larry Seidman, PhD)	Harvard Medical School
09/00-06/02	Neuropsychology and Psychiatry	Neuropsychology and Psychiatry (advisors: Larry Seidman, PhD; Margaret O'Connor, PhD; Cheryl Weinstein, PhD)	Massachusetts Mental Health Center and Beth Israel Deaconess Medical Center
06/02-07/03	NIH Individual Postdoctoral	Psychiatry (sponsor: Larry Seidman, PhD)	Harvard Medical School/ Massachusetts General

	Fellowship (F32)		Hospital

Faculty Academic Appointments

07/02-08/07	Instructor	Psychology (Psychiatry)	Harvard Medical School
11/05-	Lecturer	Behavioral Neuroscience Ph.D. Program	Boston University School of Medicine
09/07-	Assistant Professor	Psychology (Psychiatry)	Harvard Medical School

Appointments at Hospitals/Affiliated Institutions

07/02-07/03	Research Fellow	Psychiatry	Massachusetts General Hospital
06/03-08/08	Assistant in Research	Psychiatry	Massachusetts General Hospital
08/08-08/13	Research Associate	Psychiatry	Massachusetts General Hospital
04/11-04/15	Senior Research Scientist	Psychiatry	Boston University School of Medicine
08/13-	Research Scientist	Psychiatry	Massachusetts General Hospital

Committee Service

Local

1999	Clinical Psychology PhD Admissions Committee	University of Illinois at Urbana-Champaign Member (local at the time)
2007-	Board of Advisers for Diversity in the Clinical Research Training program (CRTP)	Harvard Medical School Member
2014	Dissertation Defense Committee for Kayle Slay Sawyer, Ph.D.	Boston University Reader
2015	Senior Thesis Evaluation Committee for Christina Herbosa, B.A. candidate	Harvard University Neurobiology Program Reader

Professional Societies

1997	Midwestern Psychological Society	Member
1998-2000	International Society for Traumatic Stress Studies	Member
2001-	Cognitive Neuroscience Society	Member
2002-2003	International Neuropsychological Society	Member
2010-2012	Society for Research on the Cerebellum	Member
2010-	Association for Psychological Science	Member
2017-	Society for the Teaching of Psychology	Member

Grant Review Activities

2008	Ad hoc grant reviewer	Israeli Science Foundation
2008	Ad hoc grant reviewer	Netherlands Organization for Scientific Research
2015	Ad hoc grant reviewer	Medical Research Council, United Kingdom

Editorial Activities

Ad hoc Reviewer

Journal of Abnormal Psychology
Journal of the International Neuropsychological Society
Psychological Assessment
Psychosomatics
Biological Psychiatry
British Journal of Clinical Psychology
Archives of General Psychiatry
Psychiatry Research: Neuroimaging
Trauma, Violence & Abuse
Progress in Neuro-Psychopharmacology and Biological Psychiatry
Molecular Psychiatry
European Journal of Neurology
Neuropsychology
Brain Research
Human Brain Mapping
Journal of the American Academy of Child and Adolescent Psychiatry
Acta Psychiatrica Scandinavica
The International Journal of Neuropsychopharmacology
Psychiatry Research
The Open Psychology Journal
Pediatrics
Developmental Neuropsychology
The Journal of Child Psychology and Psychiatry
American Journal of Psychiatry
Developmental Science
Neuropsychologia
Psychiatric Times
Journal of Psychiatry and Neuroscience
Psychological Medicine
Neurotherapeutics
Psychiatry and Clinical Neurosciences
Neuropsychopharmacology
Journal of Neuroscience
PLoS ONE
NeuroImage

Advances in Mind-Body Medicine
Journal of Nervous and Mental Disease
Trends in Cognitive Sciences
Journal of Abnormal Child Psychology
Cerebral Cortex
The Journal of Clinical Psychiatry
Acta Radiologica
Child Neuropsychology
European Archives of Psychiatry and Clinical Neuroscience
Journal of Attention Disorders
Expert Review in Neurotherapeutics
Physiology and Behavior
Neuroimaging Clinical
Neuroscience and Biobehavioral Reviews
Proceedings from the National Academy of Sciences
Rubriq
Brain Imaging and Behavior
Journal of Women's Health
Social Work in Health Care

Other Editorial Roles

2008-	Editorial board member	The Open Psychology Journal
2014-	Editorial panel member	The Center for Information and Study on Clinical Research Participation (CISCRP)

Honors and Prizes

1998-1992	President's (Dean's) List Honors	Siena College	
1992	Delta Epsilon Sigma Honors	Siena College	
1992	National Dean's List	American Association for Higher Education	
1992	*Summa cum laude*	Siena College, Loudonville, New York	
1993	Graduate College Fellowship	University of Illinois at Urbana-Champaign	Research
1998	Herman-Eisen Award for Professional Contribution to Psychology	University of Illinois at Urbana-Champaign	Teaching
2001	Livingston Fellowship Award 2001-2002	Harvard Medical School	Research
2001	Selected participant	American Psychological Association Advanced Training Institute in Functional Magnetic Resonance Imaging	Research
2002	Mysell Poster Award	Department of Psychiatry,	Research

		Harvard Research Day	
2003	Lilly Fellowship Award	Eli Lilly and Company	Research
2009	Travel Award	American College of Neuropsychopharmacology (ACNP)	Research
2013	Caring for Dependent Travel Award	Massachusetts General Hospital	Research
2014	Caring for Dependent Travel Award	Massachusetts General Hospital	Research

Report of Funded and Unfunded Projects

Funding Information

Past

1996 Minor Head Injury in Battered Women: Incidence and Relationship to Cognitive and Psychosocial Functioning
Graduate College Thesis Project Grant
PI
The goal of this project was to examine the incidence and effects of brain injury in battered women.

