

Curriculum Vitae

Date Prepared: July 1, 2017

Name: Diego A. Pizzagalli, Ph.D.

Office Address: McLean Hospital, de Marneffe Building, Room 233C, Mailstop 331,
115 Mill Street, Belmont, MA 02478-9106

Phone: (617) 855-4230 (Depression Center) **Fax:** (617) 855-4231
(617) 855-2797 (Neuroimaging Center)

Email: dap@mclean.harvard.edu

Place of Birth: Mendrisio, Switzerland

Education:

1995 M.S., Psychology, University of Zurich, Switzerland

1998 Ph.D., Psychology, University of Zurich, Switzerland

Postdoctoral Training:

1998-1999 Postdoctoral Research Fellow, KEY Institute for Brain-Mind Research, University Hospital of Psychiatry, Zurich, Switzerland (Dietrich Lehmann, MD)

1999-2000 Postdoctoral Research Fellow, Laboratory of Affective Neuroscience, Psychology Department, University of Wisconsin-Madison, WI, USA (Richard J. Davidson, Ph.D.)

2000-2002 Assistant Scientist, W.M. Keck Laboratory for Functional Brain Imaging and Behavior and Laboratory of Affective Neuroscience, Psychology Department, University of Wisconsin, WI, USA, Madison (Richard J. Davidson, Ph.D.)

2002 Associate Scientist, W.M. Keck Laboratory for Functional Brain Imaging and Behavior and Laboratory of Affective Neuroscience, Psychology Department, University of Wisconsin, WI, USA Madison (Richard J. Davidson, Ph.D.)

Faculty Academic Appointments:

2002-2006 Assistant Professor, Department of Psychology, Harvard University

2006-2010 John and Ruth Hazel Associate Professor of the Social Sciences, Department of Psychology, Harvard University

2010-2014 Associate Professor of Psychiatry, Department of Psychiatry, Harvard Medical School

2014 Visiting Associate Professor of Psychology, Faculty of Arts and Sciences, Harvard University

2014- Professor of Psychiatry, Department of Psychiatry, Harvard Medical School

Appointments at Hospitals/Affiliated Institutions:

1992-1994 Research Assistant, Institute for Biological Psychology, University of Zurich, Switzerland (Director: Norbert Bischof, Ph.D.)

1994-1997 Associate Research Specialist, EEG/EP-Mapping Laboratory, Department of Neurology, University Hospital, Zurich (Director: Dietrich Lehmann, MD)

1995-1997 Clinical and Research Specialist, Neuropsychological Unit, Department of Neurology,

University Hospital, Zurich (Director: Marianne Regard, Ph.D.)
 2009- Faculty Affiliate, Center for Brain Science, Harvard University, Cambridge, MA
 2010- Psychologist, McLean Hospital, Belmont, MA
 2011- Faculty Affiliate, Program in Neuroscience, Harvard Medical School, Boston, MA

Major Administrative Leadership Positions:

Local

2002-2010 Director, Affective Neuroscience Laboratory, Department of Psychology, Harvard University
 2010- Director, Center for Depression, Anxiety and Stress Research, McLean Hospital
 2010- Director, McLean Imaging Center, McLean Hospital
 2010- Director, Laboratory for Affective and Translational Neuroscience, McLean Hospital
 2015- Director of Research, Division of Depression and Anxiety, McLean Hospital

National

2011 Invited Moderator, National Institute of Mental Health (NIMH) Research Domain Criteria (RDoC) Project, “*Positive Valence Systems*” Workshop
 2012- National Institute of Mental Health (NIMH), National Advisory Mental Health Council, Workgroup on Targets and Compounds for FAST Clinical Trial Contracts
 2015 Planning Committee, Institute of Medicine, Forum on Neuroscience and Nervous System Disorders, *Enabling Drug Development, Discovery, and Translation for Cognitive Dysfunction in Depression* (Chairs: Thomas Insel and Thomas Laughren)
 2015 Organizer and Chair, *Beyond Monoamines: Towards New Conceptualizations and Treatments for Major Depression*, Radcliffe Institute for Advanced Study, Harvard University, August 20-21, 2015.
 2016 Panelist, Foundation for the National Institutes of Health, *Consensus Workshop on Standardization of Reward Processing Tasks*, Bethesda, Maryland, February 18-19, 2016.
 2016 Chair, Positive Valence Systems Subgroup, National Institute of Mental Health Council Workgroup, *Council Workgroup on Tasks and Measures for RDoC*, Bethesda, Maryland, April 5-6, 2016.
 2017 Invited Panelist, *Computational Psychiatry: Opportunities and Challenges for the Future*, NIMH Office of Director, Bethesda, MD, June 26-27, 2017.

Committee Service

Local

2002/2003, Co-chair for Organization of Departmental Colloquium, Department of Psychology,
 2003/2004 Harvard University
 2002/2003, Committee on Higher Degrees, Department of Psychology, Harvard University
 2006/2007,
 2008/2009
 2002/2003, Junior Faculty Search in Psychopathology, Department of Psychology, Harvard

2003/2004, 2005/2006 University

2003/2004, 2005/2006, 2006/2007 Chair, Research Seminar in Experimental Psychopathology/Clinical Psychology, Department of Psychology, Harvard University

2005/2006 Committee on Undergraduate Instruction, Department of Psychology, Harvard University

2006/2007 Curriculum Committee, Department of Psychology, Harvard University

2006-2007 William James Hall IT Consortium, Department of Psychology, Harvard University

2008-2009 Standing Committee on the Use of Human Subjects in Research, Harvard University

2008/2009 Co-chair, Research Seminar in Clinical Science, Department of Psychology, Harvard University

2007/2008 Senior Associate, Psychology of Conflict Research Group, International Negotiation Initiative, Harvard Law School (Director: Daniel Shapiro)

2010- Research Vision Committee, McLean Hospital

2010- Research Committee, McLean Hospital

2010- Center for Depression, Anxiety and Stress Speaker Series, McLean Hospital, Chair

2010- Neuroimaging Center Speaker Series, McLean Hospital, Chair

2010- McLean Fellowship Advisory Committee, McLean Hospital

2011- 9.4T Steering Committee, McLean Hospital

2011- Review Committee, McLean Research Day, McLean Hospital

2011- Committee on Academic Integrity, McLean Hospital

2011- Chair, Faculty Search, Center for Depression, Anxiety and Stress Research, McLean Hospital

2012- Letters of Evaluation for Academic Promotions: Harvard Medical School (MGH)

2012- Division Chief's Council, McLean Hospital

2012- Clinical Research Committee, McLean Hospital

2013- Neuroscience Seminar Series Committee, McLean Hospital

2013- EE Lab Steering Committee, McLean Hospital

2015- McLean Committee on Diversity and Inclusion

2015- Standing Committee on Promotions, Reappointments, and Appointments, Harvard Medical School

National

2010-2013 Research Domain Committee, National Network of Depression Centers

2011 Early Career Award (Psychopathology area) Committee, American Psychological Association

2012- Letters of Evaluation for Academic Promotions: Northwestern University, New York University, UCSD

2014 2014 NNDC Conference Program Committee, National Networks of Depression Center

2017- Scientific Advisor, American Foundation for Suicide Prevention

International

2015 Academic Advisory Committee, Wolfe Health Neuroscience Fellowship in the Neurobiology of Human Vulnerability and Resilience

2016 Else Kröner-Fresenius-Stiftung (Reviewer)

Professional Societies

2001- International Society for Brain Electromagnetic Topography (ISBET), Member

2003- Society for Psychophysiological Research, Member

2008-2011: Early Career Award Committee

2004- American Psychological Society, Member

2004- Society of Biological Psychiatry, Member

2013-present: Mentee/Mentor Program

2015-2017: Program Planning Committee

2004-2013 Society for Neuroscience, Member

2004- Society for Research in Psychopathology

2010-2014: Executive Board Member

2012: Early Career Award Committee

2016: Chair, Smadar Levin Award Committee

2006-2008 Emotion Research Group

2012- American College of Neuropsychopharmacology (ACNP)

2017-2019: Membership Committee

2013- Anxiety and Depression Association of America (ADAA)

2014-2017: Scientific Council

2015: Chair, Scientific Research Symposium, “*Neural Circuitry Mediating the Intersection and Divergence of Depression and Anxiety*”

2015-present: Mentee/Mentor Program

Grant Review Activities

2000 Reviewer, Wellcome Trust and the Higher Education Funding Council, England, Joint Infrastructure Fund

2001 Reviewer, National Science Foundation, USA

2003 Outside Reviewer, Intramural Program, National Institute of Mental Health

2004, 2005 Reviewer, *Building Translational Research in Behavioral Science (ZMHI-NRB-Q 07)*, National Institute of Mental Health (NIMH/NIH)

2006 Study Section Member, *NIH Adult Psychopathology and Disorders of Aging Study Section*, National Institute of Mental Health (NIMH/NIH)

2008 Reviewer, Society in Science (The Branco Weiss Fellowship), Swiss Federal Institute of Technology Zurich

2011 Reviewer, Special Emphasis Panel, Basic Research on Self-Regulation (R21), *Biobehavioral & Behavioral Processes IRG (ZRG1 BBBP-L(53))*, National Institute of

- Mental Health (NIMH/NIH)
- 2011 Reviewer, Integrated Discovery System Projects, Ontario Brain Institute (OBI),
2012 Toronto, Ontario, Canada.
- 2013 Reviewer, Harvard Catalyst Advanced Imaging Pilot Research Grants and Concept
Development Awards Program, Harvard Clinical and Translational Science Center,
Harvard University
- 2013 Reviewer, *NIH Director's Transformative Research Awards (R01)* (ZRG1-BCMB-A
51R), National Institute of Health (NIH)
- 2013 Reviewer, *Mechanistic Research on CAM Natural Products (R01)*, Center for
Complementary and Alternative Medicine (NCCAM/NIH)
- 2014 Co-Chair, *Advancing Eating Disorders Research through Dimensional Studies of
Biology and Behavior* (RFA-MH-14-030), National Institute of Mental Health
(NIMH/NIH)
- 2015 Reviewer, *Member-Conflict Applications MESH and CPDD*, ZRG1 BBBP-V (02)
- 2015 Reviewer, Dimensional Approaches to Research Classification in Psychiatric Disorders
(RDoC), ZMH1 ERB-S (03), National Institute of Mental Health (NIMH/NIH)
- 2015 Oscar Stern Award, University of Michigan Depression Center
- 2015 Reviewer, *Consortium on Biomarkers and Outcome Measures in Autism Spectrum
Disorder* (RFA-MH-15-800), National Institute of Mental Health (NIMH/NIH)
- 2016 Co-Chair, *Silvio O. Conte Centers for Basic or Translational Mental Health Research
(P50)*
- NIH Director's Early Independence Awards (DP5)* (Stage 1 Reviewer) (April and
December 2016)

Editorial Activities

- 2002, 2009 Outside Reviewer, Oxford University Press
- 2003 Outside Reviewer, MIT Press
- 2004 Outside reviewer, Allyn & Bacon [revision of Butcher/Mineka/Hooley,
Abnormal Psychology, 13th ed.]
- 2006-2011 Consulting Editor, *Emotion*
- 2007- Consulting Editor, *Cognitive, Affective and Behavioral Neuroscience*
- 2009- Advisory Board, *Swiss Journal of Psychology*
- 2010- Editorial Board, *CNS Spectrums*
- 2010-2015 Editorial Board, *Biology of Mood & Anxiety Disorders*
- 2012 Outside Reviewer, Gross, J.J. (Ed.) (2014). *Handbook of Emotion Regulation*
(2nd ed.). New York, NY: Guilford Press.
- 2012- Editorial Board, *Journal of Abnormal Psychology*
- 2012- Editorial Board, *Neuroscience and Biobehavioral Reviews*
- 2012- Editorial Board, *Depression and Anxiety*
- 2013- Editorial Board, *Neuropsychopharmacology*
- 2013- Editorial Board, *Psychological Medicine*
- 2013- Field Editor, *Harvard Review of Psychiatry*

- 2015 Editor, Special Issue “Psychobiology of the Intersection and Divergence of Depression and Anxiety”, *Depression and Anxiety*
- 2016- Editorial Board, *Biological Psychiatry*
- 2016- Editorial Board, *Computational Psychiatry*

Ad hoc Reviewer

<u>Total Numbers of Journals:</u>	N = 115
<u>Total Numbers of Reviews Performed since 1998:</u>	N = 553
<u>Average reviews/year over past 5 years:</u>	N = 57/year

Acta Psychiatrica Scandinavica; Acta Psychologica; Addiction; Aging and Mental Health; American Journal of Psychiatry; Archives of General Psychiatry; Assessment; Behavior Genetics; Behavior Therapy; Behavioral Neuroscience; Behaviour Research and Therapy; Behavioural Brain Research; Biological Psychiatry; Biological Psychiatry: Cognitive Neuroscience and Neuroimaging; Biological Psychology; Biology of Mood & Anxiety Disorders; Brain; Brain & Cognition; Brain Imaging and Behavior; British Journal of Psychiatry; Brain Research; Cerebral Cortex; Clinical Neurophysiology; Clinical Psychological Science; CNS Neuroscience & Therapeutics; CNS Spectrums; Cognitive, Affective, and Behavioral Neuroscience; Cognitive Brain Research; Cognitive Neurodynamics; Cognitive Neuropsychiatry; Cognitive Therapy and Research; Cognition & Emotion; Comprehensive Psychiatry; Computer Methods and Programs in Biomedicine; Current Psychiatry Reviews; Depression and Anxiety; Development and Psychopathology; Developmental Science; Emotion; Emotion Review; European Journal of Neuroscience; European Neuropsychopharmacology; European Psychiatry; Experimental Brain Research; Experimental & Clinical Psychopharmacology; Frontiers in Human Neuroscience; Frontiers in Language Sciences; Genes, Brain and Behavior; Harvard Review of Psychiatry; Human Brain Mapping; International Journal of Psychophysiology; JAMA Psychiatry; Journal of Abnormal Psychology; Journal of Addiction Medicine; Journal of Affective Disorders; Journal of Clinical Child and Adolescent Psychology; Journal of Child Psychology and Psychiatry; Journal of Clinical Psychiatry; Journal of Clinical Psychopharmacology; Journal of Cognitive Neuroscience; Journal of Consulting and Clinical Psychology; Journal of Experimental Psychology: General; Journal of Experimental Psychology: Learning, Memory, and Cognition; Journal of Behavior Therapy and Experimental Psychiatry; Journal of Neuroimaging; Journal of Neurophysiology; Journal of Neuroscience; Journal of Personality and Social Psychology; Journal of Psychopharmacology; Journal of Psychopathology and Behavioral Assessment; Journal of Psychiatric Research; Journal of Psychiatry and Neuroscience; Lancet Psychiatry; Molecular Psychiatry; Nature Neuroscience; Nature Reviews Neuroscience; Neurobiology of Disease; NeuroImage; Neuron; Neuropsychobiology; Neuropsychologia; Neuropsychology; Neuropharmacology; Neuropsychopharmacology; NeuroReport; Neuroscience; Neuroscience & Biobehavioral Reviews; Neuroscience Letters; Neuroscience Research; Personality & Individual Differences; Physiology & Behavior; PlosOne; Proceedings of the National Academy of Sciences; Psychiatry Research; Psychiatry Research: Neuroimaging; Psychological Medicine; Psychological Review; Psychological Science; Psychoneuroendocrinology; Psychopharmacology; Psychophysiology; Schizophrenia Research; Science; Scientific Reports; Social Cognitive and Affective Neuroscience; Stress and Health; Swiss Journal of Psychology; The FASEB Journal; The Pharmacogenomics Journal; The World Journal of Biological Psychiatry; Translational Psychiatry; Trends in Cognitive Sciences; Trends in Neurosciences

2014, 2015: Second Top Reviewer for *Neuropsychopharmacology*
 2014, 2016: Top 10 Reviewer for *Biological Psychiatry*
 2016: Top 10 Reviewer for *Biological Psychiatry: Cognitive Neuroscience and Neuroimaging*

Honors and Prizes

1988 Award from the Foundation “Swiss Youth and Science”, Section Mathematics/Informatics
 1999, 2000 Swiss National Science Foundation Fellowship
 2003 William F. Milton Fund Award, Harvard University
 2003, 2005, 2009 Clark Fund Award, Harvard University
 2004, 2006, 2007, 2008 Honorable Mention, Everett S. Mendelsohn Excellence in Mentoring Award, Graduate School Council, Harvard University
 2005, 2008 Talley Fund Award, Harvard University
 2006 Merck Awards for Genome-Related Research, Harvard University
 2006 Distinguished Scientific Award for an Early Career Contribution to Psychophysiology, Society for Psychophysiological Research
 2006, 2008 Harvard/Robert Wood Johnson Health and Society Scholars Grant
 2007 Hazel Chair
 2007 Early Career Award, The EEG & Clinical Neuroscience Society
 2008 Independent Investigator Award, NARSAD
 2011 William K. Warren Frontiers in Neuroscience Lecture, Laureate Institute for Brain Research, Tulsa, OK, USA
 2012 Full Member, American College of Neuropsychopharmacology (ACNP)
 2012 Kendon Smith Lecture Series, University of North Carolina at Greensboro, NC, USA
 2015 Anne M. Cataldo Excellence in Mentoring Award, McLean Hospital
 2016 Method to Extend Research in Time (MERIT) award, National Institute of Mental Health
 2017 The Stuart T. Hauser, M.D. PhD. Mentorship Award in Psychiatry, Harvard Medical School

Report of Funded and Unfunded Projects

Past

01/01/98 – 12/31/99 Research Grant, Institut für Grenzgebiete der Psychologie und Psychohygiene, Freiburg, Germany (grant #: 67 13 10; PI: Peter Brugger)
The Magical Brain: Neuronal Mechanisms Underlying Paranormal Belief
 Role: Co-PI
 Direct costs: \$199,955

01/01/99 – 12/31/99 81ZH-52864
 Swiss National Science Foundation Fellowship for Prospective Researchers
Investigations of Emotional Processing and Style: Electroencephalographic and Brain Imaging Studies

Role: PI
 Direct costs: \$35,000
 01/01/99 – 12/31/00 Research Grant, “Holderbank”-Stiftung zur Förderung der wissenschaftlichen Fortbildung
 Role: PI
 Direct costs: \$11,000
 01/01/02 – 12/31/02 81ZH-52864
 Competitive Renewal, Swiss National Science Foundation Fellowship for Prospective Researchers
Investigations of Emotional Processing and Style: Electroencephalographic and Brain Imaging Studies
 Role: PI
 Direct costs: \$38,000
 01/01/03 – 12/31/03 The Clark Fund, Harvard University
Functional Neuroimaging Studies of Depression
 Role: PI
 Direct costs: \$6,000
 01/01/03 – 12/31/04 William F. Milton Fund, Harvard University
Investigation of Affective Processing in Depression: Clues from Affective Neuroscience
 Role: PI
 Direct costs: \$34,943
 06/07/04 – 04/30/09 1R01MH068376-01A1 (priority score: 121, percentile: 0.7)
 National Institute of Mental Health/NIH
Neuroimaging Studies of Reward Processing in Depression
 Role: PI
 Direct costs: \$1,125,000
 12/01/04 – 11/30/05 GlaxoSmithKline
The Effects of Acute Administration of Bupropion on Neural Substrates Underlying Hedonic Capacity in Depression: A Placebo-controlled, Single-dose fMRI Study
 Role: PI
 Total costs: \$91,596
 07/01/05 – 06/30/08 Harvard University, Department of Psychology, Talley Fund
Childhood Sexual and Physical Abuse as Predictor of Depression and Reward Processing in Young Adulthood: A Neuroimaging Approach
 Role: PI
 Direct costs: \$225,875
 01/01/06 – 12/31/06 The Clark Fund, Harvard University
Behavioral and Electroencephalographic Predictors of Treatment Response in Depression
 Role: PI
 Direct costs: \$6,000

- 03/01/06 – 02/28/07 Merck Awards for Genome-Related Research, Harvard University
Neurobiological Substrates Underlying Genetic Vulnerability to Depression: A Multi-level Approach Integrating Molecular Genetics and Neuroimaging
Role: PI
Direct costs: \$20,000
- 06/01/06 – 12/31/06 GlaxoSmithKline
The Effects of Acute Administration of Bupropion on Neural Substrates Underlying Hedonic Capacity in Depression: A Placebo-controlled, Single-dose fMRI Study
Role: PI
Total costs: \$27,519
- 07/01/06 – 08/31/07 Robert Wood Johnson Health and Society Scholars Grant
Early Adverse Events and Depression: A Neuroimaging Study Assessing the Effects of Childhood Maltreatment on Reward Processing in Young Adulthood
Role: PI
Direct costs: \$29,874
- 07/01/06 – 06/30/08 1R21AT002974
National Center for Complementary & Alternative Medicine/NIH
The Effects of SAME on Reward Circuitry in Depression
Role: PI
Direct costs: \$250,000
- 09/01/06 – 08/31/07 Provost's Content Fund, #180 (with Craig Smith)
Provost's Instructional Technology Content Fund, Harvard University
Abnormal Online: A Multimedia Exploration of Psychopathology
Role: Co-PI
Direct costs: \$7,450
- 01/01/08 – 4/30/09 Robert Wood Johnson Health and Society Scholars Grant
Early Adverse Events and Depression: A Neuroimaging Study Assessing the Effects of Childhood Maltreatment on Reward Processing in Young Adulthood
Role: PI
Direct costs: \$10,000
- 09/01/08 – 08/31/09 Harvard University, Department of Psychology, Talley Fund
Childhood Sexual and Physical Abuse as Risk Factors for Depression: A Molecular Genetics Approach with a Focus on Anhedonia
Role: PI
Direct costs: \$100,000
- 01/01/09 – 12/31/09 The Clark Fund, Harvard University
Neural Mechanisms of Emotion Dysregulation in Depression
Role: Co-PI
Direct costs: \$6,000
- 09/23/09 – 06/30/09 ANT (Advanced NeuroTechnology) B.V., Enschede, Netherlands
Predicting Treatment Response in Depression
Role: PI