1996 Minor Head Injury in Battered Women: Incidence and Relationship to Cognitive and Psychosocial Functioning
Women's Studies Funding for Feminist Scholarship
PI
The goal of this project was to examine the incidence and effects of brain injury in battered women.

1996 Minor Head Injury in Battered Women
Graduate College On-Campus Dissertation Research Grant
PI
The goal of this project was to examine the incidence and effects of brain injury in battered women.

1998-1999 Minor Head Injury in Battered Women
Pre-doctoral Fellowship, NRSA, F31 MH11763
PI
The goal of this project was to examine the incidence and effects of brain injury in battered women.

2001 A Functional MRI Study of Working Memory in ADHD Adults
Peter B. Livingston Fellowship Fund Study, MGH/HMS
PI
This project examined the functional neuroanatomy of adults with ADHD.

2002-2003 A Functional MRI Study of Working Memory in ADHD Adults
Post-doctoral Fellowship, NRSA, F32 MH065040
PI

This project examined the functional neuroanatomy of adults with ADHD.

2003-2005 Neuroanatomy of Adult ADHD: An MRI Morphometric Study
R01 MH62152 (PI: Larry Seidman)
Fellow
The goal of this project was to examine structural abnormalities in ADHD adults across the lifespan.

2005-2011 Cerebellar Structure and Function in Adult ADHD
Career Development Award, K23 MH071535
PI
The goal of this project is to examine how cerebellar and structural abnormalities in ADHD adults contributes to motor and cognitive abnormalities.

2007-2009 Neuroimaging of Brain Injury in Battered Women
HMS Fund for Women's Health, HMS Center of Excellence in Women's Health
PI ($30,000)
The goal of this project was to use neuroimaging such as diffusion tensor imaging and cognitive measures to examine potential structural and functional brain abnormalities resulting from brain injury in battered women.

2008-2010 Somatotopic organization of the cerebellum and its role in plasticity
UMass, Amherst Office of Research (PI: Rebecca Spencer)
Co-investigator
The goal of this project was to examine cerebellar somatotopy across task types.

Current

2011-2016 The role of corticocerebellar pathophysiology in adult ADHD
NCE 2017 R01 HD067744 $1,480,815.00
PI
The long-term objective of this proposal is to increase our understanding of the pathophysiology of attention deficit/hyperactivity disorder (ADHD) by furthering our knowledge regarding how the cerebellum and corticocerebellar circuits contribute to perceptual and motor timing abnormalities in ADHD.

2012-2017 Cerebellar timing dysfunction in schizophrenia
R01 MH074983 (PI: William Hetrick)
Consultant
This project examines the structural and functional integrity of the cerebellum in individuals with schizophrenia, their first-degree relatives, and in healthy comparison subjects using behavioral and MRI methodology. Providing cerebellar and timing-related expertise.

2016-2021 Affective and Conative Changes in Alcoholism
R01 AA007112 (PI: Marlene Oscar Berman); 2nd Cycle of being funded on this competitive Renewal
Consultant
Emotion dysregulation may underlie addictive disorders such as alcoholism, which in turn

may further alter emotional states. Alcoholism-related abnormalities in brain centers controlling emotional perception and regulation may differ for men and women, and can differentially alter the course of alcoholism directly, by affecting sensitivity to feedback, as well as the ability to make economic, social, and health-related decisions. Providing task design and analysis as well as cerebellar expertise, grant and manuscript preparation.

Submitted

PENDING Neurobiological basis and sequelae of traumatic brain injury related to intimate partner-violence
National Institutes of Health/ National Institute of Neurological Disorders and Stroke R01
PI – Direct Costs Requested - $2,448,356
We propose to use magnetic resonance imaging and molecular markers of brain structure and function with measures of cognition, behavior and psychopathology to examine the neural mechanisms of traumatic bran injury (TBI) related to intimate-partner violence and to understand TBIs relationship to cognitive, behavioral and psychological functioning.

PENDING Validating PRISMS-Revitalize, a Lightweight Head-Mounted Display-Based TBI Rehabilitation Platform Suitable for Military Field Use
Joint Program Committee 6 Combat Casualty Care Research Program Precision Trauma Care Research Award (W81XWH-18-DMRDP-PTCRA)
Biomedical TBI Researcher
We propose to validate PRISMS-Revitalize in adolescents and young adults who have suffered a traumatic brain injury (TBI). PRISMS-Revitalize is an affordable and lightweight system designed to deliver rehabilitative exercises to improving balance and vision. We aim to show PRISMS-Revitalize is a safe, fun, and effective way to give doctors and physical therapists a personalized determination of how well a patient is recovering.

Training Grants and Mentored Trainee Grants

2015-2017 Dynamic cerebro-cerebellar networks for cognitive function in ADHD and patients with neurological damage
Canadian Institutes of Health Research
Mentor of Aaron Kucyi
This project will reveal fundamental insights into highly understudied aspects of ADHD and their neurobiological bases. As such, this work could lead to development of new therapies targeting specific brain regions and changing brain dynamics to alleviate attentional issues and reduce the burden of ADHD on individuals and society.

Report of Local Teaching and Training

Teaching of Students in Courses

1993-1996	Child Abuse Prevention Program Undergraduate students	University of Illinois, Champaign, IL 20 students per semester for 6 semesters
1996-1998	Psychology 340 and Psychology 341 Adolescent Mentoring Program	University of Illinois, Champaign, IL 15 students for 4 semesters
1996-1999	Independent Research Seminar	University of Illinois, Champaign, IL 2 students for 6 semesters
2005-	The Neurobiology of ADHD in the Human Neuropsychology I course for the Behavioral Neuroscience Ph.D. Program	Boston University School of Medicine, Boston, MA annual 3-hour lecture
2008	The Neurobiology of ADHD Applied Physiological Development course, Tufts University	1 hour Boston, MA

Formal Teaching of Residents, Clinical Fellows and Research Fellows (post-docs)

2004-2010	The Neurobiology of ADHD: Neuroimaging in the Developmental Neuroscience course for second year fellows in the Harvard Child Psychiatry Training Program which spans 3 Harvard programs	McLean, Cambridge Children's Hospital, and Massachusetts General Hospital 1.5-hour lecture
2006-2013	Neuroimaging in ADHD in the Pediatric Psychopharmacology course for Psychiatry Fellows	Massachusetts General Hospital 1-hour lecture
2016	Structural and Functional Neuroimaging in ADHD, Neuropsychiatry Seminar for second year Residents	McLean Hospital 1-hour lecture

Laboratory and Other Research Supervisory and Training Responsibilities

1996-1997	Independent Study Supervision of Undergraduate student Susannah More/ University of Illinois	Daily mentorship for 2 semesters.
2004	Independent Study Supervision of Student Intern Matthew Widmer/Hampshire College	Weekly mentorship for the summer.
2004	Independent Study Supervision of Graduate Student Ariel Brown/Boston University	Daily mentorship for 1 semester.
2005-2006	Independent Study Supervision of Student Intern Navine Nasser-Ghodsi/Massachusetts Institute of Technology	Weekly mentorship for 2 semesters.
2006-2007	Independent Study Supervision of Student Intern Megha Patel/Brandeis University	Bi-weekly mentorship for 1 year.

2008-2010	Independent Study Supervision of Student Intern Brittany LeBlanc/University of Massachusetts, Amherst	Bi-weekly mentorship for approximately 2 years.
2009	Independent Study Supervision of Student Intern Jade Sperlinga/Endicott College	Weekly mentorship for 1 semester.
2009-2010	Independent Study Supervision of Student Intern Stacey Bilicki/Endicott College	Bi-weekly mentorship for 1 semester.
2012	Independent Study Supervision of Student Intern Kyan Nafissi/Union College	Weekly mentorship for 1 summer.
2013	Independent Study Supervision of Student Intern Maria Meidanis/Suffolk University	Weekly mentorship for 1 semester.
2016-	Independent Study Supervision of Student from Wellesley College Noor Adra Massachusetts General Hospital Intern	Weekly mentorship, 1-2 hours – current.
2017-	Mentor for Elizabeth DeGeorges from Byram Hills Central High School; Authentic Science Research Program	Bi-weekly mentorship, 1-2 hours – current.
2017-	Independent Study Supervision of Student from University of Vermont Gillian Goolkasian Massachusetts General Hospital Intern	Weekly mentorship, 1-2 hours – current
2017-	Independent Study Supervision of Student from Harvard University Diana Wang Massachusetts General Hospital Intern	Weekly mentorship, 1-2 hours – current

Formally Supervised Trainees

2010- Kayle Sawyer, Ph.D. / Research Scientist, Boston University School of Medicine
Supervision during doctoral work; continuing supervision on post-doctoral projects

2012-2013 Ezra Wegbreit, Ph.D. / Postdoctoral Fellow in Psychiatry and Human Behavior, Brown University
Supervision on projects examining cerebellar abnormalities in ADHD and examining neural consequences of brain injury in battered women using functional and structural magnetic resonance imaging

2012-2015 Michael Hove, Ph.D. / Assistant Professor in Psychological Science, Fitchburg State University
Supervision on projects examining cerebellar contributions to ADHD using behavioral motor paradigms and functional magnetic resonance imaging

2014-2016 Aaron Kucyi, Ph.D. / Postdoctoral Fellow in Neurology and Neurological Sciences, Stanford University school of Medicine

Supervision on projects examining cerebro-cerebellar connectivity as well as its role in the pathophysiology of ADHD and other cerebellar-related disorders using functional magnetic resonance imaging

2015- Aihua Cao, M.D., Ph.D. / Post-doctoral Fellow in Psychiatry, Massachusetts General Hospital
Supervision on projects examining cerebro-cerebellar pathophysiology of ADHD and related behavioral features using functional and structural magnetic resonance imaging. Training in research design, analysis, and manuscript writing, 1-2 hours per week.

2017- Julia Daugherty/ PhD candidate in Psychology, Universidad de Granada, Granada, Spain
Supervision on projects examining intimate-partner violence, traumatic brain injury, and functional and structural magnetic resonance imaging. Training in research design, analysis, and manuscript writing, 1-2 hours per week.

Formal Teaching of Peers (e.g., CME and other continuing education courses)

2006-2007	Structural Imaging in ADHD PI Lunch course, Clinical and Research Program in Pediatric Psychopharmacology, Massachusetts General Hospital	1 hour Boston, MA
2006	Meta-analysis of Structural Imaging Findings in Attention-deficit/hyperactivity Disorder Interview for Talking ADHD, Remedica Medical Education and Publishing	1 hour Boston, MA
2007, 2009, 2011, 2013	Neuroimaging of ADHD The Attention Deficit Hyperactivity Disorder across the Lifespan course, Massachusetts General Hospital Department of Psychiatry	1 hour Boston, MA
2009	Structural and Functional Neuroanatomy of ADHD The Child & Adolescent Psychopharmacology course Massachusetts General Hospital Department of Psychiatry	1 hour Boston, MA

Local Invited Presentations

No presentations below were sponsored by outside entities.