Direct costs: \$6,000

11/01/09 – 10/31/10 Harvard Catalyst Pilot Grant
Toward a Neurobiological Understanding of Anhedonia in Major Depression
Role: PI
Direct costs: \$49,976

06/01/08 – 03/31/11 1R21MH078979 (priority score: 115)
National Institute of Mental Health/NIH
Translational Measures of Anhedonia in Humans and Rats
Role: PI
Direct costs: \$275,000

09/15/08 – 09/14/11 NARSAD Independent Investigator Award
National Alliance for Research on Schizophrenia and Depression
The Effects of Acute Stress on the Neurobiology of Reward Processing in Major Depressive and Bipolar Disorders
Role: PI
Direct costs: \$100,000

07/01/11 – 06/30/12 1U01MH010040-01 Supplement (Trivedi)
National Institute of Mental Health/NIH
Establishing Moderators/Biosignatures of Antidepressant Response-Clinical Care (Supplement)
Role: Subcontract PI
Direct costs: \$26,530

07/01/10 – 06/28/15 7R01MH068376-07 (Pizzagalli) (priority score: 14)
National Institute of Mental Health/NIH
Neuroimaging Studies of Reward Processing in Depression
Role: PI
Direct costs: \$2,035,842

10/01/10 – 09/30/14 1U01MH010040-01 (Trivedi)
National Institute of Mental Health/NIH
Establishing Moderators/Biosignatures of Antidepressant Response-Clinical Care
Role: Subcontract PI
Direct costs: \$411,992

06/01/12 – 02/28/15 3R01MH068376-09S1 (Pizzagalli)
National Institute of Mental Health/NIH
Neuroimaging Studies of Reward Processing in Depression (Supplement)
Role: PI
Direct costs: \$83,126

07/01/15 – 06/30/16 1U01MH092221 (Trivedi)
National Institute of Mental Health/NIH
Establishing Moderators/Biosignatures of Antidepressant Response-Clinical Care
Role: PI

Direct costs: \$98,628

02/29/12 – 02/28/17 W81XWH-12-1-0109 (Rauch, Killgore, Pizzagalli)
USAMRAA
Internet Based Cognitive Behavioral Therapy Effects on Depressive Cognitions and Brain Function
Role: Co-PI
Direct costs: \$1,646,035

09/15/13 – 04/30/17 Contract HHSN271201100061 (Fava)
National Institute of Mental Health/NIH
Double-Blind, Placebo-Controlled, Proof-of Concept (POC) Trial of LY2456302, a Kappa-Selective Opioid Receptor Antagonist, Augmentation of Antidepressant Therapy in Treatment-Resistant Depression (TRD)
Role: Sub-contract PI
Direct costs: \$21,958 (McLean Hospital subcontract)

Current

09/18/12 – 05/31/17 1R01MH095809-01A1 (Pizzagalli) (priority score: 10)
National Institute of Mental Health/NIH
Early Life Stress and Depression: Molecular and Functional Imaging Approaches
Role: PI
Direct costs: \$1,636,789

04/01/13 – 03/30/18 1R01MH100350-01 (Normandin)
National Institute of Mental Health/NIH
Combined PET and fMRI Imaging of Dopamine and Serotonin Responses in Depression
Role: Sub-contract PI
Direct costs: \$107,771 (McLean Hospital subcontract)

09/01/13 – 08/31/18 1R01MH101521-01 (Pizzagalli) [NCE]
National Institute of Mental Health/NIH
Multi level Analysis of Positive Valence Systems Across Mood Disorders
Role: PI
Direct costs: \$1,589,524

08/01/13 – 07/31/17 1R01MH101521-01 (Schneier)
National Institute of Mental Health/NIH
Ventrostriatal Dopamine Release and Reward Motivation in MDD
Role: Sub-contract PI
Direct costs: \$178,740 (McLean Hospital subcontract)

07/01/14 – 03/31/19 1R01 DA036032-01 (Gilbert)
National Institute of Drug Abuse/NIH
Predictors of Light Smoker Trajectories
Role: Sub-contract PI
Direct costs: \$151,959 (McLean Hospital subcontract)

01/01/14 – 12/31/17 Clinical Neuroscience Research Grant Program (Pizzagalli, Auerbach)
Dana Foundation
Towards Identification of Neural Predictors of Adolescent Depression: A Multi-Modal Neuroimaging Study
Role: PI
Direct costs: \$299,427

09/01/14 – 08/31/17 Tommy Fuss Fund
Toward Identification of Genetic and Neural Predictors of Adolescent Depression
Role: Co-PI (with Randy Auerbach)
Direct costs: \$86,956

08/15/15 – 05/31/17 1R01MH095809-03S1 (Pizzagalli) Supplement
National Institute of Mental Health/NIH
Early Life Stress and Depression: Molecular and Functional Imaging Approaches
Role: PI
Direct costs: \$98,628

07/01/15 – 06/30/18 R21 MH105775-01 (Kumar) [NCE]
National Institute of Mental Health/NIH
Influence of GABA on Reinforcement Learning in Individuals with Current and Remitted Depression
Role: Co-investigator
Direct costs: \$275,000

09/18/15 – 06/30/20 1R01MH102279-01 (Cusin, Fava, Pizzagalli)
National Institute of Mental Health/NIH
Neurobiological Underpinnings of Placebo Response in Depression
Role: Multiple PI
Direct costs: \$751,405 (McLean Hospital subcontract)

04/01/16 – 03/31/21 1 U01 MH108168 (Gabrieli, Whitfield-Gabrieli)
National Institute of Mental Health/NIH
Connectomes Related to Human Disease (U01)
Role: Subcontract PI
Direct costs: \$354,184 (McLean Hospital subcontract)

12/01/15 – 11/30/20 R01 DK104772-01 (Holsen)
National Institute of Diabetes and Digestive and Kidney Diseases/NIH
Ghrelin Modulation of Mesolimbic Reward Signaling in Stress-induced Hyperphagia
Role: Subcontract PI
Direct costs: \$60,490 (McLean Hospital subcontract)

10/01/15 – 09/30/17 Tommy Fuss Fund
Identifying Neural Markers that Predict Depression in Adolescence
Role: Co-PI (with Randy Auerbach)
Direct costs: \$120,000

- 04/01/16 – 03/31/20 1UH2 MH109334-01 (Pizzagalli)
National Institute of Mental Health/NIH
Novel Cross-Species Neurophysiological Assays of Reward and Cognitive Domains
Role: PI
Direct costs: \$1,953,411
- 04/28/16 – 02/28/21 2R01MH068376-12 (Pizzagalli) [recoded as MERIT award, 2R37MH068376]
National Institute of Mental Health/NIH
Neuroimaging Studies of Reward Processing in Depression
Role: PI
Direct costs: \$2,497,470
- 08/10/16 – 04/30/21 5R01MH108602-01 (Pizzagalli, Goldstein)
National Institute of Mental Health/NIH
Sex specific GABA Stress Circuitry and Hedonic Deficits in Depression
Role: Multiple PI
Direct costs: \$2,701,504
- 01/01/17 – 12/31/17 Richard Saltonstall Charitable Foundation (Pizzagalli, Whitton)
Using Reward-Based Biomarkers to Detect Genetic Risk for Bipolar Disorder
Role: Co-PI
Direct costs: \$50,000

Awards/Grants to Mentees

Past (as primary mentor)

- 09/01/06 – 09/1/07 1 F31 MH074246 (Christen M. Deveney)
National Institute of Mental Health/NIH
An ERP Analysis of Cognition After Emotion Regulation
Role: Primary Mentor (pre-doctoral fellowship)
Direct costs: \$27,124
- 04/01/07 – 06/30/08 1 F31 MH078346 (Avram J. Holmes)
National Institute of Mental Health/NIH
Action Monitoring in Depression: ERP and fMRI Correlates
Role: Primary Mentor (pre-doctoral fellowship)
Direct costs: \$35,173
- 12/01/08 – 08/31/10 1 F32 MH081394 (Daniel G. Dillon)
National Institute of Mental Health/NIH
Emotion Regulation in Depression: Neural Bases of Reappraisal
Role: Primary Mentor (post-doctoral fellowship)
Direct costs: \$88,361
- 01/01/10 – 12/31/11 NARSAD Young Investigator Award (Daniel G. Dillon)
National Alliance for Research on Schizophrenia and Depression
Toward a Functional Dissection of Anhedonia in Major Depression: Dissociating Decision-making Deficits from Reward Insensitivity
Role: Primary Mentor

Direct costs: \$59,530

07/01/11 – 06/30/12 The Adam Corneel Young Investigator Award (Randy P. Auerbach)
 McLean Hospital/Harvard Medical School
Project ADAPT: Examining the Efficacy of an Investigatory Group Treatment for Adolescent Depression
 Role: Primary Mentor
 Total costs: \$20,000

02/1/12 – 01/31/13 The O’Keefe Family Junior Investigator Award For Excellence In Imaging
 Research (Pechtel)
 McLean Imaging Center, McLean Hospital
Neural Substrates of Emotion Dysregulation and High-Risk Behavior in Adolescents with a History of Childhood Sexual Abuse
 Role: Primary Mentor
 Direct costs: \$7,900

07/01/12 – 06/30/13 Kaplen Fellowship on Depression (Auerbach)
 Department of Psychiatry, Harvard Medical School
The Neural Underpinnings Associated with Reward Dysfunction in Adolescent Depression
 Role: Primary Mentor
 Direct costs: \$72,414

07/01/12 – 06/30/13 Livingston Fellowship Award (Kumar)
 Department of Psychiatry, Harvard Medical School
Social Reinforcement Learning and Depression: An fMRI Study
 Role: Primary Mentor
 Direct costs: \$5,000

07/01/12 – 06/30/13 The Adam Corneel Young Investigator Award (Treadway)
 McLean Hospital/Harvard Medical School
Neuroinflammatory Mechanisms of Stress-induced Anhedonia
 Role: Primary Mentor
 Direct costs: \$19,188

04/1/12 – 03/31/14 K99MH094438 (Dillon)
 National Institute of Mental Health/NIH
Neuroscience of Reward-related Learning and Memory in Depression
 Role: Primary Mentor
 Direct costs: \$691,049 (K phase: \$167,964)

01/15/13 – 01/14/15 Brain & Behavior Research Foundation (formerly NARSAD) Young
 Investigator Award (Kumar)
Neurobiology of Reward and Punishment Learning in Major Depressive Disorder
 Role: Primary Mentor
 Direct costs: \$59,977

01/15/13 – 01/14/15 Brain & Behavior Research Foundation (formerly NARSAD) Young
 Investigator Award (Pechtel)

Depression and Reward Responsiveness in Adolescents with a History of Childhood Sexual Abuse

Role: Primary Mentor

Direct costs: \$59,977

- 01/15/13 – 01/14/15 Brain & Behavior Research Foundation (formerly NARSAD) Young Investigator Award (Reich)
Neuroimaging of Affective Instability in BPD/BP II
Role: Primary Mentor
Direct costs: \$59,952
- 01/15/13 – 01/14/16 F32 MH099801-01 (NRSA) (Webb)
National Institute of Mental Health/NIH
Investigating Neural and Psychotherapeutic Mediators of Placebo Response in MDD
Role: Primary Mentor
Direct costs: \$150,407
- 07/01/13 – 06/30/15 Klingenstein Third Generation Fellowship Award in Depression (Auerbach)
Predicting Adolescent Major Depressive Disorder: A Multimodal Brain Imaging Approach
Role: Primary Mentor
Direct costs: \$60,000
- 12/26/13 – 11/30/15 1K99MH102355-01 (Treadway)
National Institute of Mental Health/NIH
Stress and MDD Effects on mPFC Glutamate and GABA During Reward Processing
Role: Primary Mentor
Direct costs: \$708,000
- 01/15/14 – 01/14/16 Brain & Behavior Research Foundation (formerly NARSAD) Young Investigator Award (Admon)
Neural Networks Mediating Acute and Sustained Positive Mood Deficits in Depression
Role: Primary Mentor
Direct costs: \$59,991
- 01/15/14 – 01/14/16 Brain & Behavior Research Foundation (formerly NARSAD) Young Investigator Award (Treadway)
Assessment of Neuroinflammation and Reward Processing Dysfunction in Depression with Simultaneous PET and fMRI
Role: Primary Mentor
Direct costs: \$59,402
- 07/1/14 – 06/30/15 Andrew P. Merrill Memorial Research Fellow Award (Whitton)
McLean Hospital/Harvard Medical School
Neural Processes Underpinning Differences in Sensitivity to Temporal Variation in Reward: Moving Towards a Biomarker of Impulsivity that May Distinguish Bipolar from Unipolar Depression

- Role: Primary Mentor
Direct costs: \$15,217
- 07/01/14 – 06/30/15 The Phyllis and Jerome Lyle Rappaport Mental Health Research Fellowship (Kaiser)
McLean Hospital/Harvard Medical School
Neural Network Dysfunction in Teen Depression: Temporal Dynamics and Behavioral Correlates
Role: Primary Mentor
Direct costs: \$25,379
- 07/01/14 – 06/30/15 Sir Keith Murdoch Fellowship (Whitton)
American Australian Association
Neurobiological Predictors of (Hypo)mania in Individuals Seeking Treatment for Depression
Role: Primary Mentor
Direct costs: \$32,000
- 07/01/15 – 06/30/16 Kaplen Fellowship on Depression (McGrath)
Department of Psychiatry, Harvard Medical School
Brain Correlates of Abnormal Approach-Avoidance Behaviors in Major Depression
Role: Primary Mentor
Direct costs: \$71,000
- 07/01/15 – 06/30/16 Livingston Fellowship Award (McGrath)
Department of Psychiatry, Harvard Medical School
Brain Correlates of Abnormal Approach-Avoidance Behaviors in Major Depression
Role: Primary Mentor
Direct costs: \$5,500
- 03/01/15 – 11/23/16 1F32MH106262 (Kaiser)
National Institute of Mental Health/NIH
Temporal Dynamics of Neural Network Dysfunction in Depression
Role: Primary Mentor
Direct costs: \$178,603
- 07/01/15 – 06/30/16 The Adam Corneel Young Investigator Award (Webb)
McLean Hospital/Harvard Medical School
Predicting Future Depressive Symptoms in Adolescents: A Multi-Modal Approach
Role: Primary Mentor
Direct costs: \$19,184
- 07/01/15 – 06/30/16 Eleanor & Miles Shore HMS Fellowship (Kumar)
McLean Hospital/Harvard Medical School
The Relationship between Reinforcement Learning Abnormalities and the Emergence of Depressive Symptomology
Role: Primary Mentor

Direct costs: \$26,087

04/01/13 – 03/30/17 1 K23 MH097786-01A1 (Auerbach)
National Institute of Mental Health/NIH
Examination of Reward Processing in the Treatment of Adolescent Major Depression
Role: Primary Mentor
Direct costs: \$791,450

Current (as primary mentor)

07/01/15 – 06/30/17 Klingenstein Third Generation Fellowship Award in Depression (Webb)
Towards Reward-Related Biomarkers of Adolescent Depression Vulnerability
Role: Primary Mentor
Direct costs: \$60,000

01/15/16 – 01/14/18 Brain & Behavior Research Foundation (formerly NARSAD) Young Investigator Award (Kumar)
Influence of GABA on reinforcement learning in individuals with major depression
Role: Primary Mentor
Direct costs: \$69,990

01/15/16 – 01/14/18 Brain & Behavior Research Foundation (formerly NARSAD) Young Investigator Award (Webb)
Predicting Future Depressive Symptoms in Adolescents: A Multi-Modal Approach
Role: Primary Mentor
Direct costs: \$70,000

01/15/16 – 01/14/18 Brain & Behavior Research Foundation (formerly NARSAD) Young Investigator Award (Whitton)
Examining the Relationship Between Resting Glutamate, Corticostriatal Connectivity and Delay Discounting: Identifying Potential Predictors of (Hypo)mania in Depressive Disorders
Role: Primary Mentor
Direct costs: \$69,894

09/25/15 – 08/31/19 1K23MH108752 (Webb)
National Institute of Mental Health/NIH
Examining Reward-Related Predictors and Mechanisms of Change in BA Treatment for Anhedonic Adolescents
Role: Primary Mentor
Direct costs: \$591,471

01/01/16 – 12/31/17 NHMRC CJ Martin Early Career Biomedical Fellowship (Whitton)
National Health and Medical Research Council
Using Reward-based Biomarkers to Improve the Early Detection of Bipolar Disorder in Individuals Seeking Treatment for Depression
Role: Primary Mentor
Direct costs: \$258,040

- 01/01/16 – 12/31/17 R.G. Menzies Award (Whitton)
National Health and Medical Research Council
Using Reward-based Biomarkers to Improve the Early Detection of Bipolar Disorder in Individuals Seeking Treatment for Depression
Role: Primary Mentor
Direct costs: \$63,409
- 01/15/17 – 01/14/19 Brain & Behavior Research Foundation (formerly NARSAD) Young Investigator Award (Kaiser)
Neurocognitive Phenotyping of Mood Disorders
Role: Primary Mentor
Direct costs: \$69,394 [transferred to UCLA]
- 07/01/17 – 06/30/19 Kaplen Fellowship on Depression (Belleau)
Department of Psychiatry, Harvard Medical School
Bouncing back from stress in adolescent depression: Investigating aberrant resting state connectivity in the aftermath of stress
Role: Primary Mentor
Direct costs: \$73,670
- 07/01/17 – 06/30/19 Livingston Fellowship Award (Belleau)
Department of Psychiatry, Harvard Medical School
Bouncing back from stress in adolescent depression: Investigating aberrant resting state connectivity in the aftermath of stress
Role: Primary Mentor
Direct costs: \$4,800
- 07/01/17 – 06/30/18 The Adam Corneel Young Investigator Award (Belleau)
McLean Hospital/Harvard Medical School
Recovery from stress in adolescent depression: Investigating abnormal stress-related resting state connectivity changes
Role: Primary Mentor
Total costs: \$20,000

Report of Local Teaching and Training

Teaching of Students in Courses

University of Zurich, Switzerland

- 1996 – 1998 Lecturer on Electrophysiology, University Hospital of Psychiatry, Zurich
1990 – 1993 Teaching Assistant in Neurophysiology, M.-C. Hepp-Reymond, Ph.D., Brain Research Institute, University of Zurich

Harvard University

Year	Course Title	Location/Enrollment
2002-2003	Psych 2450. <i>Affective and Social Neuroscience</i> Graduate Seminar (n = 8)	Harvard University 2-hr sessions/wk, 12 wks
	Psych 1808. <i>Neurobiological Aspects of Psychopathology</i> Undergraduate Lecture Course (n = 8)	Harvard University Two 1.5-hr sessions/wk, 12 wks