2007 The Cerebellum in ADHD: Testing a Theory of Timing and Temporal Processing using fMRI/Seminar Presentation
Nuclear Magnetic Resonance Center, MGH

2007 Neuroimaging Findings in ADHD
Massachusetts Mental Health Center Research Grand Rounds, Harvard Medical School

2008	Neuroimaging Abnormalities in ADHD Advanced Neuropsychology Case Seminar for faculty and fellows at Cambridge Health Alliance, Harvard Medical School Teaching Affiliate
2008	Structural and Functional Neuroimaging Abnormalities in ADHD Developmental Psychopathology Research Workshop, Harvard Clinical Psychology program
2010	Cerebro-cerebellar pathophysiology in ADHD: What do we know and are there sex differences?/Seminar Presentation Psychiatric Imaging and Neuroscience Group, MGH
2010	Design and Analysis of Neuroimaging Data in ADHD/Seminar Presentation Statistical Parametric Mapping (SPM8) course, MGH
2013	Fronto-cerebellar pathophysiology in ADHD Harvard Medical School Clinical Research Training Program, Judge Baker Children's Hospital
2014	Fronto-cerebellar pathophysiology in ADHD McLean Imaging Center Speaker Series, McLean Hospital

Report of Regional, National and International Invited Teaching and Presentations

Invited Presentations and Courses

Regional

Those presentations below sponsored by outside entities are so noted and the sponsor is identified

2010	Neurobiology of ADHD/Seminar Presentation Galenea Corporation, Cambridge, MA (Sponsored by Galenea)
2010	Males vs. females: Who gets studied in research? Potential impacts on education and health/Conference Trinity College, Hartford, CT
2013	Frontocerebellar pathophysiology of ADHD Neuroimaging & Neuropsychology group, Boston VA Medical center
2013	Behavioral and Imaging Timing Abnormalities in Adult ADHD New England Sequencing and Timing conference, University of Massachusetts in Amherst
2013	BU-MNS Internship Workshop/Panel Member Massachusetts Neuropsychological Society, Boston University

National

1997	Incidence of head injury in battered women/Symposium Presentation (Primary author) Annual meeting of the Midwestern Psychological Association, Chicago, IL

1998	Effects of child abuse and neglect on later cognitive functioning/Symposium Presentation (Primary author) Midwestern Psychological Association, Chicago, IL
2003	An fMRI study of working memory in adults with ADHD: Gender differences/Symposium Presentation (Primary author) Annual Meeting of the International Neuropsychological Society, Honolulu, Hawaii
2003	Working memory in adult ADHD: An fMRI investigation/Symposium Presentation (Primary author) Annual Meeting of the American Academy of Child and Adolescent Psychiatry, Miami, FL
2003	Alexithymia in battered women: Increasing our understanding/Symposium Presentation (Primary author) Annual Meeting of the International Society for Traumatic Stress Studies, Chicago, IL
2003	Grant Writing 101/Workshop (Author) Annual Meeting of the International Society for Traumatic Stress Studies, Chicago, IL
2004	Functional neuroanatomy of working memory in adults with ADHD/Symposium Presentation (Primary author) Society of Biological Psychiatry's 59th Annual Scientific Convention and Program, NY, NY (Sponsored by Biological Psychiatry)
2007	Structural and Functional Neuroimaging Abnormalities in Attention-Deficit/Hyperactivity Disorder/Seminar Presentation Department of Psychiatry, University of Pittsburgh (Sponsored by the University of Pittsburgh)
2007	Working memory in adult ADHD: Sex differences in neural activation/Symposium Presentation (Primary author) Annual Meeting of the American Academy of Child and Adolescent Psychiatry, Boston, MA
2008	New fronto-cerebellar findings in ADHD/Symposium Presentation (Primary author) Annual meeting of the American Psychiatric Association, Washington, DC (Sponsored by the American Psychiatric Association)
2009	Sex differences in the functional neuroanatomy of working memory in adults with ADHD/Symposium Presentation (Primary author) Annual meeting of the American College of Neuropsychopharmacology. Hollywood, FL
2011	Cerebellar pathophysiology in adult ADHD/Symposium Presentation (Chair of Symposium and Presentation) Annual meeting of the Society of Biological Psychiatry. San Francisco, CA (Sponsored by Biological Psychiatry)

2013 Cerebro-cerebellar abnormalities associated with cognitive and motor processes in adult ADHD
166th Annual meeting of the American Psychiatric Association. San Francisco, CA

2014 Brain injury in battered women: Effects on white matter and cognitive functioning
Domestic Violence Death Review Team for Santa Clara County. San Jose, California

2014 Brain injury in battered women and its relationship to microstructural white matter alterations: A diffusion tensor imaging study
10th World Congress on Brain Injury. San Francisco, CA

2015 The Spectrum of Traumatic Brain Injury in Victims of Intimate Partner Violence
22nd Annual County of Santa Clara Domestic Violence Conference. Santa Clara, CA
(Sponsored by the Santa Clara Domestic Violence Committee)

2016 Cerebro-Cerebellar Abnormalities Associated with Cognitive and Motor Processes in Adult ADHD.
Department Colloquium Series
Department of Kinesiology, The Pennsylvania State University
(Sponsored by The Pennsylvania State University)

International

2005 Meta-analysis of structural imaging findings in attention-deficit/hyperactivity disorder/Symposium Presentation (Primary author)
Annual Meeting of the American Academy of Child and Adolescent Psychiatry, Toronto, Canada

2008 Neurobiology and Neuroimaging of ADHD: Current Evidence, Challenges and Future Directions/Seminar Presentation
Department of Psychiatry, University of Tokyo
(Sponsored by Janssen Pharmaceuticals)

2008 The Neurobiology of ADHD/Seminar Presentation
Janssen Pharmaceuticals CNS Forum, Tokyo, Japan
(Sponsored by Janssen Pharmaceuticals)

2009 Neuroimaging findings implicating fronto-cerebellar circuit abnormalities in the pathophysiology of ADHD/Symposium Presentation (Primary author)
Annual meeting of the World Congress of Biological Psychiatry, Paris, France

Report of Education of Patients and Service to the Community

Education of Patients and Service to the Community

No presentations below were sponsored by outside entities.

2015 James P. Timilty Middle School / Psychiatric Neuroscientist
Educated 6th through 8th graders on the neuroanatomy of the cerebellum and its important role in cognition and emotional functioning as well as motor control, providing an interactive demonstration of the adaptive role of the cerebellum.

2015 Annual County of Santa Clara Domestic Violence Conference / Psychiatric Neuroscientist
Delivered workshop entitled *Recognizing Traumatic Brain Injury: Scenarios and Information Guide* to attorneys, judges, nurses, social workers, therapists, and law enforcement officers at a domestic violence conference.

2016 Center for Judicial Education and Research Domestic Violence Institute.
Helped develop afternoon curriculum for the Fact Finding session of this program for the Judicial Counsel of California to judges in the San Francisco Bay Area.

2016 Center for Judicial Education and Research Domestic Violence Institute: An Orientation to Judicial Skills (San Francisco, CA) / Domestic Violence Neuroscience Expert
Delivered talk entitled *Invisible Traumas: Traumatic Brain Injury and Strangulation in Intimate Partner Violence* for the Judicial Counsel of California to judges in the San Francisco Bay Area.

Education Material for Patients and the Lay Community

No presentations below were sponsored by outside entities.

2015	Domestic Violence Project: Assessing Traumatic Brain Injury in Domestic Violence Victims/Survivors	Co-Author	Handout providing a concise traumatic brain injury assessment for law enforcement personnel and other stakeholders
2015	Domestic Violence and Traumatic Brain Injury	Co-Author	Education and resource brochure for victims of domestic violence in the Santa Clara County

Report of Scholarship

Publications

Peer reviewed publications in print or other media

Original Articles

1. Turrisi R, Jaccard J, Kelly SQ, **Valera EM**. Parent and teen perceptions regarding parental efforts at controlling teen drunk driving. *Journal of Applied Social Psychology* 1994; 24: 1387-1406.
2. **Valera EM**, Heller WH, Berenbaum H. A twin study of individual differences in perceptual

asymmetry. *Laterality* 1999; 4: 299-312.
3. **Valera EM**, Berenbaum H. A twin study of alexithymia. *Psychotherapy and Psychosomatics* 2001; 70: 239-246.
4. **Valera EM**, Berenbaum H. Brain injury in battered women. *Journal of Consulting and Clinical Psychology* 2003; 71, 797-804.
5. Berenbaum H, **Valera EM**, Kerns JG. Psychological trauma and schizotypal symptoms. *Schizophrenia Bulletin* 2003; 29: 143-152.
6. Seidman LJ, Doyle A, Fried R, **Valera EM**, Crum K, Matthews L. Neuropsychological function in adults with attention-deficit hyperactivity disorder. *Psychiatric Clinics of North America* 2004; 27: 261-282. PMID: 15063997
7. Seidman LJ, Biederman J, Monuteaux MC, **Valera EM**, Doyle AE, Faraone SV. Impact of gender and age on executive functioning: Do girls and boys with and without attention-deficit/hyperactivity disorder differ neuropsychologically in pre-teen and teenage years? *Developmental Neuropsychology* 2005; 27: 79-105. PMID: 15737943
8. **Valera EM**, Faraone SF, Biederman J, Poldrack RA, Seidman LJ. Functional neuroanatomy of working memory in adult attention-deficit/hyperactivity disorder. *Biological Psychiatry* 2005; 57: 439-447. PMID: 15737657
9. Seidman LJ, Biederman J, **Valera EM**, Monuteaux MC, Doyle AE, Faraone SV. Neuropsychological functioning in girls with attention-deficit/hyperactivity disorder with and without learning disabilities. *Neuropsychology* 2006; 20: 166-177. PMID: 16594777
10. Makris N, Kaiser JR, Haselgrove C, Seidman LJ, Biederman J, Boriel D, Valera EM, Papadimitriou GM, Fischl B, Caviness VS, Kennedy DN. Human cerebral cortex: A system for the integration of volume- and surface-based representations. Neuroimage; 2006; 33; 139-153.
11. Seidman LJ, **Valera EM**, Makris N, Monuteaux MC, Boriel DL, Kelkar K, Kennedy DN, Caviness VS, Bush G, Aleardi M, Faraone SV, Biederman J. Dorsolateral prefrontal and anterior cingulate cortex volumetric abnormalities in adults with attention-deficit/hyperactivity disorder identified by magnetic resonance imaging. *Biological Psychiatry*; 2006; 60; 1071-1080. PMID: 16876137.
12. **Valera EM**, Faraone SV, Murray K, Seidman LJ. Meta-analysis of structural imaging findings in attention-deficit/hyperactivity disorder. *Biological Psychiatry*; 2007; 61; 1361-1369. PMID: 16950217
13. Makris N, Biederman J, **Valera EM**, Bush G, Kaiser J, Kennedy DN, Caviness VS, Faraone SV, Seidman LJ. Cortical thinning of the attention and executive function networks in adults with attention-deficit/hyperactivity disorder. *Cerebral Cortex*; 2007; 17; 1364-1375. PMID: 16920883.
14. Makris NM, Buka SL, Biederman J, Papadimitriou GM, Hodge SM, **Valera EM**, Brown AB, Bush G, Monuteaux MC, Caviness VS, Kennedy DN, Seidman LJ. Attention and executive systems abnormalities in adults with childhood ADHD: A DT-MRI study of connections. *Cerebral Cortex*, 2008; 18(5): 1210-1220. PMID: 17906338
15. Bush G, Spencer T, Holmes J, Shin LM, Surman C, **Valera EM**, Seidman LJ, Makris N, Aleardi M, Mick E, Biederman J. Functional magnetic resonance imaging of methylphenidate and placebo in adults with attention-deficit/hyperactivity disorder during the multi-source interference task; *Archives of General Psychiatry;* 2008; 65; 102-114. PMID: 18180434
16. Biederman J, Makris N, **Valera EM**, Monuteaux MC, Goldstein JM, Buka S, Boriel DL, Bandyopadhyay S, Kennedy DN, Caviness VS, Bush G, Aleardi M, Hammerness P, Faraone SV,