2003-2004	Psych 2450. <i>Affective and Social Neuroscience</i> Graduate Seminar (n = 8)	Harvard University 2-hr sessions/wk, 12 wks
	Psych 1808. <i>Neurobiological Aspects of Psychopathology</i> Undergraduate Lecture Course (n = 12)	Harvard University Two 1.5-hr sessions/wk, 12 wks
	Psych 1855. <i>Mood Disorders</i> Upper Undergraduate Seminar (n = 6)	Harvard University 2-hr sessions/wk, 12 wks
	Psych 3200. <i>Research Seminar in Experimental Psychopathology/Clinical Psychology</i> (n = 10)	Harvard University 1-hr sessions/wk, 24 wks
2005-2006	Psych 18. <i>Abnormal Psychology</i> Undergraduate Lecture Course (n = 88)	Harvard University Two 1.5-hr sessions/wk, 12 wks
	Psych 1855. <i>Mood Disorders</i> Upper Undergraduate Seminar (n = 8)	Harvard University 2-hr sessions/wk, 12 wks
	Psych 2450. <i>Affective and Social Neuroscience</i> Graduate Seminar (n = 8)	Harvard University 2-hr sessions/wk, 12 wks
	Psych 3200. <i>Research Seminar in Experimental Psychopathology/Clinical Psychology</i> (n = 8)	Harvard University 1-hr sessions/wk, 24 wks
2006-2007	Psych 18. <i>Abnormal Psychology</i> Undergraduate Lecture Course (n = 54)	Harvard University Two 1.5-hr sessions/wk, 12 wks
	Psych 1855. <i>Mood Disorders</i> Upper Undergraduate Seminar (n = 13)	Harvard University 2-hr sessions/wk, 12 wks
	Psych 2450. <i>Affective and Social Neuroscience</i> Graduate Seminar (n = 3)	Harvard University 2-hr sessions/wk, 12 wks
	Psych 3200. <i>Research Seminar in Experimental Psychopathology/Clinical Psychology</i> (n = 8)	Harvard University 1-hr sessions/wk, 24 wks
	Psych 2851r. <i>Affective Neuroscience: Research Seminar</i> Undergraduate Lab Course (= 4)	Harvard University 1-hr sessions/wk, 12 wks
2008-2009	Psych 1808. <i>Neurobiological Aspects of Psychopathology</i> Undergraduate Lecture Course (n = 18)	Harvard University Two 1.5-hr sessions/wk, 12 wks
	Psych 2441. <i>Clinical Neuroscience</i> Upper-level Undergraduate Seminar (n = 18)	Harvard University 2-hr sessions/wk, 13 wks
	Psych 2851r. <i>Affective Neuroscience: Research Seminar</i> Undergraduate Lab Course (Fall: n = 5, Spring: n = 4)	Harvard University 1-hr sessions/wk, 13 wks
	Psych 3200. <i>Research Seminar in Experimental Psychopathology/Clinical Psychology</i> (n = 11)	Harvard University 1-hr sessions/wk, 24 wks
2009-2010	Psych 2441. <i>Clinical Neuroscience</i> Upper-level Undergraduate Seminar (n = 8)	Harvard University 2-hr sessions/wk, 13 wks
	Psych 2851r. <i>Affective Neuroscience: Research Seminar</i> Undergraduate Lab Course (Fall: n = 6, Spring: n = 3)	Harvard University 1-hr sessions/wk, 13 wks
	Psych 1855. <i>Mood Disorders</i> Upper Undergraduate Seminar (n = 17)	Harvard University 2-hr sessions/wk, 13 wks
2013-2014	Psych 18. <i>Abnormal Psychology</i> Undergraduate Lecture Course (n = 107)	Harvard University Two 1.5-hr sessions/wk, 12 wks
2016-2017	Psych 18. <i>Abnormal Psychology</i> Undergraduate Lecture Course (n = 96)	Harvard University Two 1.5-hr sessions/wk, 12 wks

Harvard University Extension School

2003-2004	Psyc E-2450: <i>Affective and Social Neuroscience</i> Master of Liberal Arts Degree Candidates (n = 15)	Harvard Extension School 2-hr sessions/wk, 15 wks
	Psyc E-1855: <i>Mood Disorders</i> Master of Liberal Arts Degree Candidates (n = 15)	Harvard Extension School 2-hr sessions/wk, 15 wks
2005-2006	Psyc E-2450: <i>Affective and Social Neuroscience</i> Master of Liberal Arts Degree Candidates (n = 15)	Harvard Extension School 2-hr sessions/wk, 15 wks
2006-2007	Psyc E-1855: <i>Mood Disorders</i> Master of Liberal Arts Degree Candidates (n = 15)	Harvard Extension School 2-hr sessions/wk, 15 wks
2008-2009	Psyc E-2441: <i>Clinical Neuroscience</i> Master of Liberal Arts Degree Candidates (n = 15)	Harvard Extension School 2-hr sessions/wk, 15 wks

2009-2010	Psyc E-2441: <i>Clinical Neuroscience</i> Master of Liberal Arts Degree Candidates (n = 14)	Harvard Extension School 2-hr sessions/wk, 15 wks
	Psyc E-1855: <i>Mood Disorders</i> Master of Liberal Arts Degree Candidates (n = 6)	Harvard Extension School 2-hr sessions/wk, 15 wks

Harvard Medical School

2010	Clinical Investigator Training Program (CITP), Beth Israel Deaconess Medical Center, Boston Junior faculty at HMS & affiliated hospitals (n = 15)	Harvard Medical School Lecture on the <i>Neuroscience of Depression</i>
2013	Harvard Clinical and Translational Science Center, “Imaging in Neuroscience” course Junior faculty at HMS & affiliated hospitals (n = 105)	Harvard Medical School Lecture on the <i>Use of PET Imaging in Psychiatry</i>

Laboratory and Other Research Supervisory and Training Responsibilities

Harvard University

Years	Type of Responsibility/Location	Level of Effort
2002-2010	Supervision of 5 post-doctoral research fellows, 6 graduate students, and 10 research assistants in affective, cognitive and clinical neuroscience, functional neuroimaging, high-density electrophysiology, clinical psychology and experimental psychopathology, Department of Psychology, Harvard University	Daily mentorship
2002-2012	Dissertation Committee Member for 13 Graduate Students, Department of Psychology, Harvard University 2002/2003: <i>Zachariah Jonasson, Kristin Vickers</i> 2005/2006: <i>Alison Harris, Pearl Chiu, Avgusta Shestyuk</i> 2007/2008: <i>Sadia Najmi, Christen Deveney (*), Laura Phillips</i> 2008/2009: <i>Avram Holmes (*)</i> 2009/2010: <i>Ryan Bogdan (*), Hannah Reese</i> 2010/2011: <i>Jason Angel</i> 2011/2012: <i>Lisa Berghorst (*)</i> (*) Primary Mentor	4 hours per week for 6 weeks
2002-2010	Reader for 4 Master-level Students, Harvard University 2002/2003: <i>Christen Deveney</i> , Psychology Department	6 hours per week for 2

	2002/2003: <i>Avniel Ghuman</i> , Biophysics Department 2005/2006: <i>Hannah Reese</i> , Psychology Department 2008/2009: <i>Amitai Shenhav</i> , Psychology Department	weeks
2002-2010	Primary Advisor for 7 Undergraduate Honors Theses, Department of Psychology, Harvard University 2004/2005: <i>Erika Cowman</i> (*) (Recipient of Psychology Faculty Prize award for “Senior honors thesis of outstanding quality”) 2006/2007: <i>Tiffany Meites</i> (*), <i>Petra Pajtas</i> (*), <i>Patricia Pringle</i> (*), <i>Katherine Steele</i> (*) 2008/2009: <i>Yuliya Nikolova</i> (*) (Recipient of 2009 Thomas Temple Hoopes Prize for Excellence In The Work of Undergraduates) 2010/2011: <i>Samantha Connolly</i> (*) (*) Recipient of Harvard College Research Program Award	3 hours per week
2002-2006	Thesis Reader, Undergraduate Honors Theses, Department of Psychology, Harvard University 2002/2003: <i>Emily Adkins</i> 2003/2004: <i>Kristy Benoit</i> , <i>Caitlin Ferriter</i> , <i>Chetan Irwin</i> , <i>David Stahl</i> 2005/2006: <i>Shana Franklin</i> , <i>Arin Keyser</i> , <i>Kim Emiko Ono</i> , <i>Matthew Wallenstein</i>	6 hours per week for 2 weeks
2002-2010	Supervision for 20 students enrolled in Undergraduate Supervised Research (910r), Department of Psychology, Harvard University (8 recipients of Harvard College Research Program Award; 2 recipients of Mind-Brain-Behavior Research Award)	1 hour per week

Harvard Medical School

2010-	<i>Randy Auerbach, Ph.D.</i> , Assistant Professor, McLean Hospital/HMS Primary Mentor, NIMH K23; HMS Kaplen Fellowship on Depression; Klingenstein Third Generation Fellowship Award in Depression	3 hours per week
2011-	<i>Poornima Kumar, Ph.D.</i> , Instructor of Psychiatry, McLean Hospital/HMS Primary Mentor, NARSAD Young Investigator Award (2x); HMS Livingston Fellowship Award; HMS Eleanor & Miles Shore	2 hours per week
2011-	<i>Amy Janes, Ph.D.</i> , Assistant Professor, HMS Psychiatry, McLean Hospital NIDA K01 Consultant	1 hour per week
2013-	<i>Bradford Reich, M.D.</i> , Assistant Clinical Professor, McLean Hospital/HMS Primary Mentor, NARSAD Young Investigator Award	2 hours per month
2013-	<i>Christian Webb, Ph.D.</i> , Instructor of Psychiatry, McLean Hospital/HMS Primary Mentor, NIMH Post-doctoral NRSA; NIMH K23; Klingenstein Third Generation Fellowship Award in Depression; The Adam Corneel Young Investigator Award, McLean Hospital; NARSAD Young Investigator Award	2 hours per week
2013-	<i>Alexis Whitton, Ph.D.</i> , Instructor of Psychiatry, McLean Hospital/HMS Primary Mentor, Andrew P. Merrill Memorial Research Fellow Award, McLean Hospital; Sir Keith Murdoch Fellowship, American Australian Association; NARSAD Young Investigator Award; CJ Martin Early Career Biomedical Fellowship, National Health and Medical Research Council	2 hours per week
2014-	<i>Callie McGrath, Ph.D.</i> , Post-doctoral Fellow, McLean Hospital	2 hours per

	Primary Mentor, Kaplen Fellowship on Depression; HMS Livingston Fellowship Award	week
2015-	<i>Jennifer Gatchel, M.D., Ph.D.</i> , Instructor of Psychiatry, McLean Hospital/HMS, Co- Mentor, Andrew P. Merrill Memorial Research Fellowship (with Dr. Brent Forester)	1 hour per month
2015-	<i>David Sturman, M.D., Ph.D.</i> , Psychiatry Resident, MGH/McLean Hospital Primary Mentor	1 hour per month
2016-	<i>Emily Belleau, Ph.D.</i> , Post-doctoral Fellow, McLean Hospital Primary Mentor	2 hours per week
2016-	<i>Maria Ironside, Ph.D.</i> , Post-doctoral Fellow, McLean Hospital Primary Mentor	2 hours per week
2016-	<i>Stefanie Nickels, Ph.D.</i> , Post-doctoral Fellow, McLean Hospital Primary Mentor	2 hours per week
2013-	Primary Mentor, Undergraduate Honors Theses, Department of Neurobiology or Department of Psychology, Harvard University <i>Pragya Kakani</i> (Recipient of 2014 Thomas Temple Hoopes Prize for Excellence In The Work of Undergraduates; Recipient of John E. Dowling Award for the Best Undergraduate Neurobiology Thesis in the Class of 2014) <i>Stephanie Deccy</i> (2014 – present) <i>Kevin Einkauf</i> (2015 – 2016) [Recipient of Harvard College Program for Research in Science and Engineering (PRISE), Harvard College Research Program (HCRP)] <i>Melissa Yuan</i> (2014 – 2016) <i>Isobel Green</i> (2015 – present) [Recipient of Harvard College Program for Research in Science and Engineering (PRISE), Harvard College Research Program (HCRP)]	1 hours per week

2004, 2006, 2007, 2008: Nominated for Everett S. Mendelsohn Excellence in Mentoring Award, Graduate Student Council, Harvard University (Honorable Mention)

Formally Supervised Trainees

Year	Name and degrees / Current position / Specific Accomplishments of Trainee
<i>A. Post-doctoral Fellow/Faculty, McLean Hospital/Harvard Medical School</i>	
2006-2014	<i>Daniel G. Dillon, Ph.D.</i> Assistant Professor of Psychiatry, McLean Hospital & Harvard Medical School 19 peer-reviewed manuscripts, 3 book chapters, >17 abstract/conference presentations Awards: NIMH Post-doctoral NRSA; NARSAD Young Investigator Award; NIMH K99
2009-2013	<i>Pia Pechtel, Ph.D.</i> Clinical Re-Specialization, University of Exeter, Exeter, UK 9 peer-reviewed manuscripts, 10 abstract/conference presentations Awards: Postdoctoral Fellowship, German Research Foundation; NARSAD Young Investigator Award; The O’Keefe Family Junior Investigator Award For Excellence In Imaging Research
2011-2015	<i>Michael Treadway, Ph.D.</i> Assistant Professor, Department of Psychology, Emory University

	4 peer-reviewed manuscripts, 1 book chapter, 4 abstract/conference presentations Awards: NIMH K99; The Adam Corneel Young Investigator Award; NARSAD Young Investigator Award
2012-2016	<i>Roe Admon, Ph.D.</i> , Senior Lecturer, Department of Psychology, Haifa University 5 peer-reviewed manuscripts, 15 abstract/conference presentations Awards: NARSAD Young Investigator Award, The Adam Corneel Young Investigator Award, McLean Hospital
2013-2016	<i>Roselinde Kaiser, Ph.D.</i> Assistant Professor, Department of Psychology, UCLA 3 peer-reviewed publications, 8 abstract/conference presentations Awards: NIMH Post-doctoral NRSA, The Phyllis and Jerome Lyle Rappaport Mental Health Research Fellowship, McLean Hospital
<i>B. Post-doctoral Fellow, Primary Advisor, Department of Psychology, Harvard University</i>	
2006-2008	<i>Diane L. Santesso, Ph.D.</i> Research Assistant Professor, University of Waterloo, Waterloo, Ontario 8 peer-reviewed manuscripts, 6 abstract/conference presentations Awards: Postdoctoral Fellowship Award, Natural Sciences and Engineering Research Council of Canada
2009	<i>Marie-Anne Vanderhasselt, Ph.D.</i> Post-doctoral research fellow, Department of Psychology, Ghent University 1 peer-reviewed manuscript Awards: National Science Foundation, Flanders/Belgium
<i>C. Graduate Student, Primary Advisor, Department of Psychology, Harvard University</i>	
2003-2009	<i>Avram J. Holmes, Ph.D.</i> Assistant Professor, Department of Psychology, Yale University 16 peer-reviewed manuscripts, 1 book chapter, 22 abstract/conference presentations Awards: Pre-doctoral NRSA recipient
2003-2010	<i>Ryan Bogdan, Ph.D.</i> Assistant Professor, Department of Psychology, Washington University in St. Louis 15 peer-reviewed manuscripts, 1 book chapter, 23 abstract/conference presentations Association for Psychological Science, Rising Stars in Psychological Science Award
2004-2006	<i>Pearl H. Chiu, Ph.D.</i> (with Dr. Patricia Deldin) Assistant Professor, Virginia Tech Carilion School of Medicine and Research Institute 1 peer-reviewed manuscript, 1 abstract/conference presentation
2004-2008	<i>Christen M. Deveney, Ph.D.</i> (with Dr. Patricia Deldin) Assistant Professor, Department of Psychology, Wellesley College 5 peer-reviewed manuscripts, 6 abstract/conference presentations Awards: Pre-doctoral NRSA recipient
2006-2012	<i>Lisa H. Berghorst, Ph.D.</i> Psychology Associate, Alvord, Baker, & Associates, LLC, Rockville, MD 3 peer-reviewed manuscript, 1 chapter, 12 abstract/conference presentation
2008-2011	<i>Alexander J. Millner, Ph.D.</i> Post-doctoral Fellow, Department of Psychology, Harvard University 1 peer-reviewed manuscript, 2 abstract/conference presentation

Formal Teaching of Peers

- 2012 *Depression, Anxiety and Stress*, CME Conference, Harvard Medical School, Department of Continuing Education, September 7-8, 2012, Boston, Massachusetts (Course Directors: Scott L. Rauch, Diego A. Pizzagalli, Shelly F. Greenfield, Christopher M. Palmer)
- 2014 *Depression, Anxiety and Stress*, CME Conference, Harvard Medical School, Department of Continuing Education, September 5-6, 2014, Boston, Massachusetts (Course Directors: Scott L. Rauch, Diego A. Pizzagalli, Christopher M. Palmer)

Invited Presentations and Courses

Local Invited Presentations

No presentations below were sponsored by outside entities

- 1999 Invited lecturer, “Psychometric Methods”, University of Wisconsin-Madison, March, 1999, Madison, WI, USA
- 2002 Grand Rounds, Department of Psychiatry, Massachusetts General Hospital, September 2002, Boston, MA, USA
- 2002 Invited speaker, Social and Affective Neuroscience Series, Department of Psychology, Harvard University, November, 2002, Cambridge, MA, USA
- 2004 Grand Rounds, Harvard Medical School Division on Addictions Roundtable, January, 2004, Cambridge, MA, USA
- 2007 Invited speaker, “Depression: Clues from Affective Neuroscience”, Robert Wood Johnson Healthy & Society Seminar, Harvard School of Public Health, May 10, 2007, Boston, MA, USA
- 2008 Invited talk, “Neuroimaging Studies of Reward Processing in Major Depression”, Depression Clinical Research Program, Massachusetts General Hospital, July 9, 2008, Boston, MA, USA
- 2009 Invited speaker, Robert Wood Johnson Health & Society Seminar, Harvard School of Public Health, March 5, 2009, Boston, MA, USA
- 2009 Invited speaker, Children’s Hospital Boston, Division of Developmental Medicine, March 12, 2009, Boston, MA, USA
- 2010 Invited Speaker, Research Speaker Series, Neuroimaging Center, McLean Hospital, Belmont, MA, USA, September 13, 2010
- 2010 Invited Speaker, Clinical Investigator Training Program (CITP), Beth Israel Deaconess Medical Center, Boston, MA, USA, October 12, 2010
- 2010 Invited Speaker, Brain Mapping Seminar, Athinoula A. Martinos Center for Biomedical Imaging, Massachusetts General Hospital, Boston, MA, USA, October 20, 2010
- 2010 Grand Rounds, McLean Hospital, Belmont, MA, USA, November 4, 2010
- 2011 Psychiatric Genetics and Translational Research Seminar, Center for Human Genetic Research, Massachusetts General Hospital. Boston, MA, USA, December 13, 2011
- 2012 Grand Rounds, Massachusetts General Hospital, Department of Psychiatry, Boston, MA, USA, March 15, 2012
- 2012 Faculty, The 4th Annual Massachusetts General Hospital Colloquium On Depression: The Core Role of Fatigue in Depressive Disorders and the Use of Biomarkers for Personalized Treatment, Boston MA, June 2, 2012. (Topic: Apathy and Anhedonia in Depression).

- 2012 *Depression, Anxiety and Stress*, Harvard Medical School, Department of Continuing Education, September 7-8, 2012, Boston, Massachusetts (Topic: “New Horizons: Research Endeavors”)
- 2013 MGH Psychiatry Academy Virtual Grand Rounds Series, Boston MA, USA, May 1, 2013.
- 2014 Invited Speaker, Nuclear Medicine and Molecular Imaging (NMMI) Speaker Series, Massachusetts General Hospital, Boston, MA, USA, March 14, 2014.
- 2014 *Depression, Anxiety and Stress*, CME Conference, Harvard Medical School, Department of Continuing Education, September 5-6, 2014, Boston, Massachusetts (Topic: “Depression, Anxiety and Stress: An Overview of the Field”)
- 2014 Pfizer Neuroscience Seminar Series, Cambridge, MA, USA, November 12, 2014
- 2015 Alkermes Neuroscience Talks, Waltham, MA, USA, March 23, 2015.
- 2016 McLean Hospital National Council (Topic: “New Frontiers in Depression Research: Clues from McLean’s Brain Imaging Center”), Belmont, MA, USA, October 19, 2016.

Report of Regional, National and International Invited Teaching and Presentations:

No presentations below were sponsored by outside entities

Regional

- 2003 Invited speaker, “The Functional Neuroanatomy of Depression: Integrating Neuroimaging and Electrophysiological Approaches”, Clinical Colloquium Series, Boston University, November, 2003, Boston, MA, USA
- 2005 Invited speaker, “Toward an Objective Characterization of Depressive Phenotypes: Clues from Translational Approaches”, Clinical Research Training Program, Judge Baker Children’s Center, May 2005, Boston, MA, USA
- 2005 Invited speaker, Affective Science Speaker Series, Affective Science Initiative, Boston College, November 21, 2005, Boston, MA, USA
- 2005 Department Colloquium, Brown University, “Toward Objective Characterizations of Depressive Phenotypes: Clues From Affective Neuroscience”, November 30, 2005, Providence, RI, USA
- 2009 Invited speaker, Clinical Psychology Talk Series, Department of Psychology, Yale University, April 30, 2009, New Haven, CT, USA
- 2009 Invited speaker, “The Neuroscience of Emotion: From Reaction to Regulation”, Third Annual Tufts University Conference on Emerging Trends in Behavioral, Affective, Social, and Cognitive (BASC) Neurosciences, Tufts University, June 4-6, 2009, Medford, MA, USA
- 2012 Grand Rounds, National Center for PTSD speaker series, March 16, 2012, Boston, MA, USA
- 2015 Department Colloquium, Department of Psychology, Tufts University, Medford, MA, March 30, 2015.
- 2015 Clinical Current Work Speaker Series, Department of Psychology, Yale University, November 19, 2015.
- 2015 Grand Rounds, Department of Psychiatry and Human Behavior, The Alpert Medical School of Brown University, December 2, 2015.
- 2016 Grand Rounds, Department of Psychiatry, University of Massachusetts Medical School, April 21, 2016.

National

- 2000 Invited speaker, Brain Mapping Seminar, UCLA Brain Mapping, UCLA, Los Angeles, CA, USA, October 2000.
- 2002 Invited speaker, Department of Psychology, Harvard University, Cambridge, MA, USA, March 2002.
- 2005 Invited speaker, “Toward an Objective Characterization of Depressive Phenotypes: Insight from Translational Research”, Invited Symposium, “Neural Mechanisms of Emotion-Cognition Interactions: Translation from Basic to Clinical Science” (Chair: Deanna M. Barch, Ph.D.) American Psychological Society, 17th Annual Convention, Los Angeles, CA, USA, May 26-29, 2005.
- 2005 Co-chair and speaker, “Laboratory Measures of Anhedonia in Humans: A Signal Detection Approach”, Invited Symposium, “Towards building translational measures of depression: Objective characterizations of depressive phenotypes and biomarkers in humans and animals” (Co-Chairs: Athina Markou, Diego A. Pizzagalli), American College of Neuropsychopharmacology, 44th Annual Meeting, Waikoloa, Hawaii, USA, December 11-15, 2005.
- 2007 Invited speaker, “Abnormal Responses to Errors in Depression: Behavioral and Electrophysiological Correlates”, Invited Symposium, “Cognitive, Neural, and Genetic Components of Mood-Related and Personality Pathology” (Chair: Charles Sanislow, Ph.D.), American Psychological Society, 19th Annual Convention, Washington D.C., USA, May 24-27, 2007.
- 2007 Departmental Colloquium, “Toward an Objective Characterization of Depressive Phenotypes: Insight from Translational Research”, Neuroscience Seminar Series, The Scripps Research Institute, San Diego, CA, USA, May 23, 2007.
- 2007 Invited talk, “Toward Objective Characterizations of Depressive Phenotypes: Clues from Affective Neuroscience”, Mood and Anxiety Disorders Program, National Institute of Mental Health, Bethesda, MD, USA, June 13, 2007.
- 2008 Invited talk, “Toward Objective Characterizations of Depressive Phenotypes: Clues from Affective Neuroscience”, New York State Psychiatric Institute, New York, NY, USA, May 13, 2008.
- 2009 Invited speaker, “The Neuroscience of Major Depressive Disorder: Focus on Anhedonia”, Depression Center Colloquium Series, University of Michigan, Ann Arbor, MI, USA, January 29, 2009.
- 2009 Invited speaker, Winter 2009 Distinguished Seminar Series, Psychology Department, University of Michigan, Ann Arbor, MI, USA, January 28, 2009.
- 2010 Invited speaker, Symposium *Plasticity of the Reward Circuitry in Depression and Stress-Related Disorders* (Chair: Eric Nestler, MD, Ph.D.), 49th Annual Meeting of the American College of Neuropsychopharmacology (ACNP), Miami Beach, FL, USA, December 5-9, 2010.
- 2011 Invited Speaker, Symposium *Abnormalities in Reward-Related Brain Function in Psychopathology: A Research Domain Criteria (RDoC)* (Chair: Robin Nusslock, Ph.D.), 25th Annual Meeting of the Society for Research in Psychopathology, Boston, MA, USA, September 22-25, 2011.
- 2011 William K. Warren Frontiers in Neuroscience Lecture, Laureate Institute for Brain Research, Tulsa, OK, USA, February 28, 2011.
- 2012 Invited speaker, Kendon Smith Lecture Series, Department of Psychology, University of North Carolina at Greensboro, Greensboro, NC, USA, March 22, 2012.

- 2012 Faculty, The 4th Annual Massachusetts General Hospital Colloquium On Depression: *The Core Role of Fatigue in Depressive Disorders and the Use of Biomarkers for Personalized Treatment*, Chicago IL, June 9, 2012. (Professional development for psychiatrists, psychologists, primary care/family physicians, nurses, and residents and fellows). (Topic: *Apathy and Anhedonia in Depression*)
- 2013 Grand Rounds, Department of Psychiatry, Dartmouth-Hitchcock Medical Center, Lebanon, NH, USA, January 8, 2013.
- 2013 Department Colloquium, Department of Psychology, University of Arizona, “*The Neuroscience of Major Depressive Disorder: Focus on Anhedonia*”, Tucson, AZ, USA, April 19, 2013.
- 2013 Invited Speaker, Entertainment Software and Cognitive Neurotherapeutics Society, Los Angeles, CA, March 15-17, 2013.
- 2014 Keynote Speaker, *Spring Symposium on Mood Disorders*, University of Alabama at Birmingham, Birmingham, AL, April 11-12, 2014.
- 2014 Invited speaker, Symposium *The NIMH Research Domain Criteria Initiative: Overview and Exemplars* (Chair: Sarah E. Morris), 28th Annual Meeting of the Society for Research in Psychopathology, Evanston, IL, USA, September 18-21, 2014.
- 2014 Co-Chair, Symposium *Identifying Neurocognitive Mechanisms Underlying Depression Across the Lifespan* (Chair: Randy P. Auerbach, Diego A. Pizzagalli), 28th Annual Meeting of the Society for Research in Psychopathology, Evanston, IL, USA, September 18-21, 2014.
- 2014 Panelist, *Translational Models for Depression: Anhedonia as a Target*. Annual Conference of the National Network of Depression Centers, Chicago, IL, USA, October 22-23, 2014.
- 2014 Co-chair, Symposium “*Understanding the Effects of Stress at the Intersection of Appetitive and Aversive Functions in Disease: Integrating Across Genes, Brain, and Behavior*” (Co-Chairs: Scott Rauch & Diego A. Pizzagalli), American College of Neuropsychopharmacology, 53rd Annual Meeting, Phoenix, AZ, USA, December 7-11, 2014.
- 2014 Speaker, Symposium “*Characterizing Reward Circuitry Dysfunction Across the Mood Disorders Spectrum: Relevance and Predictive Value in Clinical Practice*” (Co-Chairs: Wayne Drevets, Mary Phillips), American College of Neuropsychopharmacology, 53rd Annual Meeting, Phoenix, AZ, USA, December 7-11, 2014.
- 2015 Speaker, Institute of Medicine of the National Academies, “*Enabling Discovery, Development, and Translation for Cognitive Dysfunction in Depression: A Workshop*” (Co-chairs: Thomas Insel, Thomas Laughren), The National Academy of Sciences, Washington, DC, February 24, 2015.
- 2015 Department Colloquium, Department of Psychology and Psychiatry, University of Pennsylvania, Philadelphia, PA, March 18, 2015.
- 2015 Keynote Speaker, Inaugural Event, Center for Affective Neuroscience of Depression and Anxiety, Stony Brook University, Stony Brook, NY, September 9, 2015.
- 2015 Discussant, Symposium, “*Integration of Reward and Social/Circadian Rhythm Model Perspectives in Understanding Mood Disorders*”, Society for Research in Psychopathology, New Orleans, LA, October 15-18, 2015.
- 2015 Chair, Symposium “*Using Neural Connectivity Biomarkers in Major Depressive Disorder (MDD) to Identify Subtypes and Predict Treatment Response*” (Co-Chairs:

- Diego A. Pizzagalli & Scott Langenecker), American College of Neuropsychopharmacology, 54rd Annual Meeting, Hollywood, FL, USA, December 6-10, 2015.
- 2015 Presenter, Symposium “*The Research Domain Criteria (RDoC) Initiative: New Data across Psychiatric Conditions and Age Groups*” (Co-Chairs: Ellen Leibenluft & Bruce Cuthbert), American College of Neuropsychopharmacology, 54rd Annual Meeting, Hollywood, FL, USA, December 6-10, 2015.
- 2016 Invited speaker and Discussant, National Institute of Mental Health, *Mechanisms of Suicide: Integrating RDoC to inform Novel and Personalized Interventions*, Bethesda, Maryland, June 2-3, 2016.
- 2016 Chair, Symposium *The Network Neuroscience of Mood and Anxiety Disorders*, 30th Annual Meeting of the Society for Research in Psychopathology, Baltimore, MD, USA, September 29-October 2, 2016.
- 2016 Discussant, Symposium *Multimodal Predictors of Anhedonia Across the Lifespan* (Chair: Randy Auerbach), 30th Annual Meeting of the Society for Research in Psychopathology, Baltimore, MD, USA, September 29-October 2, 2016.
- 2016 Speaker, Rochester Conte Center Symposium, “*Persistent, Maladaptive Behaviors: Why We Make Bad Choices*”, University of Rochester, October 11-13, 2016.
- 2016 Invited Speaker, *RDoC Investigators Meeting*, NIH Neuroscience Center, Bethesda, Maryland, October 17-18, 2016.
- 2017 Distinguished Scientist Lecture, University of Pittsburgh Department of Psychiatry, Pittsburgh, PA, February 17, 2017.
- 2017 Grand rounds, Department of Psychiatry, University of California San Diego, San Diego, CA, March 27, 2017.
- 2017 Presenter, Symposium “*Discovery and Evaluation of Neural Translational Measures for Improving Therapeutic Discovery for Mental Disorders*” (Chair: Jared Young), Society of Biological Psychiatry, 72nd Annual Meeting, San Diego, CA, May 18-20, 2017.
- 2017 Neuroscience Graduate Seminar Series, Vanderbilt Kennedy Center for Research on Human Development & Vanderbilt Brain Institute, Vanderbilt University, Nashville, TN, October 18, 2017.
- 2018 Grand rounds, Department of Psychiatry, University of Wisconsin-Madison, Madison, WI, March 9, 2018.

International

- 2000 Chair, Symposium “*Affective and Social Aspects of Face Processing: Integrating Electrophysiological and Brain Imaging Studies*”, 40th Annual Meeting of the Society for Psychophysiological Research Conference, October 18-22, 2000, San Diego, USA
- 2000 Invited Chair, Symposium “*Aspect of Face Processing*”, 10th World Congress of Psychophysiology, February 8-13, 2000, Sydney, Australia
- 2000 Invited speaker, Annual Scientific Meeting of the British Psychophysiology Society, September, 2000, London, UK
- 2001 Invited speaker, 12th World Congress of the International Society for Brain Electromagnetic Topography (ISBET), March 8-10, 2001, Utsunomiya, Japan
- 2001 Invited speaker, Central Institute of Mental Health, December, 2001, Mannheim, Germany

- 2002 Invited Keynote Speaker, Symposium “Electromagnetic Topography”; 13th World Congress of the International Society for Brain Electromagnetic Topography (ISBET), October 27-29, 2002, Naples, Italy
- 2003 Invited speaker, “Mood Disorders across Development: Emerging Insights from Affective Neuroscience”, 36th Annual Meeting of the International Society for Developmental Psychobiology; Sackler Symposium “Mood Disorders in children and adolescents”; November, 2003, New Orleans, LA, USA
- 2004 Invited speaker, “The Role of Frontocingulate Pathways in Major Depression: Integrating Electrophysiological and Neuroimaging Approaches”, Nineteenth Annual Meeting for the Society for Research in Psychopathology; Symposium: Frontal lobe and Psychopathology (Organizer: Sohee Park), October 7-10, 2004, St. Louis, Missouri, USA
- 2005 Invited speaker, “Development of Laboratory-based Measures of Anhedonia in Humans”, 20th Annual Meeting of the Society for Research in Psychopathology, October 27-30, 2005, Coral Gables, FL, USA
- 2006 Invited speaker, “Resting anterior cingulate gamma activity and abnormal responses to errors in depression: A source localization high-density EEG study”, Symposium, “Abnormalities of gamma oscillations in neuropsychiatric disorders” (Co-Chairs: Silvana Galderisi and Kevin Spencer) Third Joint ECNS (EEG and Clinical Neuroscience Society) & ISNIP (International Society for Neuroimaging in Psychiatry) Conference, Neuroimaging and Neurophysiology of Psychosis, September 13-17, 2006, Boston, MA, USA
- 2006 Invited Talk, Distinguished Scientific Award for an Early Career Contribution to Psychophysiology, 46th Annual Meeting of the Society for Psychophysiological Research, October 25-29, 2006, Vancouver, BC, Canada
- 2007 Invited Talk, Early Career Award, The EEG & Clinical Neuroscience Society (ECNS), Forth Joint ECNS (EEG and Clinical Neuroscience Society) & ISNIP (International Society for Neuroimaging in Psychiatry) Conference, September 19-23, 2007, Montreal, QC, Canada
- 2008 Chair and Speaker, Symposium, “Neurobiological sequelae of early childhood adversity”; 48th Annual Meeting of the Society for Psychophysiological Research, October 1-5, 2008, Austin, TX, USA
- 2008 Invited speaker, Symposium, *Attentional Control and Executive Processes in Depression and Rumination* (Chairs: Nilly Mor, Eva Gilboa-Schechtman), Association for Behavioral and Cognitive Therapies, 42nd Annual Convention, November 13-16, 2008, Orlando, FL, USA
- 2009 Invited speaker, plenary session, 27. Symposium der Fachgruppe Klinische Psychologie und Psychotherapie der Deutschen Gesellschaft für Psychotherapie (DGP), May 23, 2009, Zurich, Switzerland
- 2009 Invited Speaker, Symposium, *Neurobiological Perspectives on the Interplay Between Emotional and Attentional Processing in Depression* (chair: Rudi de Raedt, Ph.D.), Annual Meeting of the International Society for Research on Emotion, August 6-8, 2009, Leuven, Belgium
- 2009 Invited Speaker, Symposium, Genetics in Depression: Cognitive Mechanisms and Life Stress (chair: Ian Gotlib, Ph.D.), 23rd Annual Meeting of the Society for Research in Psychopathology, September 10-13, 2009, Minneapolis, MN, USA

- 2010 Co-Chair and Speaker (Chair: Robin Nusslock), Symposium, “Abnormalities in Reward-Related Neural Circuitry in Mood Disorders”; 65th Annual Meeting of the Society of Biological Psychiatry, May 20-22, 2010, New Orleans, Louisiana, USA
- 2011 Invited Discussant, Roundtable Discussion (topic: *Genetics, Brain, and Behavior*), 51st Annual Meeting of the Society for Psychophysiological Research, September 14-18, 2011, Boston, MA
- 2011 Invited Speaker, Symposium *Neurocognitive Dysfunction in Anxiety and Depression* (Chair: Jason Moser, Ph.D.), 51st Annual Meeting of the Society for Psychophysiological Research, September 14-18, 2011, Boston, MA
- 2012 Invited Speaker, Annual Congress of the Italian Society of Psychopathology, Rome, Italy, February 14-17, 2012
- 2012 Wellcome Trust Centre for Neuroimaging, University College of London, London UK, March 30, 2012.
- 2012 Keynote Speaker, "Symposium: The Use of Neuromodulation for Treating Affective Disorders and Physical Pain," Psychiatric Association of Quebec, Québec, Canada, May 11, 2012; Title: “*The Rostral Anterior Cingulate Cortex as a Biomarker for Treatment Response: A putative Target for Deep Brain Stimulation in Depression?*”
- 2012 Keynote Speaker, International Pharmacoe-EEG Society (IPEG), New York, NY, October 18-21, 2012
- 2013 Keynote Speaker, Servier Valdoxan International Expert Board, “*Neuroimaging in Depression: Contributions to Understanding Neural Pathways and Treatment Mechanisms*”, Paris, January 22, 2013.
- 2013 Invited Speaker, Distinguished Lecture Series, Department of Psychology, Queen's University, Kingston, ON, Canada, March 22, 2013.
- 2013 Symposium Co-Chair, *Toward Personalizing Treatment for Depression: New Imaging and Physiological Findings*, 68th Annual Meeting of the Society of Biological Psychiatry, San Francisco, CA, May 16-18, 2013.
- 2013 Symposium Co-Chair, *Computational Psychiatry: Emerging Use of Computational Models of Reinforcement Learning in Mood Disorders*, 68th Annual Meeting of the Society of Biological Psychiatry, San Francisco, CA, May 16-18, 2013.
- 2013 Invited Speaker, Symposium *Using Experimental Neurophysiology to Better Understand Psychopathology: Developments in Schizophrenia, Mood, and Anxiety Disorders* (Chair: Scott Sponheim), 27th Annual Meeting of the Society for Research in Psychopathology, Oakland, CA, USA, September 19-22, 2013.
- 2014 Keynote Speaker, *Neuroscience and Mood* Conference, Canadian Network for Mood and Anxiety Treatments (CANMAT), Toronto, Canada, January 24-25, 2014.
- 2015 Keynote Speaker, 22nd International Symposium on Current issues and Controversies in Psychiatry, Barcelona, Spain, March 6-7, 2015.
- 2015 Invited Speaker, Swiss Memory Workshop, Spiez, Switzerland, August 24-26, 2015.
- 2017 Invited Speaker, European College of Neuropsychopharmacology, Experimental Medicine Network, Validation of Reward Processing tasks, Leiden University, The Netherlands, March 15, 2017.
- 2017 Keynote Speaker, The Cameron Holcombe Wilson Chair RDoC Symposium, University of Toronto, Toronto, Canada, March 22, 2017.

Report of Technological and Other Scientific Innovations

1) “*Systems and Methods for Predicting Effectiveness in the Treatment of Psychiatric Disorders, including Depression*” [filed April 3, 2006; PCT filed April 3, 2007; International Publication Date: 10/25/2007 (Publication number: WO2007/120480; Application Number: PCT/US2007/008107); Published US Patent Application, Application Number: 20090306534. <http://www.wipo.int/>

2) “*Methods For Predicting Effectiveness in the Treatment of Psychiatric Disorders*”, U.S. Provisional Patent Application Serial No. 60/788,615 [filed April 3, 2006]

The technology is currently used by 111 (82 national and 29 international) research groups in the following fields of study:

Anxiety Disorders (1); Brain inflammation; Bulimia; Cannabis Abuse; Childhood Anxiety Disorders; Bipolar Disorder (8 groups); Depression (23); Eating Disorders; Gambling; Impulse Control Disorders; Individual Differences (5); Internet Addiction; Nicotine Abuse (5); Obesity; Parkinson’s Disease (2); Post-Traumatic Stress Disorders (2); Psychosis (3); Schizophrenia (10); Schizotypal Personality Disorder Social Anxiety Disorder; Substance Abuse (2); Video Game Addiction.

3) “*Systems and Methods for Treating Depression, Including the Use of Neurobehavioral Tasks*”, [filed 9/24/2009; PCT filed 9/23/2010; International Publication Date: 3/31/2011 (Publication number: WO2011/038124; Application Number: PCT/US2010/050010); <http://www.wipo.int>

Report of Education of Patients and Service to the Community

- 2011 Museum of Science, Boston, MA, USA
Advisor, Hall of Human Life (provided advice and consultation for a new, permanent exhibit on human biology and health, with a focus on clinical depression)
- 2012 Winchester High School, Winchester, MA, USA
Outreach activity on the topic “*The Neuroscience of Depression*”

Report of Scholarship

Peer reviewed publications in print or other media

Research Investigations

1. **Pizzagalli, D.**, Koenig, T., Regard, M., Lehmann, D. (1998). Faces and emotions: Brain electric field sources during covert emotional processing. *Neuropsychologia*, **36**, 323-332.
2. **Pizzagalli, D.**, Regard, M., Lehmann, D. (1999). Rapid emotional face processing in the human right and left brain hemispheres. *NeuroReport*, **10**, 2691-2698.
3. **Pizzagalli, D.**, Koenig, T., Regard, M., Lehmann, D. (1999). Affective attitudes to face images associated with intracerebral EEG source location before face viewing. *Cognitive Brain Research*, **7**, 371-377.
4. **Pizzagalli, D.**, Lehmann, D., Gianotti, L., Koenig, T., Tanaka, H., Wackermann, J., Brugger, P. (2000). Brain electric correlates of strong belief in paranormal phenomena: Intracerebral EEG source and regional Omega complexity analyses. *Psychiatry Research: Neuroimaging*, **100**, 139-154.
5. **Pizzagalli, D.**, Lehmann, D., Koenig, T., Regard, M., Pascual-Marqui, R.D. (2000). Face-elicited ERPs and affective attitude: Brain electric microstate and tomography analyses. *Clinical Neurophysiology*, **111**, 521-531.
6. Lehmann, D., Faber, P.L., Achermann, P., Jeanmonod, D., Gianotti, L.R., **Pizzagalli, D.** (2001). Brain sources of EEG gamma frequency during volitionally meditation-induced, altered states of