Seidman LJ. Towards further understanding of the comorbidity between attention-deficit/hyperactivity disorder and bipolar disorder: An MRI study of brain volumes. *Psychological Medicine*; 2008; 38; 1045-1056. PMID: 17935640

17. Monuteaux MC, Seidman LJ, Faraone SV, Makris N, Spencer T, **Valera EM**, Brown A, Bush G, Doyle AE, Hughes S, Helliesen M, Mick E, Biederman J. A preliminary study of dopamine D4 receptor genotype and structural brain alterations in adults with ADHD. *American Journal of Medical Genetics, Part B Neuropsychiatric Genetics*; 2008, 147B: 1436-1441. PMID: 18951431
18. **Valera EM**, Brown A, Biederman J, Faraone SV, Makris N, Monuteaux MC, Whitfield-Gabrieli S, Vitulano M, Schiller M, Seidman LJ. Sex differences in the functional neuroanatomy of working memory in adults with ADHD. *American Journal of Psychiatry;* 2010; 167:86-94. PMID: 19884224
19. Brown AB, Biederman J, **Valera EM**, Doyle AE, Bush G, Spencer T, Monuteaux MC, Mick E, Whitfield-Gabrieli S, Makris N, LaViolette PS, Oscar-Berman M, Faraone SV, Seidman LJ. Effect of dopamine transporter gene (SLC6A3) variation on dorsal anterior cingulate function in ADHD. *American Journal of Medical Genetics, Part B Neuropsychiatric Genetics*; 2010; 153B:365-75. PMID 19676101
20. Makris N, Seidman LJ, **Valera EM**, Monuteaux M, Kennedy DN, Caviness VS Jr, Crum K, Brown AB, Bush G, Faraone S, Biederman J. Anterior cingulate volumetric alterations in treatment-naïve adults with ADHD: A pilot study. *Journal of Attention Disorders;* 2010; 13:407-413. PMID: 20008822
21. Stoodley CJ, **Valera EM**, Schmahmann JD. An fMRI case study of functional topography in the human cerebellum. *Behavioral Neurology;* 2010; 23:65-79. PMID: 20714062
22. **Valera EM**, Spencer RMC, Zeffiro TA, Makris N, Spencer TJ, Faraone SV, Biederman J, Seidman LJ. Neural substrates of impaired sensorimotor timing in adult attention-deficit/hyperactivity disorder. *Biological Psychiatry;* 2010; 68:359-367. NIHMSID # 208913; PMID: 20619827
23. Seidman LJ, Biederman J, Liang L, **Valera EM**, Monuteaux MC, Brown A, Kaiser J, Spencer T, Faraone SV, Makris N. Gray matter alterations in adults with attention-deficit/hyperactivity disorder identified by voxel based morphometry. *Biological Psychiatry*; 2011; 69: 857-866. PMID: 21183160
24. Brown AB, Biederman J, **Valera EM**, Makris N, Doyle A, Whitfield-Gabrieli S, Mick E, Spencer T, Faraone S, Seidman L. Relationship of DAT1 and adult ADHD to task-positive and task-negative working memory networks. *Psychiatry Research: Neuroimaging*; 2011; 193: 7-16. PMID: 21596533
25. Stoodley CJ, **Valera EM**, Schmahmann JD. Functional topography of the cerebellum for motor and cognitive tasks: An fMRI study. *NeuroImage*; 2012; 59: 1560-1570. PMID: 21907811
26. Brown A, Biederman J, **Valera EM**, Lomedico A, Aleardi M, Makris N, Seidman LJ. Working memory network alterations and associated symptoms in adults with ADHD and bipolar disorder. *Journal of Psychiatric Research*; 2012; 46: 476-483. PMID: 22272986
27. Makris N, Seidman LJ, Brown A, **Valera EM**, Kaiser JR, Petty CR, Liang L, Aleardi M, Boriel D, Henderson CS, Giddens M, Faraone SV, Spencer TS, Biederman J. Further understanding of the comorbidity between attention-deficit/hyperactivity disorder and bipolar disorder in adults: An MRI study of cortical thickness. *Psychiatry Research: Neuroimaging*; 2012; 202:1-11. PMID: 2264068
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adults with ADHD. *Experimental Brain Research*; 2015; 233: 1145-1153.

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34. **Valera EM**, Kucyi A. Brain injury in women experiencing intimate partner-violence: Neural mechanistic evidence of an "invisible" trauma." *Brain Imaging and Behavior;* 2016 [Epub ahead of print] PMID: 27766587.
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Other peer-reviewed publications

1. Seidman LJ, **Valera EM**, Makris, N. Structural brain imaging of Attention-Deficit/Hyperactivity Disorder. *Biological Psychiatry* 2005; 57: 1263-1272. PMID: 15949998.
2. Bush G, **Valera EM**, Seidman LJ. Functional neuroimaging of Attention-Deficit/Hyperactivity Disorder: A review and suggested future directions. *Biological Psychiatry*; 2005; 57: 1273-1284. PMID: 15949999.
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Non-peer reviewed scientific or medical publications/materials in print or other media

Reviews and Chapters

1. Seidman LJ, **Valera EM**. The ADHD Brain. In: Biederman J, ed. *ADHD: Current understanding of etiology, diagnosis, and neurobiology*. Hasbrouck Heights, NJ: Veritas Institute 2003, pp. 25-34.
2. Seidman LJ, **Valera EM**, Bush G. Brain function and structure in adults with attention-deficit hyperactivity disorder. *Psychiatric Clinics of North America* 2004; *27*: 323-347. PMID: 15064000.
3. **Valera EM**, Seidman LJ. Neurobiology of ADHD in preschoolers. *Infants and Young Children* 2006; 19: 94-108.
4. **Valera EM**, Brown AB, Seidman LJ. Neuropsychology of ADHD and other disorders of childhood. In Wood SJ, Allen NB, Pantelis C, ed. *Neuropsychology of Mental Disorders*. Cambridge, UK: Cambridge University Press; 2009. pp. 285-299.

Book Review

1. Mukherjee D, Kerns J, **Valera EM**, Heller W. Schizophrenia: Past, present, and future [invited review of the book, Psychopathology: The evolving science of mental disorder]. Contemporary Psychology 1998; 43: 858-859.

Professional Educational Materials or Reports, in print or other media

1. Syllabus for the Child Abuse Prevention Program, Psychology Department, University of Illinois, Champaign, Illinois (1993-1996). Role: developed the syllabus for the academic component of a community based child abuse intervention program run through a local woman's shelter. Course is for undergraduate students.
2. Syllabus for the Adolescent Mentoring Program (Psych 340/341), Psychology Department, University of Illinois, Champaign, Illinois (1996-1998). Role: responsible for co-developing syllabus (and course) designed to aid adolescents in the community who are suffering from varying levels of depression. The goals of the program were to prevent adolescent admission or readmission into the psychiatric hospital by providing them with student mentors.
3. **Valera EM**, Faraone SV. Perspectives on Adult ADHD: Recognizing Impairment, Improving Lives. *ADHD: A common neurobiological disorder.* Adult ADHD Academic Council 2006. Newsletter in CME series, sponsored by BU School of Medicine and Shire Pharmaceuticals, to help keep general psychiatrists and primary-care physicians abreast of the latest findings on ADHD in adults and what they mean for clinicians, and to facilitate timely, accurate diagnoses and optimal treatment strategies. Role: authored section on neuroimaging and ADHD, created CME questions pertaining to the material and reviewed overall document.
4. Biederman J, Faraone SV, Fried R, **Valera EM**. Adult ADHD: A neurobiological disorder with a lifetime impact. Adult ADHD Academic Council 2007. CME monograph, sponsored by BU School of Medicine and Shire Pharmaceuticals, to help keep general psychiatrists and primary-care physicians abreast of the latest findings on ADHD in adults and what they mean for clinicians, and to facilitate timely, accurate diagnoses and optimal treatment strategies. Role: authored section on the neurobiology of the ADHD brain, provided CME questions for that section

5. Domestic violence protocol for law enforcement 2016: Police Chief's Association of Santa Clara. The Domestic Violence Protocol for Law Enforcement provides guidelines and establishes standards for public safety call takers, dispatchers, first responders and investigators in handling domestic violence incidents. The Protocol seeks to interpret and apply statutory and case law relating to domestic violence incident response and investigation. Role: authored brief section detailing how to adequately inquire about the possibility and severity of potential brain injuries sustained during an incident of domestic-violence.
6. Violence Against Women Education Project. Domestic Violence Judicial Institute: an Orientation to Judicial Skills 2016. Role: contributed to the development of the course curriculum by providing up-to-date information on partner-violence related brain injury and appropriate fact-finding information. This is a project of the Judicial Council of California Center for Judicial Education and Research (CJER) Center for Families, Children & the Courts (CFCC). This 4-day course is designed to provide up-to-date and relevant information that will allow judges in the California area to work more effectively with domestic-violence cases.

Theses

1. **Valera EM**. Genetic influence on perceptual asymmetries [Masters thesis]. Urbana, IL: University of Illinois at Urbana-Champaign; 1996.
2. **Valera EM**. Brain injury in battered women: Prevalence and relationship to cognitive functioning and psychopathology [Dissertation thesis]. Urbana, IL: University of Illinois at Urbana-Champaign;1999.