- consciousness, and experience of the self. *Psychiatry Research: Neuroimaging*, **108**, 111-121.
7. Gianotti, L.L.R., Mohr, C., **Pizzagalli, D.**, Lehmann, D., Brugger, P. (2001). Associative processing and paranormal belief. *Psychiatry and Clinical Neurosciences*, **55**, 595-603.
 8. Mohr, C., Graves, R.E., Gianotti, L., **Pizzagalli, D.**, Brugger, P. (2001). Loose but normal: A semantic association study. *Journal of Psycholinguistic Research*, **30**, 475-483.
 9. Lavric, A., **Pizzagalli, D.**, Forstmeier, S., Rippon, G. (2001). A double-dissociation of English past-tense production revealed by event-related potentials and low resolution electromagnetic tomography (LORETA). *Clinical Neurophysiology*, **112**, 1833-1849.
 10. **Pizzagalli, D.**, Pascual-Marqui, R.D., Nitschke, J.B., Oakes, T.R., Larson, C.L., Abercrombie, H.C., Schaefer, S.M., Koger, J.V., Benca, R.M., Davidson, R.J. (2001). Anterior cingulate activity as a predictor of degree of treatment response in major depression: Evidence from brain electrical tomography analysis. *American Journal of Psychiatry*, **158**, 405-415.
 11. **Pizzagalli, D.**, Lehmann, D., Brugger, P. (2001). Lateralized direct and indirect semantic priming effects in subjects with paranormal experiences and beliefs. *Psychopathology*, **34**, 75-80.
 12. **Pizzagalli, D.A.**, Lehmann, D., Hendrick, A.M., Regard, M., Pascual-Marqui, R.D., Davidson, R.J. (2002). Affective judgments of faces modulate early activity (~160 ms) within the fusiform gyri. *NeuroImage*, **16**, 663-677.
 13. Silva, J.R., **Pizzagalli, D.A.**, Larson, C.L., Jackson, D.C., Davidson, R.J. (2002). Frontal brain asymmetry in restrained eaters. *Journal of Abnormal Psychology*, **111**, 676-681.
 14. **Pizzagalli, D.A.**, Nitschke, J.B., Oakes, T.R., Hendrick, A.M., Horras, K.A., Larson, C.L., Abercrombie, H.C., Schaefer, S.M., Koger, J.V., Benca, R.M., Pascual-Marqui, R.D., Davidson, R.J. (2002). Brain electrical tomography in depression: The importance of symptom severity, anxiety, and melancholic features. *Biological Psychiatry*, **52**, 73-85.
 15. **Pizzagalli, D.A.**, Oakes, T.R., Davidson, R.J. (2003). Coupling of theta activity and glucose metabolism in the human rostral anterior cingulate cortex: An EEG/PET study of normal and depressed subjects. *Psychophysiology*, **40**, 939-949.
 16. **Pizzagalli, D.A.**, Greischar, L.L., Davidson, R.J. (2003). Spatio-temporal dynamics of brain mechanisms in aversive classical conditioning: High-density event-related potential and brain electrical tomography analyses. *Neuropsychologia*, **41**, 184-194.
 17. Lavric, A., **Pizzagalli, D.A.**, Forstmeier, S. (2004). When 'go' and 'nogo' are equally frequent: ERP components and cortical tomography. *European Journal of Neuroscience*, **20**, 2483-2488.
 18. **Pizzagalli, D.A.**, Oakes, T.R., Fox, A.S., Chung, M.K., Larson, C.L., Abercrombie, H.C., Schaefer, S.M., Benca, R.M., Davidson, R.J. (2004). Functional but not structural subgenual prefrontal cortex abnormalities in melancholia. *Molecular Psychiatry*, **9**, 393-405.
 19. Oakes, T.R., **Pizzagalli, D.A.**, Hendrick, A.M., Horras, K.A., Larson, C.L., Abercrombie, H.C., Schaefer, S.M., Koger, J.V., Davidson, R.J. (2004). Functional coupling of simultaneous electrical and metabolic activity in the human brain. *Human Brain Mapping*, **21**, 257-270.
 20. Greischar, L.L., Burghy, C.A., Van Reekum, C.M., Jackson, D.C., **Pizzagalli, D.A.**, Mueller, C., Davidson, R.J. (2004). Effects of electrode density and electrolyte spreading in dense array electroencephalographic recording. *Clinical Neurophysiology*, **115**, 710-720.
 21. **Pizzagalli, D.A.**, Sherwood, R.J., Henriques, J.B., Davidson, R.J. (2005). Frontal brain asymmetry and reward responsiveness: A Source-localization study. *Psychological Science*, **16**, 805-813.
 22. **Pizzagalli, D.A.**, Jahn, A.L., O'Shea, J.P. (2005). Toward an objective characterization of an anhedonic phenotype: A Signal-detection approach. *Biological Psychiatry*, **57**, 319-327.
 23. Hofmann, S.G., Moscovitch, D.A., Litz, B.T., Kim, H.J., Davis, L.L., **Pizzagalli, D.A.** (2005). The worried mind: autonomic and prefrontal activation during worrying. *Emotion*, **5**, 464-475.

24. **Pizzagalli, D.A.**, Peccoralo, L.A., Davidson, R.J., Cohen, J.D. (2006). Resting anterior cingulate activity and abnormal responses to errors in subjects with elevated depressive symptoms: A 128-channel EEG study. *Human Brain Mapping*, **27**, 185-201.
25. Shackman, A.J., Sarinopoulos, I., Maxwell, J.S., **Pizzagalli, D.A.**, Lavric, A., Davidson, R.J. (2006). Anxiety selectively disrupts visuospatial working memory. *Emotion*, **6**, 40-61.
26. Bogdan, R., **Pizzagalli, D.A.** (2006). Acute stress reduces reward responsiveness: Implications for depression. *Biological Psychiatry*, **60**, 1147-1154.
27. Holmes, A.J., **Pizzagalli, D.A.** (2007). Task feedback effects on conflict monitoring and executive control: Relationship to subclinical measures of depression. *Emotion*, **7**, 68-76.
28. Candrian, M., Farabaugh, A., **Pizzagalli, D.A.**, Baer, L., Fava, M. (2007). Perceived stress and cognitive vulnerability mediate the effects of Personality Disorder comorbidity on treatment outcome in Major Depressive Disorder: A path analysis study. *Journal of Nervous and Mental Disease*, **195**, 729-737.
29. **Pizzagalli, D.A.**, Bogdan, R., Ratner, K.G., Jahn, A.L. (2007). Increased perceived stress is associated with blunted hedonic capacity: Potential implications for depression research. *Behaviour Research and Therapy*, **45**, 2742-2753.
30. Barr, R.S., **Pizzagalli, D.A.**, Culhane, M.A., Goff, D.C., Evins, A.E. (2008). A single dose of nicotine enhances reward responsiveness in non-smokers: Implications for development of dependence. *Biological Psychiatry*, **63**, 1061-1065.
31. Chiu, P.H., Holmes, A.J., **Pizzagalli, D.A.** (2008). Dissociable recruitment of rostral anterior cingulate and inferior frontal cortex in emotional response inhibition. *NeuroImage*, **42**, 988-997.
32. Deveney, C.M., **Pizzagalli, D.A.** (2008). The cognitive consequences of emotion regulation: An ERP investigation. *Psychophysiology*, **45**, 435-444.
33. Dillon, D.G., Holmes, A.J., Jahn, A.L., Bogdan, R., Wald, L.L., **Pizzagalli, D.A.** (2008). Dissociation of neural regions associated with anticipatory versus consummatory phases of incentive processing. *Psychophysiology*, **45**, 36-49.
34. Holmes, A.J., **Pizzagalli, D.A.** (2008). Spatio-temporal dynamics of error processing dysfunctions in Major Depressive Disorder. *Archives of General Psychiatry*, **65**, 179-188. [Ranks in the top 1% based on a highly cited threshold for the field of Psychiatry/Psychology and publication year (source: ISI Thompson Reuters).]
35. Holmes, A.J., **Pizzagalli, D.A.** (2008). Response conflict and frontocingulate dysfunction in unmedicated participants with Major Depression. *Neuropsychologia*, **46**, 2904-2913.
36. Meites, T.M., Deveney, C.M., Steele, K.T., Holmes, A.J., **Pizzagalli, D.A.** (2008). Implicit depression and hopelessness in remitted depressed individuals. *Behaviour Research and Therapy*, **46**, 1078-1084.
37. **Pizzagalli, D.A.**, Evins, A.E., Schetter, E.C., Frank, M.J., Pajtas, P.E., Santesso, D.L., Culhane, M. (2008). Single dose of a dopamine agonist impairs reinforcement learning in humans: Behavioral evidence from a laboratory-based measure of reward responsiveness. *Psychopharmacology*, **196**, 221-232.
38. **Pizzagalli, D.A.**, Goetz, E., Ostacher, M., Iosifescu, D.V., Perlis R.H. (2008). Euthymic patients with Bipolar Disorder show decreased reward learning in a probabilistic reward task. *Biological Psychiatry*, **64**, 162-168.
39. **Pizzagalli, D.A.**, Iosifescu, D., Hallett, L.A., Ratner, K.G., Fava, M. (2008). Reduced hedonic capacity in Major Depressive Disorder: Evidence from a probabilistic reward task. *Journal of Psychiatric Research*, **43**, 76-87.
40. Putnam, K.M., **Pizzagalli, D.A.**, Gooding, D.C., Kalin, N.H., Davidson, R.J. (2008). Neural activity

- and diurnal variation of cortisol: Evidence from brain electrical tomography analysis and relevance to anhedonia. *Psychophysiology*, **45**, 886-895.
41. Santesso, D.L., Dillon, D.G., Birk, J.L., Holmes, A.J., Goetz, E., Bogdan, R., **Pizzagalli, D.A.** (2008). Individual differences in reinforcement learning: Behavioral, electrophysiological, and neuroimaging correlates. *NeuroImage*, **42**, 807-816.
 42. Santesso, D.L., Meuret, A.E., Hofmann, S.G., Mueller, E.M., Ratner, K.G., Roesch, E.B., **Pizzagalli, D.A.** (2008). Electrophysiological correlates of spatial orienting towards angry faces: A source localization study. *Neuropsychologia*, **46**, 1338-1348.
 43. Santesso, D.L., Steele, K.T., Bogdan, R., Holmes, A.J., Deveney, C.M., Meites, T.M., **Pizzagalli, D.A.** (2008). Enhanced negative feedback responses in remitted depression. *NeuroReport*, **19**, 1045-1048.
 44. Bogdan, R., **Pizzagalli, D.A.** (2009). The heritability of hedonic capacity and perceived stress: A twin study evaluation of candidate depressive phenotypes. *Psychological Medicine*, **39**, 211-218.
 45. Dillon, D.G., Holmes, A.J., Birk, J.L., Brooks, N., Lyons-Ruth, K., **Pizzagalli, D.A.** (2009). Childhood adversity is associated with left basal ganglia dysfunction during reward anticipation. *Biological Psychiatry*, **66**, 206-213.
 46. Mueller, E.M., Hofmann, S.G., Santesso, D.L., Meuret, A.E., Bitran, S., **Pizzagalli, D.A.** (2009). Electrophysiological evidence of attentional biases in Social Anxiety Disorder. *Psychological Medicine*, **39**, 1141-1152.
 47. **Pizzagalli, D.A.**, Holmes, A.J., Dillon, D.G., Goetz, E.L., Birk, J.L., Bogdan, R., Dougherty, D.D., Iosifescu, D.V., Rauch, S.L., Fava, M. (2009). Reduced caudate and nucleus accumbens response to rewards in unmedicated subjects with Major Depressive Disorder. *American Journal of Psychiatry*, **166**, 702-710. [Ranks in the top 1% based on a highly cited threshold for the field of Psychiatry/Psychology and publication year (source: ISI Thompson Reuters).]
 48. Ragland, J.D., Cools, R.*, Frank, M.*, **Pizzagalli, D.A.***, Preston, A.*, Ranganath, C.*, Wagner, A.D.* (2009). CNTRICS final task selection: Long-term memory. *Schizophrenia Bulletin*, **35**, 197-212. [*co-authors had equivalent input and are listed alphabetically]
 49. Santesso, D.L., Evins, A.E., Frank, M.J., Schetter, E.C., **Pizzagalli, D.A.** (2009). Single dose of a dopamine agonist impairs reinforcement learning in humans: Evidence from event-related potentials and computational modeling of striatal-cortical function. *Human Brain Mapping*, **30**, 1963-1976.
 50. Wacker, J., Dillon, D.G., **Pizzagalli, D.A.** (2009). The role of the nucleus accumbens and rostral anterior cingulate cortex in anhedonia: Integration of resting EEG, fMRI, and volumetric techniques. *NeuroImage*, **46**, 327-337.
 51. Dillon, D.G., Bogdan, R., Fagerness, J., Holmes, A.J., Perlis, R.H., **Pizzagalli, D.A.** (2010). Variation in TREK1 gene linked to depression-resistant phenotype is associated with potentiated neural responses to rewards in humans. *Human Brain Mapping*, **31**, 210-221.
 52. Holmes, A.J., **Pizzagalli, D.A.** (2010). Effects of task-relevant incentives on the electrophysiological correlates of error processing in Major Depressive Disorder. *Cognitive, Affective, and Behavioral Neuroscience*, **10**, 119-128.
 53. Holmes, A.J., Bogdan, R., **Pizzagalli, D.A.** (2010). Serotonin transporter genotype and action monitoring dysfunction: A possible substrate underlying increased vulnerability to depression. *Neuropsychopharmacology*, **35**, 1186-1197.
 54. Janes, A.C., **Pizzagalli, D.A.**, Richardt, S., Frederick, B.D., Chuzi, S., Pachas, G., Culhane, M.A., Holmes, A.J., Fava, M., Evins, A.E., Kaufman, M.J. (2010). Brain reactivity to smoking cues prior to smoking cessation predicts ability to maintain tobacco abstinence. *Biological Psychiatry*, **67**,

722-729.

55. Lempert, K.M., **Pizzagalli, D.A.** (2010). Delay discounting and future-directed thinking in anhedonic individuals. *Journal of Behavior Therapy and Experimental Psychiatry*, **41**, 258-264.
56. Bogdan, R., Perlis, R.H., Fagerness, J., **Pizzagalli, D.A.** (2010). The impact of Mineralocorticoid Receptor ISO/VAL genotype (rs5522) and stress on reward learning. *Genes, Brain and Behavior*, **9**, 658-667.
57. Janes, A.C., **Pizzagalli, D.A.**, Richardt, S., Frederick, B.B., Holmes, A.J., Sousa, J., Fava, M., Evins, A.E., Kaufman, M.J. (2010). Neural substrates of attentional bias for smoking-related cues: an fMRI study. *Neuropsychopharmacology*, **35**, 2339-2345.
58. Koslov, K., Mendes, W.B., Pajtas, P.E., **Pizzagalli, D.A.** (2011). Asymmetry in resting intracortical activity as a buffer to social threat. *Psychological Science*, **22**, 641-649.
59. Bogdan, R., Santesso, D.L., Fagerness, J., Perlis, R.H., **Pizzagalli, D.A.** (2011). Corticotropin-releasing hormone receptor type 1 (CRHR1) genetic variation and stress interact to influence reward learning. *Journal of Neuroscience*, **31**, 13246-13254.
60. Denninger, J.W., van Nieuwenhuizen, A.O., Wisniewski, S.R., Luther, J.F., Trivedi, M.H., Rush, A.J., Gollan, J.K., **Pizzagalli, D.A.**, Fava, M. (2011). Changes in depressive symptoms and social functioning in STAR*D. *Journal of Nervous and Mental Disease*, **199**, 807-810.
61. Nikolova, Y., Bogdan, R., **Pizzagalli, D.A.** (2012). Perception of a naturalistic stressor interacts with 5-HTTLPR genotype and gender to impact reward responsiveness. *Neuropsychobiology*, **65**, 45-54.
62. AhnAllen, C.G., Gregor, K., Liverant, G.I., Gregor, K.L., Kamholz, B.W., Levitt, J.J., Gulliver, S.B., **Pizzagalli, D.A.**, Koneru, V.K., Kaplan, G.B. (2012). The relationship between reward-based learning and nicotine dependence in smokers with schizophrenia. *Psychiatry Research*, **196**, 9-14.
63. Dutra, S.J., Stoeckel, L.E., Carlini, S.V., **Pizzagalli, D.A.***, Evins, A.E.* (2012). Varenicline as a smoking cessation aid in schizophrenia: Effects on smoking behavior and reward sensitivity. *Psychopharmacology*, **219**, 25-34 [*Contributed equally as senior authors].
64. Grob, S., **Pizzagalli, D.A.**, Dutra, S.J., Stern, J., Mörgele, H., Milos, G., Schnyder, U., Hasler, G. (2012). Dopamine-related deficit in reward learning after catecholamine depletion in unmedicated, remitted subjects with Bulimia Nervosa. *Neuropsychopharmacology*, **37**, 1945-1952.
65. Vanderhasselt, M.A., De Raedt, R., Dillon, D.G., Dutra, S.J., Brooks, N., **Pizzagalli, D.A.** (2012). Decreased cognitive control in response to negative information in remitted depression: An Event Related Potential study. *Journal of Psychiatry and Neuroscience*, **37**, 250-258.
66. Millner, A.J., Jaroszewski, A.C., Chamarthi, H., **Pizzagalli, D.A.** (2012). Behavioral and electrophysiological correlates of training-induced cognitive control improvements. *NeuroImage*, **63**, 742-753.
67. Santesso, D.L., Bogdan, R., Birk, J.L., Goetz, E.L., Holmes, A.J., **Pizzagalli, D.A.** (2012). Neural responses to negative feedback are related to negative emotionality in healthy adults. *Social Cognitive and Affective Neuroscience*, **7**, 794-803.
68. Bogdan, R., Pringle, P., Goetz, E.L., **Pizzagalli, D.A.** (2012). Perceived stress, anhedonia and illusion of control: Evidence for two meditational models. *Cognitive Therapy and Research*, **36**, 827-832.
69. Vrieze, E., Ceccarini, J., **Pizzagalli, D.A.**, Bormans, G., Vandenbulcke, M., Demyttenaere, K., Van Laere, K., Claes S. (2013). Measuring extrastriatal dopamine release during a reward learning task. *Human Brain Mapping*, **34**, 575-586.
70. Vrieze, E., **Pizzagalli, D.A.**, Demyttenaere, K., Hompes, T., Sienaert, P., de Boer, P., Schmidt, M., Claes S. (2013). Reduced reward learning predicts outcome in Major Depressive Disorder.

Biological Psychiatry, **73**, 639-645.

71. Janes, A.C., Jensen, J.E., Farmer, S.L., Frederick, B.D., **Pizzagalli, D.A.**, Lukas, S.E. (2013). GABA levels in the dorsal anterior cingulate cortex associated with difficulty ignoring smoking-related cues in tobacco-dependent volunteers. *Neuropsychopharmacology*, **38**, 1113-1120.
72. Goetz, E.L., Hariri, A.R., **Pizzagalli, D.A.**, Strauman, T.J. (2013). Genetic moderation of the association between regulatory focus and reward responsiveness: A proof-of-concept study. *Biology of Mood & Anxiety Disorders*. 2013 Feb 1;3(1):3. doi: 10.1186/2045-5380-3-3.
73. Wacker, J., Mueller, E.M., **Pizzagalli, D.A.**, Hennig, J., Stemmler, G. (2013). Dopamine-D2-receptor blockade reverses the association between trait approach motivation and frontal asymmetry in an approach-motivation context. *Psychological Science*, **24**, 489-497.
74. Pechtel, P., **Pizzagalli, D.A.** (2013). Disrupted reinforcement learning and maladaptive behavior in women with a history of childhood sexual abuse: A high-density event-related potential study. *JAMA Psychiatry*, **70**, 499-507.
75. Dillon, D.G., **Pizzagalli, D.A.** (2013). Evidence of successful modulation of brain activation and subjective experience during reappraisal of negative emotion in unmedicated depression. *Psychiatry Research: Neuroimaging*, **212**, 99-107.
76. Berghorst, L.H., Bogdan, R., Frank, M.J., **Pizzagalli, D.A.** (2013). Acute stress selectively reduces reward sensitivity. *Frontiers in Human Neuroscience* 7:133. doi:10.3389/fnhum.2013.00133.
77. Huys, Q.J.M, **Pizzagalli, D.A.**, Bogdan, R., Dayan, P. (2013). Mapping anhedonia onto reinforcement learning: A behavioural meta-analysis. *Biology of Mood & Anxiety Disorders*. 2013, 3:12.
78. Der-Avakian, A., D'Souza, M.S., **Pizzagalli, D.A.***, Markou, A.* (2013). Assessment of reward responsiveness in the Response Bias Probabilistic Reward Task in rats: Implications for cross-species translational research. *Translational Psychiatry* 3, e297; doi:10.1038/tp.2013.74
[*Contributed equally as senior authors]
79. Pechtel, P., Dutra, S.J., Goetz, E.L., **Pizzagalli, D.A.** (2013). Blunted reward responsiveness in remitted depression. *Journal of Psychiatric Research*, **47**, 1864-1869.
80. Vrieze, E., Demyttenaere, K., Bruffaerts, R., Hermans, D., **Pizzagalli, D.A.**, Sienaert, P., Hompes, T., de Boer, P., Schmidt, M., Claes S. (2014). Dimensions in major depressive disorder and their relevance for treatment outcome. *Journal of Affective Disorders*, **155**, 35-41.
81. Abramovitch, A., Reuman, L., **Pizzagalli, D.A.**, Wilhelm, S. (2014). Anhedonia in Obsessive-Compulsive Disorder: Beyond comorbid depression. *Psychiatry Research*, **216**, 223-229.
82. Kumar, P., Berghorst, L.H., Nickerson, L.D., Dutra, S.J., Goer, F., Greve, D., **Pizzagalli, D.A.** (2014). Differential effects of acute stress on anticipatory and consummatory phases of reward processing. *Neuroscience*, **266**, 1-12.
83. Dillon, D.G., Dobbins, I.G., **Pizzagalli, D.A.** (2014). Weak reward source memory in depression reflects blunted activation of VTA/SN and parahippocampus. *Social Cognitive and Affective Neuroscience*, **9**, 1576-1583.
84. Boger, K.D., Auerbach, R.P., Pechtel, P., Busch, A.B., Greenfield, S.F., **Pizzagalli, D.A.** (2014). Co-occurring depressive and substance use disorders in adolescents: An examination of reward responsiveness during treatment. *Journal of Psychotherapy Integration*, **24**, 109-121.
85. Liverant, G.I., Sloan, D.M., **Pizzagalli, D.A.**, Harte, C.B., Kamholz, B.W., Rosebrock, L.E., Cohen, A.L., Fava, M., Kaplan, G.B. (2014). Associations among smoking, anhedonia, and reward learning in depression. *Behavior Therapy*, **45**, 651-663.
86. Mueller, E.M., Panitz, C., Hermann, C., **Pizzagalli, D.A.** (2014). Prefrontal oscillations during recall of conditioned and extinguished fear in humans. *Journal of Neuroscience*, **34**, 7059-66.

87. Chumbley, J.R, Hulme, O., Köchli, H., Russell E., Van Uum, S., **Pizzagalli D.A.**, Fehr, E. (2014). Stress and reward: Long term cortisol exposure predicts the strength of sexual preference. *Physiology & Behavior*, **131**, 33-40.
88. Pergadia, M.L., Der-Avakian, A., D'Souza, M.S., Madden, P.A.F., Heath, A.C., Shiffman, S., Markou, A., **Pizzagalli, D.A.** (2014). Withdrawal of nicotine blunts reward responsiveness in humans and rats. *JAMA Psychiatry*, **71**, 1238-1245.
89. Abramovitch, A., **Pizzagalli, D.A.**, Geller, D.A., Reuman, L., Wilhelm, S. (2015) Cigarette smoking in obsessive compulsive disorder and unaffected parents of OCD patients. *European Psychiatry*, **30**, 137-144.
90. Treadway, M.T., Waskom, M.L., Dillon, D.G., Holmes, A.J., Park, M.T.M., Chakravarty, M.M., Dutra, S.J., Polli, F.E., Iosifescu, D.V., Fava, M., Gabrieli, J.D.E., **Pizzagalli, D.A.** (2015). Illness progression, recent stress and morphometry of hippocampal subfields and medial prefrontal cortex in Major Depression. *Biological Psychiatry*, **77**, 285-294.
91. Admon, R., Nickerson, L.D., Dillon, D.G., Holmes, A.J., Bogdan, R., Kumar, P., Dougherty, D.D., Iosifescu, D.V., Mischoulon, D., Fava, M., **Pizzagalli, D.A.** (2015). Dissociable cortico-striatal connectivity abnormalities in major depression in response to monetary gains and penalties. *Psychological Medicine*, **45**, 121-31
92. Mueller, E.M., Panitz, C., **Pizzagalli, D.A.**, Hermann, C., Wacker, J. (2015). Midline theta dissociates agentic extraversion and anhedonic depression. *Personality and Individual Differences*, **79**, 172-177.
93. Mueller, E. M., Pechtel, P., Cohen, A.L., Douglas, S.R., **Pizzagalli, D.A.** (2015). Potentiated processing of negative feedback in depression is attenuated by anhedonia. *Depression and Anxiety*, **32**, 296-305.
94. Admon, R., Holsen, L.M., Aizley, H., Remington, A., Whitfield-Gabrieli, S., Goldstein, J.M., **Pizzagalli, D.A.** (2015). Striatal hyper-sensitivity during stress in remitted individuals with recurrent depression. *Biological Psychiatry*, **78**, 67-76.
95. Kumar, P., Slavich, G.M., Berghorst, L.H., Treadway, M.T., Brooks, N.H., Dutra, S.J., Greve, D.N., O'Donovan, A., Bleil, M.E., Maninger, N., **Pizzagalli, D.A.** (2015). Perceived chronic stress exposure modulates reward-related medial prefrontal cortex responses to acute stress in depression. *Journal of Affective Disorders*, **180**, 104-111.
96. Auerbach, R.P., Stanton, C.H., Proudfit, G.H., **Pizzagalli, D.A.** (2015). Self-referential processing in adolescent depression: A high-density ERP study. *Journal of Abnormal Psychology*, **124**, 233-245.
97. Dillon, D.G.*, Wiecki, T.*, Pechtel, P., Webb, C., Goer, F., Murray, L., Trivedi, M., Fava, M., McGrath, P.J., Weissman, M., Parsey, R., Kurian, B., Adams, P., Carmody, T., Weyandt, S., Shores-Wilson, K., Toups, M., McInnis, M., Oquendo, M.A., Cusin, C., Deldin, P., Bruder, G., **Pizzagalli, D.A.** (2015). A computational analysis of Flanker interference in depression. *Psychological Medicine*, **45**, 2333-2344.
98. Kaiser, R.H., Andrews-Hanna, J.R., Wager, T.D., **Pizzagalli, D.A.** (2015). Large-scale network dysfunction in Major Depressive Disorder: Meta-analysis of resting-state functional connectivity. *JAMA Psychiatry*, **72**, 603-611.
99. Beard, C., Donahue, R.J., Dillon, D.G., Van't Veer, A., Webber, C., Lee, J., Barrick, E., Hsu, K.J., Foti, D., Carroll, F.Y., Carlezon, W.A., Jr., Björgvinsson, T., **Pizzagalli, D.A.** (2015). Abnormal error processing in depressive states: A Translational examination in humans and rats. *Translational Psychiatry*. (2015) **5**, e564; doi:10.1038/tp.2015.54
100. Fletcher, K., Parker, G., Paterson, A., Fava M., Iosifescu, D., **Pizzagalli, D.A.** (2015). Anhedonia

- in melancholic and non-melancholic depressive disorders. *Journal of Affective Disorders*, **184**, 81-88.
101. Auerbach, R.P., Stewart, J.G., Stanton, C.H., Mueller, E.M., **Pizzagalli, D.A.** (2015). Emotion processing biases and resting EEG activity in depressed adolescents. *Depression and Anxiety*, **32**, 693-701.
 102. Janes, A.C.* , Pedrelli, P.* , Whitton, A.E., Pechtel, P., Douglas, S., Martinson, M.A., Huz, I., Fava, M., **Pizzagalli, D.A.****, Evins, A.E.** (2015). Reward responsiveness varies by smoking status in women with a history of major depressive disorder. *Neuropsychopharmacology*, **40**, 1940-1946 [*These authors made equal contributions; **These authors made equal senior contributions.]
 103. Peechatka, A.L., Whitton, A.E., Farmer, S.L., **Pizzagalli, D.A.**, Janes, A.C. (2015). Cigarette craving is associated with blunted reward processing in nicotine-dependent smokers. *Drug and Alcohol Dependence*, **155**, 202-207.
 104. Hsu, K.J., Beard, C., Rifkin, L., Dillon, D.G., **Pizzagalli, D.A.**, Björgvinsson, T. (2015). Transdiagnostic mechanisms in depression and anxiety: The role of rumination and attentional control. *Journal of Affective Disorders*, **188**, 22-27.
 105. Admon, R., **Pizzagalli, D.A.** (2015). Corticostriatal pathways contribute to the natural time course of positive mood. *Nature Communications*. 6:10065 doi: 10.1038/ncomms10065 (2015).
 106. Mueller, E.M., **Pizzagalli, D.A.** (2016). One year old fear memories rapidly activate human fusiform gyrus. *Social Cognitive & Affective Neuroscience*, **11**, 308-316.
 107. Webb, C.A., Dillon, D.G., Pechtel, P., Goer, F., Murray, L., Huys, Q.J.M., Fava, M., McGrath, P.J., Weissman, M., Parsey, R., Kurian, B., Adams, P., Weyandt, S., Trombello, J., Grannemann, B., Cooper, C., Deldin, P., Tenke, C., Trivedi, M., Bruder, G., **Pizzagalli, D.A.** (2016). Neural correlates of three promising endophenotypes of depression: Evidence from the EMBARC study. *Neuropsychopharmacology*, **41**, 454-463.
 108. Whitton, A.E., Kakani, P., Foti, D., Van't Veer, A., Haile, A., Crowley, D.J., **Pizzagalli, D.A.** (2016). Blunted neural responses to reward in remitted Major Depression: A high-density event-related potential study. *Biological Psychiatry: Cognitive Neuroscience and Neuroimaging*, **1**, 87-95.
 109. Kaiser, R.H., Whitfield-Gabrieli, S., Dillon, D.G., Goer, F., Beltzer, M., Minkel, J., Smoski, M., Dichter, G., **Pizzagalli, D.A.** (2016). Dynamic resting-state functional connectivity in Major Depression. *Neuropsychopharmacology*, **41**, 1822-1830.
 110. Norton, D.J., McBain, R.K., **Pizzagalli, D.A.**, Cronin-Golomb, A., Chen, Y. (2016). Dysregulation of visual motion inhibition in major depression. *Psychiatry Research*, **240**, 214-221.
 111. Trivedi, M.H., McGrath, P.J., Fava, M., Parsey, R.V., Kurian, B.T., Phillips, M.L., Oquendo, M.A., Bruder, G., **Pizzagalli, D.**, Toups, M., Cooper, C., Adams, P., Weyandt, S., Morris, D.W., Grannemann, B., Ogden, R.T., Buckner, R., McInnis, M., Kraemer, H.C., Petkova, E., Carmody, T.J., Weissman, M.M. (2016). Establishing moderators and biosignatures of antidepressant response in clinical care (EMBARC): Rationale and design. *Journal of Psychiatric Research*, **78**, 11-23.
 112. Corral-Frías, N.S., **Pizzagalli, D.A.**, Carré, J, Michalski, L.J., Nikolova, Y.S., Perlis, R.H., Fagerness, J., Conley, E.D., Lee, M.R., Lancaster, T.M., Haddad, S., Wolf, A., Hariri, A.R., Smoller, J.W., Bogdan, R. (2016). A common genetic variant in Catechol-O-methyl-transferase is associated with individual differences in reward-related response bias. *Genes, Brain and Behavior*, **15**, 503-513.

113. Lewandowski, K.E., Whitton, A.E., **Pizzagalli, D.A.**, Norris, L.A., Ongur, D., Hall, M.H. (2016). Reward learning, neurocognition, social cognition, and symptomatology in psychosis. *Frontiers in Psychiatry*, 7:100.doi: 10.3389/fpsyt.2016.00100
114. Auerbach, R.P., Bondy, E., Stanton, C.H., Webb, C.A., Shankman, S.A., **Pizzagalli, D.A.** (2016). Self-referential processing in adolescents: Stability of behavioral and event-related potential markers. *Psychophysiology*, **53**, 1398-1406.
115. Sawyer, A.T., Liverant, G.I., Jun, J.J., Lee, D.J., Cohen, A.L., Dutra, S.J., **Pizzagalli, D.A.**, Sloan, D.M. (2016). Punishment learning in veterans with posttraumatic stress disorder. *Journal of Traumatic Stress*, **29**, 374-378.
116. Berghorst, L.H.* , Kumar, P.* , Greve, D.N., Deckersbach, T., Ongur, D., Dutra, S., **Pizzagalli, D.A.** (2016). Stress and reward processing in bipolar disorder: An fMRI study. *Bipolar Disorders*, **18**, 602-611. [*Co-first authors]
117. Muench, H.M., Westermann, S., **Pizzagalli, D.A.**, Hofmann, S.G., Mueller, E.M. (2016). Self-relevant threat contexts enhance early processing of fear-conditioned faces. *Biological Psychology*, **121**, 194-202.
118. Auerbach, R.P., Tarlow, N., Bondy, E., Stewart, J.G., Aguirre, B., Kaplan, C., Yang, W., **Pizzagalli, D.A.** (2016). Electrocortical reactivity during self-referential processing in female youth with Borderline Personality Disorder. *Biological Psychiatry: Cognitive Neuroscience and Neuroimaging*, **1**, 335-344.
119. Admon, R.* , Kaiser, R.H.* , Dillon, D.G., Beltzer, M., Goer, F., Olson, D.P., Vitaliano, G., **Pizzagalli, D.A.** (2017). Dopaminergic enhancement of striatal response to reward in major depression. *American Journal of Psychiatry*, **174**, 378-386. [*Co-first authors]
120. Delaparte, L., Yeh, F.C., Adams, P., Malchow, A., Trivedi, M.H., Oquendo, M.A., Deckersbach, T., Ogden, T., **Pizzagalli, D.A.**, Fava, M., Cooper, C., McInnis, M., Kurian, B.T., Weissman, M.M., McGrath, P.J., Klein, D.N., Parsey, R.V., DeLorenzo, C. (2017). A comparison of structural connectivity in anxious depression versus non-anxious depression. *Journal of Psychiatric Research*, **89**, 38-47.
121. Tenke, C.E., Kayser, J., Pechtel, P., Webb, C.A., Dillon, D.G., Goer, F., Murray, L., Deldin, P., Kurian, B.T., McGrath, P.J., Parsey, R., Trivedi, M., Fava, M., Weissman, M.M., McInnis, M., Abraham, K., Alvarenga, J., Alschuler, D.M., Cooper, C., **Pizzagalli, D.A.**, Bruder, G.E. (2017). Demonstrating test-retest reliability of electrophysiological measures for healthy adults in a multisite study of biomarkers of antidepressant treatment response. *Psychophysiology*, **54**, 34-50.
122. Webb, C.A., Auerbach, R.P., Bondy, E., Stanton, C.H., Foti, D.J., **Pizzagalli, D.A.** (2017). Abnormal neural responses to feedback in depressed adolescents. *Journal of Abnormal Psychology*, **126**, 19-31.
123. Whitton, A.E., Van't Veer, A., Kakani, P., Dillon, D.G., Ironside, M.L., Haile, A., Crowley, D.J., **Pizzagalli, D.A.** (2017). Acute stress impairs frontocingulate activation during error monitoring in remitted depression. *Psychoneuroendocrinology*, **75**, 164-172.
124. Der-Avakian, A., D'Souza, M.S., Potter, D., Chartoff, E.H., Carlezon, W.A. Jr, **Pizzagalli, D.A.***, Markou, A.* (2017). Social defeat disrupts reward learning and potentiates striatal nociceptin/orphanin FQ mRNA in rats. *Psychopharmacology*, **234**, 1603-1614. [*These authors made equal senior contributions.]
125. Barch, D.M., Carter, C.C., Gold, J.M., Johnson, S.L., Kring, A.M., MacDonald, A.W. III, **Pizzagalli, D.A.**, Ragland, J.D., Silverstein, S.M., Strauss, M.E. (2017). Explicit and implicit reinforcement learning across the psychosis spectrum. *Journal of Abnormal Psychology*. 2017 Apr 13. doi: 10.1037/abn0000259. [Epub ahead of print]

126. Auerbach, R.P., Pisoni, A., Bondy, E., Kumar, P., Stewart, J.G., Yendiki, A., **Pizzagalli, D.A.** (2017). Neuroanatomical prediction of anhedonia in adolescents. *Neuropsychopharmacology*. doi:10.1038/npp.2017.28; accepted article preview online February 6, 2017.
127. Treadway, M.T., Admon, R., Arulpragasam, A.R., Mehta, M., Douglas, S., Vitaliano, G., Olson, D.P., Cooper, J.A., **Pizzagalli, D.A.** (2017). Association between interleukin-6 and striatal prediction-error signals following acute stress in healthy females. *Biological Psychiatry*. 2017 Mar 28. pii: S0006-3223(17)31371-9. doi: 10.1016/j.biopsych.2017.02.1183. [Epub ahead of print]
128. Jensen, J.E.*, Auerbach, R.P.*, Pisoni, A., **Pizzagalli, D.A.** (in press). Localized MRS reliability of in vivo glutamate at 3 Tesla in shortened scan times: A feasibility study. *NMR in Biomedicine*. [*Co-first authors]
129. Admon, R.*, Treadway, M.T.*, Valeri, L., Mehta, M., Douglas, S., **Pizzagalli, D.A.** (in press). Distinct trajectories of cortisol response to prolonged acute stress are linked to affective responses and hippocampal gray matter volume in healthy females. *Journal of Neuroscience*. [*Co-first authors]
130. Whitton, A.E., Deccy, S., Ironside, M.L., Kumar, P., Beltzer, M., **Pizzagalli, D.A.** (in press). EEG source functional connectivity reveals abnormal high-frequency communication among large-scale functional networks in depression. *Biological Psychiatry: Cognitive Neuroscience and Neuroimaging*.

Other Peer-Reviewed Publications

1. Davidson, R.J., **Pizzagalli, D.**, Nitschke, J.B., Putnam, K. (2002). Depression: Perspectives from affective neuroscience. *Annual Review of Psychology*, **53**, 545-574.
2. Dillon, D.G., **Pizzagalli, D.A.** (2007). Inhibition of action, thought, and emotion: A selective neurobiological review. *Applied & Preventive Psychology*, **12**, 99-114.
3. Lavric, A., Pizzagalli, D., Forstmeier, S., Rippon, G. (2001). Mapping dissociations in verb morphology. *Trends in Cognitive Sciences*, **5**, 301-308.
4. Dillon, D.G., Deveney, C.M., **Pizzagalli, D.A.** (2011). From basic processes to real-world problems: How research on emotion and emotion regulation can inform understanding of psychopathology, and vice versa. *Emotion Review*, **3**, 74-82.
5. **Pizzagalli, D.A.** (2011). Frontocingulate dysfunction in depression: Towards biomarkers of treatment response. *Neuropsychopharmacology Review*, **36**, 183-206. [Ranks in the top 1% based on a highly cited threshold for the field of Psychiatry/Psychology and publication year (source: ISI Thompson Reuters.)]
6. Pechtel, P., **Pizzagalli, D.A.** (2011). Effects of early life stress on cognitive and affective function: An integrated review of human literature. *Psychopharmacology*, **214**, 55-70.
7. Bogdan R., Nikolova, Y.S., **Pizzagalli, D.A.** (2013). Neurogenetics of depression: A focus on reward processing and stress sensitivity. *Neurobiology of Disease*, **52**, 12-23.
8. Dillon, D. G., Rosso, I. M., Pechtel, P., Killgore, W. D. S., Rauch, S. L., **Pizzagalli, D.A.** (2014). Peril and pleasure: an RDoC-inspired examination of threat responses and reward processing in anxiety and depression. *Depression and Anxiety*, **31**, 233-249.
9. Auerbach, R.P., Admon, R., **Pizzagalli, D.A.** (2014). Adolescent depression: Stress and reward dysfunction. *Harvard Review of Psychiatry*, **22**, 139-148.
10. **Pizzagalli, D.A.** (2014). Depression, stress, and anhedonia: Toward a synthesis and integrated model. *Annual Review of Clinical Psychology*, **10**, 393-423. [Ranks in the top 1% based on a highly cited threshold for the field of Psychiatry/Psychology and publication year (source: ISI Thompson

Reuters.]

11. Treadway, M.T., **Pizzagalli, D.A.** (2014). Imaging the pathophysiology of Major Depressive Disorder – From localist models to circuit-based analysis. *Biology of Mood & Anxiety Disorders*, 2014 4:5.
12. Whitton, A.E., Treadway, M.T, **Pizzagalli, D.A.** (2015). Reward processing dysfunction in major depression, bipolar disorder and schizophrenia. *Current Opinion in Psychiatry*, **28**, 7-12.
13. Admon, R., **Pizzagalli, D.A.** (2015). Dysfunctional reward processing in depression. *Current Opinion in Psychology*, **4**, 114-118.
14. Der-Avakian, A., Barnes, S.A., Markou, A., **Pizzagalli, D.A.** (2016). Translational Assessment of Reward and Motivational Deficits in Psychiatric Disorders. *Current Topics in Behavioral Neurosciences*, **28**, 231-262.
15. Rizvi, S.J., **Pizzagalli, D.A.**, Sproule, B.A., Kennedy, S.H. (2016). Assessing anhedonia in depression: Potentials and pitfalls. *Neuroscience & Biobehavioral Reviews*, **65**, 21-35.
16. **Pizzagalli, D.A.**, Carlezon, W.A., Jr. (2017). Error processing in depressive states: A translational opportunity? *Neuropsychopharmacology Review*, **42**, 372.

Commentaries/Letters to the Editor

1. **Pizzagalli, D.A.**, Deveney, C.M. (2005). Impaired hedonic capacity in major depressive disorder: Impact on affiliative behaviors. *Behavioral and Brain Sciences*, **28**, 362-363. [Invited commentary]
2. **Pizzagalli, D.A.** (2005). The role of frontocingulate pathways in the emotion-cognition interface: Emerging clues from depression. *Behavioral and Brain Sciences*, **28**, 214-215. [Invited commentary]
3. **Pizzagalli, D.A.** (2010). The "anhedonia paradox" in schizophrenia: Insights from affective neuroscience. *Biological Psychiatry*, **67**, 899-901. [Invited commentary]
4. Kaiser, R.H, **Pizzagalli, D.A.** (2015). Dysfunctional connectivity in the depressed adolescent brain. *Biological Psychiatry*, **78**, 594-595. [Invited commentary]
5. Krystal, J.H., ... **Pizzagalli, D.A.**, ... (2016). Constance E. Lieber, Theodore R. Stanley, and the enduring impact of philanthropy on psychiatry research. *Biological Psychiatry*, **80**, 84-86. [Invited commentary] (42nd author among 64 co-authors ordered alphabetically).
6. **Pizzagalli, D.A.** (2016). Psychobiology of the intersection and divergence of depression and anxiety. *Depression and Anxiety*, **33**, 891-894. [Editorial, Special Issue].