Abstracts, Poster Presentations and Exhibits Presented at Professional Meetings (only select and/or recent)

1. **Valera EM**, Faraone SF, Biederman J, Poldrack RA, Seidman LJ. Functional neuroanatomy of working memory in Adult Attention-Deficit/Hyperactivity Disorder. *Harvard Research Day* 2002; Mysell Award winner.
2. **Valera EM**, Francis A, Makris N, Li Z, Wegbreit E, O'Connor M. Brain injury in battered women and its relationship to microstructural white matter alterations: A diffusion tensor imaging study. *American College of Neuropsychopharmacology* 2013.
3. Ruiz SM, Sawyer KS, **Valera EM**, Lehar S, Valmas M, Remijnse PL, Harris GJ, Oscar-Berman M. Alcoholics' responses to changing reward contingencies in a probabilistic reversal learning fMRI task. *Society for Neuroscience Abstracts* 2014; 429.26.
4. Kucyi A, Hove MJ, Esterman MS, Biederman J, **Valera EM**. Brain Dynamics of Ongoing Attentional Fluctuations in ADHD. *American College of Neuropsychopharmacology* 2015.
5. **Valera EM**, Kucyi A, Hove MJ, Esterman M, Biederman J. Brain dynamics of ongoing attentional fluctuations in ADHD. Atlanta, GA. *Society of Biological Psychiatry* 2016.

Narrative Report

Introduction

I am a cognitive neuroscientist with extensive training in clinical neuropsychology, psychopathology and traumatic brain injury (TBI). I developed dual interests in attention deficit/hyperactivity disorder (ADHD) and trauma (particularly in the form of domestic violence) during my graduate career, and devoted my clinical and research training to these specific areas of interest. After receiving my Ph.D. at

the University of Illinois at Urbana-Champaign, I began using neuroimaging with a focus on understanding the neurobiology of ADHD and partner-related TBI. From my ADHD research, I have also developed a strong interest in the cerebellum.

Area of Excellence: Investigation

Though most ADHD research has focused on frontal-striatal dysfunction, the discovery of cerebellar abnormalities in both structural and functional magnetic resonance imaging (MRI), including my own functional and structural MRI work, provides compelling evidence that the cerebellum plays a critical role in the pathophysiology of ADHD. In my current program of research, first funded by a K23 NIMH Career Development Award and now by an R01, I am examining the functional and structural integrity of corticocerebellar circuits in adult ADHD in order to elucidate their role in deficits, such as attention, motor coordination, temporal processing, and working memory. I am using structural and functional MRI, diffusion tensor imaging (DTI), and varied connectivity analyses in conjunction with behavioral motor assessments to test the hypothesis that corticocerebellar network abnormalities contribute to ADHD via a breakdown in the cerebellum's ability to accurately predict timing for perceptual and motor domains. My lab's most recent work in this area holds clinical relevance as it provides support for the potential targeting of cerebellar areas for therapeutic interventions in ADHD.

Additionally, supported by a grant awarded from the Harvard Medical School Center of Excellence, and following-up on my published dissertation work, I am using functional connectivity, sensitivity weighted imaging, diffusion tensor imaging and various clinical structural imaging scans to test for the presence of abuse-related brain injuries in women who have suffered intimate-partner violence (IPV), a largely overlooked but critical international public health issue. Using a brief neuropsychological battery and diagnostic assessment, I am also examining the relationships between brain injuries and cognitive and psychological functioning in these women. Most recently, we have provided the first mechanistic evidence of TBI and its association with cognitive functioning in women sustaining IPV-related TBI. This research could have serious implications for legal, social, educational and therapeutic interventions available to women in such physically abusive situations.

Teaching and Education

My teaching responsibilities at the University of Illinois included several years as a primary instructor for a child abuse prevention program as well as being co-developer and co-instructor of an adolescent mentoring program for upper level undergraduate students.

For the past several years, I have been a guest lecturer for courses (some annually) at Massachusetts General Hospital, Boston University, Tufts University, Children's Hospital, and Cambridge Health Alliance on topics such as the neurobiology of ADHD, neuroimaging in ADHD, and the cerebellum's potential role in the pathophysiology of neuropsychiatric disorders. I have also disseminated my IPV findings to researchers as well as non-academic professionals interacting with such women (e.g., judges, social workers, police officers, attorneys). In the past, I have conducted clinical supervision of undergraduate students working with troubled adolescents, and currently conduct supervision of research assistants or interns, at the undergraduate, post-graduate, and postdoctoral levels. This includes training and supervision in tasks such as neuropsychological assessment, administration of structured clinical

interviews (e.g., Structured Clinical Interview for DSM) and all research (e.g., manuscript preparation) and administrative (e.g., IRB) aspects of conducting a study.

Supporting Activity: Education of Patients and Service to the Community

Though most of my time is devoted to ADHD research for which I am currently funded, over the past several years, I have worked to bring awareness and critical information regarding IPV-related TBI to the general public and to those who are most directly involved and affected. My work modifying police protocols, developing handouts, pamphlets and workshops, assisting with curriculum development and providing presentations to lay audiences has enabled me to disseminate this information effectively to police officers, neuropathologists, judges and others working directly with those affected by IPV-related TBI. I have also provided free consultation in two legal cases where IPV-related TBI was a factor.

Summary

Since becoming a post-doctoral fellow at Harvard Medical School, I have focused on using neuroimaging to increase our understanding of the neurobiology of both ADHD and IPV-related TBI in an effort to provide clinically relevant clues to increase treatment options. Through my lectures, consultations and outreach efforts to relevant academic and non-academic individuals, I have endeavored to increase general awareness of the neurobiology of ADHD as well as IPV-related TBI and its consequences.