Book Chapters

1. **Pizzagalli, D.**, Koenig, T., Regard, M., Lehmann, D. (1997). Event-related potential fields and general affective style for presented face images. In: H. Witte, U. Zwiener, B. Schack and A. Doering (Eds.), *Quantitative and topological EEG and MEG analysis*. Jena: Druckhaus Mayer Verlag GmbH, pp. 467-470.
2. Lehmann, D., Koenig, T., **Pizzagalli, D.** (1999). Gedanken und Emotionen im elektrischen Feld des Hirns. In: W. Machleidt, H. Haltenhof und P. Garlipp (Eds.), *Schizophrenie - eine affektive Erkrankung?* Stuttgart: Schattauer, pp. 31-43.
3. Treves, A., **Pizzagalli, D.** (2002). Vigilance and perception of social stimuli: Views from ethology and social neuroscience. In: M. Bekoff, C. Allen and G. Burghardt (Eds.), *The Cognitive Animal: Empirical and Theoretical Perspectives on Animal Cognition*. Cambridge: The MIT Press, pp. 463-469.
4. Davidson, R.J., **Pizzagalli, D.**, Nitschke, J.B. (2002). The representation and regulation of emotion

- in depression: Perspectives from affective neuroscience. In: I. Gotlib and C. Hammen (Eds.), *Handbook of Depression*. New York: Guilford Press, pp. 219-244.
5. **Pizzagalli, D.**, Lehmann, D., Koenig, T., REGARD, M., Pascual-Marqui, R. D. (2002). Face-elicited ERPs and affective attitude: Brain electrical microstate and tomography analyses. In: J.T. Cacioppo, G.G. Berntson, R. Adolphs, C.S. Carter, R.J. Davidson, M.K. McClintock, B.S. McEwen, M.J. Meaney, D.L. Schacter, E.M. Sternberg, S.S. Suomi, S.E. Taylor (Eds.), *Foundations in Social Neuroscience*. Cambridge: The MIT Press, pp. 599-614.
 6. **Pizzagalli, D.**, Hendrick, A.M., Horras, K.A., Davidson, R.J. (2002). Anterior cingulate theta activity is associated with degree of treatment response in major depression. In: K. Hirata, Y. Koga, K. Nagata, K. Yamazaki (Eds.), *Recent Advances in Human Brain Mapping. Proceedings of the 12th World Congress of the International Society for Brain Electromagnetic Topography (ISBET 2001)*. Excerpta Medica, International Congress Series 1232. Amsterdam: Elsevier Science B.V., pp. 711-7.
 7. Davidson, R.J., **Pizzagalli, D.**, Nitschke, J.B., Kalin, N.H. (2003). Parsing the subcomponents of emotion and disorders of emotion: Perspectives from affective neuroscience. In: R.J. Davidson, K.R. Scherer, H.H., Goldsmith (Eds.), *The Handbook of Affective Science*. Oxford: University Press, pp. 8-24.
 8. **Pizzagalli, D.**, Shackman, A.J., Davidson, R.J. (2003). The functional neuroimaging of human emotion: Asymmetric contributions of cortical and subcortical circuitry. In: K. Hugdahl and R.J. Davidson (Eds.), *The Asymmetrical Brain*. Cambridge: MIT Press, pp. 511-532.
 9. **Pizzagalli, D.A.** (2007). Electroencephalography and High-Density Electrophysiological Source Localization. In: J.T. Cacioppo, L.G. Tassinary, G.G. Berntson (Eds.), *Handbook of Psychophysiology* (3rd Edition). Cambridge, U.K.: Cambridge University Press, pp. 56-84.
 10. Davidson, R.J., **Pizzagalli, D.**, Nitschke, J.B. (2009). The representation and regulation of emotion in depression: Perspectives from affective neuroscience. In: I. Gotlib and C. Hammen (Eds.), *Handbook of Depression* (2nd edition). New York: Guilford Press, pp. 218-248.
 11. **Pizzagalli, D.A.** (2009). Anhedonia. In: D. Sander and K.R. Scherer (Eds.), *The Oxford Companion to Emotion and the Affective Sciences*. New York: Oxford University Press, p. 33.
 12. Dillon, D.G., **Pizzagalli, D.A.** (2010). Maximizing positive emotions: A translational, transdiagnostic look at positive emotion regulation. In: A. M Kring and D. M. Sloan (Eds.), *Emotion Regulation and Psychopathology*, Guilford Press, New York, pp. 229-252.
 13. Berghorst, L., **Pizzagalli, D.A.** (2010). Defining depression endophenotypes. In C.E. Beyer and S.A. Stahl (Eds.), *Next Generation Antidepressants. Moving Beyond Monoamines To Discover Novel And Differentiated Treatment Strategies For Mood Disorders*. Cambridge University Press, pp. 70-89.
 14. **Pizzagalli, D.A.**, Dillon, D.G., Bogdan, R., Holmes, A. (2011). Reward and punishment processing in the human brain: Clues from affective neuroscience and implications for depression research. In: O. Vartanian and D. Mandel (Eds.), *Neuroscience of Decision Making*. New York: Psychology Press, pp. 199-220.
 15. **Pizzagalli, D.A.**, Treadway, M.T. (2014). Neuroimaging approaches to the study of Major Depressive Disorder: From regions to circuits. In: I.H. Gotlib, C.L. Hammen (Eds.), *Handbook of Depression*, 3rd Edition. New York: Guilford, pp. 202-219.
 16. Webb, C. A., **Pizzagalli, D.A.** (in press). Sadness and depression. In: M. Lewis, J. M. Haviland-Jones, and L.F. Barrett (Eds.), *The Handbook of Emotion*, 4th Edition. New York: Guilford.
 17. Rosso, I.M., Dillon, D.G., **Pizzagalli, D.A.**, Rauch SL. (2015) Translational perspectives on anxiety disorders and the Research Domain Criteria construct of potential threat. In K.J. Ressler, D. Pine, B.O. Rothbaum (Eds.), *Anxiety Disorders: Translational Perspectives on Diagnosis and Treatment*.

New York, Oxford University Press.

18. **Pizzagalli, D.A.**, Whitton, A.E., Webb, C.A. (in press). Mood Disorders. In James N. Butcher, Jill Hooley, Philip D. Kendall (Eds). APA Handbook of Psychopathology, American Psychological Association.

Theses

M.S. Thesis

Pizzagalli, D. (1995). EEG Reaktivität auf verbale Stimuli im Schlaf [EEG reactivity to verbal stimuli during sleep]. Master Thesis in Psychology, University of Zurich (Institute of Psychology), Zurich, Switzerland.

Ph.D. Thesis

Pizzagalli, D. (1998). Face, Word, and Emotional Processing: Electrophysiological (EEG and ERP) studies on emotions with a focus on personality. Ph.D. Thesis presented to the Faculty of Arts of the University of Zurich, Zurich, Switzerland.

Abstracts, Poster Presentations, and Exhibits Presented at Professional Meetings during the past three years

1. Beltzer, M., Goer, F., Kaiser, R., Whitton, A., Pechtel, P., Olson, D., Vitaliano, G., McCormack, H., Teicher, M., **Pizzagalli, D.A.** (2015, January). A preliminary analysis of reward processing and affect under stress in depression and childhood sexual abuse. [Poster presented at the 2015 McLean Research Day, Belmont, MA, USA, January 21, 2015]
2. Demers, L., Weber, M., Rauch, S.L., Killgore, W.D.S., **Pizzagalli, D.A.**, Schwab, Z., Rosso, I.M. (2015, January). Negative information-processing bias in social anxiety disorder masks the bias towards negative information in major depressive disorder. [Poster presented at the 2015 McLean Research Day, Belmont, MA, USA, January 21, 2015]
3. Goer, F., Wooten, D., Beltzer, M., Vitaliano, G., Brennan, B., Brooks, N., Crowley, D., Alpert, N., Normandin, M., El Fakhri, G., **Pizzagalli, D.A.** (2015, January). Reduced Striatal Dopamine Transporter Binding in Major Depressive Disorder. [Poster presented at the 2015 McLean Research Day, Belmont, MA, USA, January 21, 2015]
4. Ironside, M.L., Whitton, A.E., Treadway, M.T., Jensen, J.E., Farabaugh, A., Deckersbach, T., , Ongür, D., O'Connor, L., **Pizzagalli, D.A.** (2015, January). Reward learning across the mood disorder spectrum. [Poster presented at the 2015 McLean Research Day, Belmont, MA, USA, January 21, 2015]
5. Mehta, M., Treadway, M.T., Admon, R., Douglas, S.R., Vitaliano, G.D, Olson, D.P., Pizzagalli, D.A. Role of the Medial Prefrontal Cortex in reward-guided learning. [Poster presented at the 2015 McLean Research Day, Belmont, MA, USA, January 21, 2015]
6. Peechatka, A.L., Whitton, A.E., Farmer, S.L., **Pizzagalli, D.A.**, Janes, A.J. (2015, January). Cigarette craving is associated with blunted reward processing in nicotine-dependent smokers. [Poster presented at the 2015 McLean Research Day, Belmont, MA, USA, January 21, 2015]
7. Auerbach R., Pisoni, A., Stanton, C., Kumar, P., **Pizzagalli, D.A.** (2015, March). Examining the positive and negative valence systems in adolescents of affectively-ill mothers. [Oral presentation at the 2015 Biennial Meeting of the Society for Research in Child Development (SRCD), Philadelphia, PE, March 19-21, 2015.]
8. Hall, M.H., Whitton, A.E., Mallya, S.G., Douglas, S., Spencer, K.M., Cohen, B.M., Levy, D.L., Smoller, J.W., Öngür, D., Pizzagalli, D.A. (2015, April). Associations among reward-based learning, mood symptoms, and their relation to brain neurophysiology in schizophrenia and bipolar

- disorder. [Poster presented at 2015 Harvard Medical School Psychiatry Research Day, Boston, MA, April 8, 2015.]
9. Admon, R., **Pizzagalli, D.A.** (2015, April). Inability to sustain positive mood in remitted individuals with recurrent depression. [Oral presentation at the Annual Meeting of the Anxiety and Depression Association of America (ADAA), Miami, FL, USA, April 9-12, 2015.]
 10. Auerbach, R.P., Pisoni, A., Kumar, P., Stanton, C.H., **Pizzagalli, D.A.** (2015, April). Toward identification of neural predictors of adolescent depression. [Oral presentation at the Annual Meeting of the Anxiety and Depression Association of America (ADAA), Miami, FL, USA, April 9-12, 2015.]
 11. Beltzer, M., Admon, R., Olson, D., Vitaliano, G., Goer, F., Pizzagalli, D.A. (2015, April). Dopaminergic enhancement leads to improved neural response to reward in major depression: Preliminary evidence. [Poster presented at the Annual Meeting of the Anxiety and Depression Association of America (ADAA), Miami, FL, USA, April 9-12, 2015.]
 12. Webb, C.A., Auerbach, R.P., Stanton, C.H., Soulitious, E., **Pizzagalli, D.A.** (2015, April). Differential neural response to feedback in depressed adolescents: A high-density ERP study. [Oral presentation at the Annual Meeting of the Anxiety and Depression Association of America (ADAA), Miami, FL, USA, April 9-12, 2015.]
 13. Whitton, A.E., Treadway, M.T., Ironside, M.L., Jensen, J.E., Farabaugh, A., Deckersbach, T., **Pizzagalli, D.A.** (2015, April). A multi-modal assessment of positive valence systems across unipolar and bipolar depression. [Oral presentation at the Annual Meeting of the Anxiety and Depression Association of America (ADAA), Miami, FL, USA, April 9-12, 2015.]
 14. Dillon, D.G., Frank, M., **Pizzagalli, D.A.** (2015, April). Positive reinforcement enhances encoding of upcoming information. [Oral presentation at the 8th Annual Meeting of the Social & Affective Neuroscience Society, Boston, MA, April 23-25, 2015.]
 15. Whitton, A.E., Treadway, M.T., Ironside, M.L., Jensen, E., Farabaugh, A., Deckersbach, T., Ongur, D., **Pizzagalli, D.A.** (2015, April). A multi-modal assessment of positive valence systems across mood disorders. [Poster presented at the 8th Annual Meeting of the Social & Affective Neuroscience Society, Boston, MA, April 23-25, 2015.]
 16. Mueller, E.M., **Pizzagalli, D.A.** (2015, May). Human remote fear memory recall rapidly activates fusiform gyrus one year after conditioning. [Oral presentation at the European Meeting for Human Fear Conditioning, Bochum, Germany, May 4-6, 2015.]
 17. Mueller, E.M., **Pizzagalli, D.A.** (2015, June). One-year-old fear memories rapidly activate human fusiform gyrus. [Oral presentation at the Annual Meeting of the German Society for Psychophysiology, Frankfurt am Main, Germany, June 4-6, 2015.]
 18. Norris, L.A., Whitton, A.E., Öngür, D., Cohen, B.M., Keshavan, M.S., **Pizzagalli, D.A.**, Hall, M.H., Lewandowski, K.E. (2015, June). Reward processing as a predictor of adherence to a cognitive remediation treatment protocol. [Poster presented at 18th Annual Cognitive Remediation in Psychiatry Conference, New York, NY, June 5, 2015.]
 19. Mueller, E.M., **Pizzagalli, D.A.** (2015, September). Human remote fear memory recall rapidly activates fusiform gyrus one year after conditioning. [Oral presentation at the Annual Meeting of the Society for Psychophysiological Research, Seattle, WA, September 30-October 3, 2015.]
 20. Mathersul, D., Ruscio, A.M., Medaglia, J.D., Wu, H., Weber, M.J., **Pizzagalli, D.A.** (2015, September). Neural reactivity to monetary gain and loss in depression and anxiety. [Oral presentation at the Annual Meeting of the Society for Psychophysiological Research, Seattle, WA, September 30-October 3, 2015.]

21. Vrieze, E, **Pizzagalli, D.A.**, Hompes, T., Demyttenaere, K., Sienaert, P, de Boer, P., Schmidt, M., Claes, S. (2015, November). Interplay between stress hormone responses and impaired reward learning ability in major depressive disorder: A longitudinal study. *Psychoneuroendocrinology*. 2015 Nov;61:57-8.
22. Liverant, G.I., Rosebrock, L, Sloan, D., **Pizzagalli, D.A.**, Kamholz (2015, November). Associations among smoking, anhedonia, and reward learning in depression. [Oral presentation at the 49th Annual Meeting of the Association for Behavioral and Cognitive Therapies, Chicago, IL, November 12-15, 2015.]
23. Treadway, M.T., Barrick, E.M., Jensen, J.E., **Pizzagalli, D.A.** (2015, November). Effects of acute and chronic stress on medial prefrontal glutamate release and reinforcement learning: implications for pathophysiology of stress-induced anhedonia. [Oral presentation at the 49th Annual Meeting of the Association for Behavioral and Cognitive Therapies, Chicago, IL, November 12-15, 2015.]
24. Mathersul, D., Ruscio, A., Medaglia, J., Wu. H., Weber, M., **Pizzagalli D.A.** (2015, December). Neural reactivity to monetary gain and loss in depression and anxiety. [Oral presentation at the 25th Annual Conference of the Australasian Society for Psychophysiology, Sydney, Australia, December 2-4, 2015]. *Front. Hum. Neurosci. Conference Abstract: ASP2015 - 25th Annual Conference of the Australasian Society for Psychophysiology*. doi: 10.3389/conf.fnhum.2015.219.00042
25. Brennan, B.P., Admon, R., Jensen, J.E., Pechtel, P., Perriello, C., Ryan, E.M., **Pizzagalli, D.A.**, Hudson, J.I., Pope, H.G. (2016, January). Acute change in anterior cingulate cortex glutamine/glutamate ratio is associated with response to citalopram in Major Depression. [Poster presented at McLean Research Day, Belmont, MA, January 20, 2016.]
26. Clegg, R., Kaiser, R., Goer, F., Beltzer, M., Petchel, P., Whitton, A.E., Vitaliano, G., Olson, D., Brooks, N., Scott, L.A., **Pizzagalli, D.A.** (2016, January). Corticolimbic dysfunction and rumination as mediating factors in the relationship between early life stress and depressive symptoms. [Poster presented at McLean Research Day, Belmont, MA, January 20, 2016.]
27. Dubois, M., Kumar, P., Berghorst, L.A., Di Simplicio, M., Alfarano, G., **Pizzagalli, D.A.** (2016, January). Examining abnormal reward learning in bipolar disorder. [Poster presented at McLean Research Day, Belmont, MA, January 20, 2016.]
28. Fukunaga, R., Kaiser, R., Olson, E.A., Webb, C., Killgore, W.D.S., **Pizzagalli, D.A.**, Rauch, S.L., Rosso, I.M. (2016, January). Resting-state medial prefrontal cortex connectivity in major depression reveals increased connectivity with the lateral prefrontal cortex and thalamus. [Poster presented at McLean Research Day, Belmont, MA, January 20, 2016.]
29. Green, I., Parsons, E., Capitaio, L., **Pizzagalli, D.A.**, Kumar, P. (2016, January). Impaired social reward learning in dysphoria. [Poster presented at McLean Research Day, Belmont, MA, January 20, 2016.]
30. Ironside, M.L., Whitton, A.E., Treadway, M.T., Jensen, J.E., Farabaugh, A., Deckersbach, T., Öngür, D., **Pizzagalli, D.A.** (2016, January). Reward learning across the mood disorder spectrum. [Poster presented at McLean Research Day, Belmont, MA, January 20, 2016.]
31. Mehta, M., Admon, R., Treadway, M.T., Douglas, S.R., Vitaliano, G.D., Olson, D.O., **Pizzagalli, D.A.** (2016, January). Temporal unfolding of positive and negative affect following an ecologically valid social stressor. [Poster presented at McLean Research Day, Belmont, MA, January 20, 2016.]
32. Sperl, M. F. J., Panitz, C., Rosso, I. M., Dillon, D. G., Kumar, P., Hermann, A., Hermann, C., **Pizzagalli, D. A.**, Mueller, E. M. (2016, January). Modulation of theta oscillations by fear conditioning and extinction during simultaneous EEG and fMRI. [Poster presented at McLean Research Day, Belmont, MA, January 20, 2016.]

33. Uhl, A.A., Kumar, P., Beltzer, M., Murray, L., Vitaliano, G., Olson, D., **Pizzagalli, D.A.** (2016, January). Reduced nucleus accumbens response during social reinforcement learning in Major Depressive Disorder. [Poster presented at McLean Research Day, Belmont, MA, January 20, 2016.]
34. Yuan, M., Whitton, A.E., Ironside, M., **Pizzagalli, D.A.** (2016, January). Differences in delay discounting across the mood disorder spectrum: A high-density event-related potential study. [Poster presented at McLean Research Day, Belmont, MA, January 20, 2016.]
35. Bondy, E., Webb, C., **Pizzagalli, D.**, Auerbach, R. (2016, March). Cognitive behavior therapy for depressed adolescents: Normalization of electrocortical reactivity during self-referential processing. [Poster presented at 36th Annual Conference of the Anxiety and Depression Association of America (ADAA), Philadelphia, PA, March 31-April 3, 2016.]
36. Brennan, B., Admon, R., Pechtel, P., Perriello, C., Ryan, E., **Pizzagalli, D.**, Hudson, J., Pope, H., Jensen, J. (2016, March). Acute increase in anterior cingulate cortex Glutamine/Glutamate ratio is associated with response to Citalopram in Major Depression. [Poster presented at 36th Annual Conference of the Anxiety and Depression Association of America (ADAA), Philadelphia, PA, March 31-April 3, 2016.]
37. Ironside, M., Whitton, A., Treadway, M., Jensen, J., Farabaugh, A., Deckersbach, T., Nierenberg, A., Alpert, J., Curren, L., Öngür, D., **Pizzagalli, D.** (2016, March). Anhedonia is associated with blunted neural response to reward across mood disorders. [Poster presented at 36th Annual Conference of the Anxiety and Depression Association of America (ADAA), Philadelphia, PA, March 31-April 3, 2016.]
38. Pisoni, A., Kumar, P., **Pizzagalli, D.**, Auerbach, R. (2016, March). Adolescent depression: Probing neural mechanisms underlying social reward processes. [Poster presented at 36th Annual Conference of the Anxiety and Depression Association of America (ADAA), Philadelphia, PA, March 31-April 3, 2016.]
39. Admon, R., Kaiser, R.H., Olson, D., Vitaliano, G., Dillon, D.G, **Pizzagalli, D.A.** (2016, May). Dopaminergic enhancement of striatal response to reward in major depression. [Oral presentation at the 71st Annual Meeting of the Society of Biological Psychiatry (SOBP), Atlanta, Georgia, USA, May 12-14, 2016.]
40. Arulpragasam, A.R., Treadway, M.T., Admon, R., Mehta, M., Douglas, S., Vitaliano, G.D., Olson, D.P., **Pizzagalli, D.A.** (2016, May). The Effects of acute stress on prediction error signaling in the nucleus accumbens during reinforcement learning. [Poster to be presented at the 71st Annual Meeting of the Society of Biological Psychiatry (SOBP), Atlanta, Georgia, USA, May 12-14, 2016.]
41. Auerbach, R.P., Pisoni, A., Kumar, P., Jensen, J.E., **Pizzagalli, D.A.** (2016, May). Toward identifying neural predictors of adolescent depression. [Poster to be presented at the 71st Annual Meeting of the Society of Biological Psychiatry (SOBP), Atlanta, Georgia, USA, May 12-14, 2016.]
42. Auerbach, R.P., Pisoni, A., Kumar, P., Kaiser, R., Jensen, J.E., **Pizzagalli, D.A.** (2016, May). Neurobiological and glutamatergic markers that predict anhedonia and depression in adolescents. [Oral presentation at the 71st Annual Meeting of the Society of Biological Psychiatry (SOBP), Atlanta, Georgia, USA, May 12-14, 2016.]
43. Kumar, P., Berghorst, L.A., Di Simplicio, M., Alfarano, G., Holmes, E., **Pizzagalli, D.A.** (2016, May). Examining abnormal reward learning in Bipolar Disorder. [Oral presentation at the 71st Annual Meeting of the Society of Biological Psychiatry (SOBP), Atlanta, Georgia, USA, May 12-14, 2016.]

44. Treadway, M., Barrick, E.M., Jensen, J.E., **Pizzagalli, D.A.** (2016, May). Effects of acute and chronic stress on medial prefrontal glutamate release and reinforcement learning. [Oral presentation at the 71st Annual Meeting of the Society of Biological Psychiatry (SOBP), Atlanta, Georgia, USA, May 12-14, 2016.]
45. Sperl, M.F.J., Panitz, C., Rosso, I.M., Dillon, D.G., Whitton, A.E., Kumar, P., Hermann, A., Hermann, C., **Pizzagalli, D.A.**, Mueller, E.M. (2016, May). Validierung eines experimentellen Paradigmas zur simultanen fMRT-EEG-Messung: Modulation von Theta-Oszillationen durch konditionierte und extinguierte Furcht. Psychology and The Brain Conference, Berlin, Germany, May 26-28, 2016.
46. Sperl, M.F.J., Panitz, C., Rosso, I.M., Dillon, D.G., Whitton, A.E., Kumar, P., Hermann, A., Hermann, C., **Pizzagalli, D.A.**, Mueller, E.M. (2016, September). Validation of an experimental paradigm for simultaneous fMRI-EEG: Modulation of theta oscillations by fear conditioning and extinction. *Psychophysiology*, **53**, S94 [Poster presented at the 56th Annual Meeting of the Society for Psychophysiological Research (SRP), Minneapolis, MN, September 21-25, 2016.]
47. Avery, B., Ironside, M., Ditcheva, M., Whitton, A.E., **Pizzagalli, D.A.**, Vrshek-Schallhorn, S. (2016, October). Trait sensitivity to reward moderates effects of negative evaluative stress on reward learning in males. [Poster presented at the 30th Annual Meeting of the Society for Research in Psychopathology, Baltimore, MD, September 29-October 2, 2016.]
48. Auerbach, R.P., Pisoni, A., Yendiki, A., Kumar, P., Stewart, J., **Pizzagalli, D.A.** (2016, October). Towards an integrated model of anhedonia in adolescents. [Oral presentation at the 30th Annual Meeting of the Society for Research in Psychopathology, Baltimore, MD, September 29-October 2, 2016.]
49. Clegg, R., Kaiser, R., Goer, F., Beltzer, M., Whitton, A.E., Vitaliano, G., Olson, D., Scott, L.A., **Pizzagalli, D.A.** (2016, October). Effect of early life stress on corticolimbic function and cortisol reactivity. [Poster presented at the 30th Annual Meeting of the Society for Research in Psychopathology, Baltimore, MD, September 29-October 2, 2016.]
50. Grove, T., Tso, Y., Chun, J., Mueller, S., Taylor, S., McInnis, M., Votta, C., Cheng, C., Yao, B., **Pizzagalli, D.A.**, Bruder, G., Tenke, C., Dillon, D., Cooper, C., Trivedi, M., McGrath, P., Weissman, M., Deldin, P. (2016, October). Negative affect and social functioning. [Poster presented at the 30th Annual Meeting of the Society for Research in Psychopathology, Baltimore, MD, September 29-October 2, 2016.]
51. Holmes, A., Patrick, L., Dillon, D., Kaiser, R., **Pizzagalli, D.A.**, Buckner, R., Öngür, D., Baker, J. (2016, October). Network-level fingerprints of psychiatric illness. [Oral presentation at the 30th Annual Meeting of the Society for Research in Psychopathology, Baltimore, MD, September 29-October 2, 2016.]
52. Kaiser, R., **Pizzagalli, D.A.** (2016, October). Childhood stress and grown-up brain circuits: Potential neurodevelopmental pathways to depression. [Oral presentation at the 30th Annual Meeting of the Society for Research in Psychopathology, Baltimore, MD, September 29-October 2, 2016.]
53. Whitton, A.E., Deccy, S., Ironside, M.L., **Pizzagalli, D.A.** (2016, October). Resting-state EEG source functional connectivity in depressive disorders. [Oral presentation at the 30th Annual Meeting of the Society for Research in Psychopathology, Baltimore, MD, September 29-October 2, 2016.]
54. Whitton, A.E., Deccy, S., Ironside, M.L., **Pizzagalli, D.A.** (2016, October). Resting-state EEG source functional connectivity in depressive disorders. [Oral presentation at the 30th Annual

Meeting of the Society for Research in Psychopathology, Baltimore, MD, September 29-October 2, 2016.]

55. Belleau, E., Gonenc, A., Dillon, D.G., Pizzagalli, D.A. (2017, January). An investigation of white matter integrity in Major Depressive Disorder. [Poster presented at McLean Research Day, Belmont, MA, January 18, 2017.]
56. Bondy, E., Lincoln, S.H., Pisoni, A., Kumar, P., **Pizzagalli, D.A.**, Auerbach, R.P. (2017, January). Neural markers underlying reward dysfunction predicts depression in adolescents. [Poster presented at McLean Research Day, Belmont, MA, January 18, 2017.]
57. Cardenas, E., Ironside, M., Clegg, R., Kaiser, R., Admon, R., Goer, F., Dillon, D., Olson, D., Vitaliano, G., **Pizzagalli, D.A.** (2017, January). Effects of amisulpride on reinforcement learning. [Poster presented at McLean Research Day, Belmont, MA, January 18, 2017.]
58. Clegg, R., Kaiser, R., Goer, F., Beltzer, M., Pechtel, P., Whitton, A.E., Vitaliano, G., Olson, D.P., Scott, L.A., Cardenas, E., **Pizzagalli, D.A.** (2017, January). Effects of early life stress on corticolimbic function and cortisol reactivity. [Poster presented at McLean Research Day, Belmont, MA, January 18, 2017.]
59. Green, I., **Pizzagalli, D.A.**, Kumar, P. (2017, January). Assessing the effectiveness of positive mood induction in individuals with low vs. moderate anhedonia. [Poster presented at McLean Research Day, Belmont, MA, January 18, 2017.]
60. Kang, M.S., Clegg, R., Frederick, B., Van der Feen, J., Aguirre, B., **Pizzagalli, D.A.**, Kaiser, R. (2017, January). Anomalies in resting-state network connectivity in adolescent depression. [Poster presented at McLean Research Day, Belmont, MA, January 18, 2017.]
61. Rutherford, A., Whitton, A.E., Treadway, M.T., Ironside, M.L., Jensen, J.E., Farabaugh, A., Deckersbach, T., Öngür, D., **Pizzagalli, D.A.** (2017, January). A multi-modal assessment of (hypo)manic and anhedonic symptomology across mood disorders. [Poster presented at McLean Research Day, Belmont, MA, January 18, 2017.]
62. Singleton, P., Bondy, E., Webb, C., **Pizzagalli, D.A.**, Auerbach, R. (2017, January). The impact of anhedonia on cognitive behavior therapy for depressed adolescents. [Poster presented at McLean Research Day, Belmont, MA, January 18, 2017.]
63. Zegel, M., **Pizzagalli, D.A.**, Janes, A.C. (2017, January). Nicotine improves symptoms of depression for non-smokers with Major Depressive Disorder. [Poster presented at McLean Research Day, Belmont, MA, January 18, 2017.]
64. Ironside, M., Admon, R., Kaiser, R., Dillon, D.G., Clegg, R., Beltzer, M., Goer, F., Olson, D.P., Vitaliano, G., **Pizzagalli, D.A.** (2017, April). Effects of childhood sexual abuse on positive versus negative reinforcement learning in MDD and resilient groups. [Poster presented at 37th Annual Conference of the Anxiety and Depression Association of America (ADAA), San Francisco, CA, April 6-9, 2017.]
65. Kang, M., Clegg, R., Frederick, B., Van der Feen, J., Aguirre, B., **Pizzagalli, D.A.**, Kaiser, R. (2017, April). Anomalies in resting-state network connectivity in adolescent depression. [Poster presented at 37th Annual Conference of the Anxiety and Depression Association of America (ADAA), San Francisco, CA, April 6-9, 2017.]
66. Rutherford, A.V., Whitton, A.E., Treadway, M.T., Ironside, M.L., Jensen, J.E., Farabaugh, A., Deckersbach, T., Öngür, D., **Pizzagalli, D.A.** (2017, April). A multi-modal assessment of (hypo)manic and anhedonic symptomology across mood disorders. [Poster presented at 37th Annual Conference of the Anxiety and Depression Association of America (ADAA), San Francisco, CA, April 6-9, 2017.]

67. Webb, C., Auerbach, R., Bondy, E., Stanton, C., Foti, D., **Pizzagalli, D.A.** (2017, April). Abnormal neural responses to wins and losses in adolescent depression: Time-domain and time-frequency decomposition analyses and relations to rumination. [Poster presented at 37th Annual Conference of the Anxiety and Depression Association of America (ADAA), San Francisco, CA, April 6-9, 2017.]
68. Liao, A., Walker, R., Carmody, T.J., Cooper, C., McInnis, M.G., Adams, P., **Pizzagalli, D.A.**, Kurian, B.T., Fava, M., Parsey, R., McGrath, P.J., Weissman, M.M., Trivedi, M.H. (2017, April). Anxiety and anhedonia in Major Depressive Disorder: The role of neuroticism, cognitive control, and reward learning. [Poster presented at 37th Annual Conference of the Anxiety and Depression Association of America (ADAA), San Francisco, CA, April 6-9, 2017.]
69. Ironside, M., Admon, R., Kaiser, R., Dillon, D.G., Clegg, R., Beltzer, M., Goer, F., Olson, D.P., Vitaliano, G., **Pizzagalli, D.A.** (2017, April). Effects of childhood sexual abuse on positive versus negative reinforcement learning in MDD and resilient groups. [Poster presented at Annual Harvard Medical School Psychiatry Research Day, Boston, MA, April 12, 2017.]
70. Nickels, S., Kangas, B., Robble, M., Bergman, J., Cardenas, E., Perlo, S., Carlezon, W., **Pizzagalli, D.A.** (2017, April). Novel cross-species neurophysiological assays for drug development: Stimuli validation for a human-rodent translational assay of cognitive control. [Poster presented at Annual Harvard Medical School Psychiatry Research Day, Boston, MA, April 12, 2017.]
71. Sturman, D.A., Webb, C.A., Fava, M., Tenke, C.E., Bruder, G., Trivedi, M., **Pizzagalli, D.A.**, and the EMBARC Team. (2017, April). Negative self-referential feelings in major depressive disorder: EEG and behavioral phenotype from the EMBARC study. [Poster presented at Annual Harvard Medical School Psychiatry Research Day, Boston, MA, April 12, 2017.]
72. Villegas, A.C., Lewis, S., Hurtado-Puerto, A., Dillon, D.G., **Pizzagalli, D.A.**, Camprodon, J.A. (2017, April). Using the Erickson Flanker Task to assess the cognitive impact of electroconvulsive therapy on executive control of attention. [Poster presented at Annual Harvard Medical School Psychiatry Research Day, Boston, MA, April 12, 2017.]
73. Webb, C.A., Trivedi, M., Fava, M., McGrath, P., Weissman, M., Parsey, R., Dillon, D.G., Pechtel, P., Goer, F., Trombello, J., Cooper, C., Deldin, P., Tenke, C.E., Carmody, T., Bruder, G., **Pizzagalli, D.A.** (2017, April). The incremental predictive validity of rostral anterior cingulate cortex activity in relation to treatment response in depression: Evidence from the EMBARC study. [Poster presented at Annual Harvard Medical School Psychiatry Research Day, Boston, MA, April 12, 2017.]
74. Webb, C.W., Trivedi, M., Fava, M., McGrath, P., Weissman, M., Parsey, R., Dillon, D., Pechtel, P., Goer, F., Adams, P., Trombello, J., Cooper, C., Deldin, P., Tenke, C., Carmody, T., Bruder, G., **Pizzagalli, D.A.** (2017, May). The incremental predictive validity of rostral anterior cingulate cortex activity in relation to treatment response in depression: Evidence from the EMBARC study. [Poster presented at the 72nd Annual Meeting of the Society of Biological Psychiatry (SOBP), San Diego, CA, May 18-20, 2017.]
75. Webb, C.W., Olson, E., Killgore, W.D.S., **Pizzagalli, D.A.**, Rauch, S.L., Rosso, I.M. (2017, May). Anterior cingulate cortex morphology predicts treatment response to internet-based CBT for depression. [Oral presentation at the 72nd Annual Meeting of the Society of Biological Psychiatry (SOBP), San Diego, CA, May 18-20, 2017.]
76. Whitton, A.E., **Pizzagalli, D.A.** (2017, May). Spectral EEG dynamics of large-scale functional network disturbances in depression. [Poster presented at the 72nd Annual Meeting of the Society of Biological Psychiatry (SOBP), San Diego, CA, May 18-20, 2017.]

77. Yapici-Eser, H., Yasemin Eren, C., Gonen, M., Kandemir, H., Yazici, D., Chen, C.Y., Ongur, D., **Pizzagalli, D.A.**, Hall, M.H. (2017, May). Association between GLP1 receptor gene polymorphisms and reward learning across psychiatric diagnoses. [Poster presented at the 72nd Annual Meeting of the Society of Biological Psychiatry (SOBP), San Diego, CA, May 18-20, 2017.]
78. Clegg, R., Kaiser, R.H., Cardenas, E., Goer, F., Beltzer, M., Pechtel, P., Vitaliano, G., Olson, D.P., Teicher, M., **Pizzagalli, D.A.** (2017, May). Differences in corticolimbic function and cortisol reactivity in women with childhood trauma. [Poster presentation at the 29th Annual Convention of the Association of Psychological Science (APS), Boston, MA, May 25-28, 2017.]
79. Lawlor, V., Webb, C., Trivedi, M., Fava, M., McGrath, P.J., Weissman, M., Parsey, R., McInnis, M., Oquendo, M.A., Cusin, C., Deldin, P., Bruder, G., **Pizzagalli, D.A.**, Dillon, D.G. (2017, May). Drift-diffusion modeling of reward learning in depression. [Poster presentation at the 29th Annual Convention of the Association for Psychological Science (APS), Boston, MA, May 25-28, 2017.]
80. Liverant, G.I., Sawyer, A.T., Jun, J.J., Lee, D.J., **Pizzagalli, D.A.**, Sloan, D.M. (2017, May). Punishment learning in veterans with posttraumatic stress disorder. [Oral presentation at 29th Annual Convention of the Association of Psychological Science (APS), Boston, MA, May 25-28, 2017.]
81. Rosebrock, L.E., Liverant, G.I., Sloan, D.M., **Pizzagalli, D.A.**, Kamholz, B.W. (2017, May). Associations among smoking, anhedonia, and reward learning in depression. [Oral presentation at 29th Annual Convention of the Association of Psychological Science (APS), Boston, MA, May 25-28, 2017.]
82. Kang, M., Clegg, R., Frederick, B., Van der Feen, J., Aguirre, B., **Pizzagalli, D.A.**, Kaiser, R. (2017, May). Anomalies in resting-state connectivity underlying comorbid anxiety in adolescent depression. [Poster presented at the 29th Association for Psychological Science Annual Convention (APS), Boston, MA, May 25-28, 2017.]
83. Kumar, P., Goer, F., Murray, L.M., Beltzer, M., **Pizzagalli, D.A.** (2017, June). Impaired prediction error encoding and striatal-midbrain connectivity during reward learning in depression. [Poster presented at the Organization for Human Brain Mapping (OHBM) Annual Meeting, Vancouver, Canada, June 25-29, 2017.]
84. Whitton, A.E., Deccy, S., Ironside, M.L., **Pizzagalli, D.A.** (2017, June). Abnormal high frequency resting-state EEG source functional connectivity in depression. [Poster presented at the Organization for Human Brain Mapping (OHBM) Annual Meeting, Vancouver, Canada, June 25-29, 2017.]
85. Robble, M., Nickels, S., Wooldridge, L., Cárdenas, E., Perlo, S., Kangas, B., Bergman, J., Carlezon, W., **Pizzagalli D.A.** (2017, November). A cross-species neurophysiological assay of cognitive control: Development of a touchscreen-based rodent analog of the Flanker Task. [Poster to be presented at the Annual Meeting of the Society for Neuroscience, Washington, DC, November 11-15, 2017.]

<i>Additional Abstracts Later Published as Full Length Articles During the Past Three Years:</i>	24
<i>Additional Abstracts in Refereed Journals Prior to the Last Three Years (1996 – 2014):</i>	70
<i>Additional Conference Presentations Prior to the Last Three Years (1996 – 2014):</i>	87
Total abstracts/conference presentations (1996 – present):	266

Narrative Report of Research and Teaching Contributions

I am an experimental psychologist and neuroscientist who uses a multi-disciplinary approach to improve our understanding of the psychological, environmental, and neurobiological factors associated with mood disorders, particularly major depressive disorder (MDD). To this end, I rely on an integration of behavioral, electrophysiological, neuroimaging [functional and structural magnetic resonance imaging (MRI), and positron emission tomography (PET)] techniques, and molecular genetics. Moreover, in light of the substantial heterogeneity of depression, I have adopted an endophenotypic approach focused on three cardinal phenotypes of MDD: anhedonia (loss of pleasure), increased stress sensitivity, and negative processing biases. I currently spend 65% of my time on research, and 35% on administration and mentoring/teaching.

Over the past decade I have devoted substantial effort to investigate the neurobiology of anhedonia. In this context, I have developed a laboratory-based assessment of a core component of anhedonia, reward responsiveness (i.e., the ability to modulate behavior as a function of reinforcement history). Using this probabilistic reward task, my mentees and I have found that individuals with elevated depressive symptoms, euthymic individuals at increased risk for depression (owing a past history of MDD or childhood maltreatment), psychiatrically healthy individuals carrying genetic variants previously associated with depression, and unmedicated MDD subjects are all characterized by a reduced ability to modify behavior according to reinforcement history and blunted activation within brain reward pathways (dopaminergic-rich mesocorticolimbic pathways), suggesting that reduced reward responsiveness may be a vulnerability factor for depression. Recently, I have extended this line of work in several important ways. First, based on preclinical studies suggesting that stress exerts depressogenic effects via mesocorticolimbic disruptions, we tested and confirmed the hypothesis that stressors as well as a history of childhood maltreatment blunt reward responsiveness in humans. Second, we evaluated the moderating effects of specific genes on stress-induced anhedonia and the role of dopamine in reward responsiveness. More recently, in collaboration with a group at UCSD, I have developed an animal analogue of the probabilistic reward task, which will allow us to interrogate the molecular underpinnings of anhedonia with more precision. Collectively, these findings suggest that anhedonia is an important endophenotype of depression, and that stress-induced hedonic deficits (and associated dysfunction in brain reward pathways) is a promising candidate mechanism linking stress to depression. Highlighting the impact of this work, more than 73 research groups worldwide are currently using the probabilistic reward task I have developed.

In a second line of work, I have investigated biomarkers of treatment response in depression. This work expands our prior report that pre-treatment resting EEG activity in the rostral anterior cingulate cortex predicted treatment response in MDD 4-6 months later with 89% sensitivity/ specificity. Because a substantial percentage of depressed individuals do not respond to treatment, establishing predictors at early stages of treatment, or even before it begins, could significantly reduce personal suffering and the substantial socio-economic burden associated with failed treatments.

In addition to my research activities, which have been continuously funded since 1999 (\$16,472,342 in direct costs), I have had the privilege of mentoring and teaching students and investigators at various levels. Since 2002, I have acted as the primary mentor at Harvard University or Harvard Medical School for 8 junior faculty (HMS Instructors or Assistant Professors), 7 post-doctoral fellows, 6 graduate students, 21 undergraduate students (7 of whom wrote an honors thesis under my primary mentorship). Collectively, my mentees have received \$4,632,916 in direct costs (\$4,422,728 at McLean Hospital since June 2010). For my mentoring activities, I was awarded the Anne M. Cataldo Excellence in Mentoring Award from McLean Hospital (2015) and The Stuart T. Hauser, M.D. PhD. Mentorship Award in Psychiatry from Harvard Medical School (2017). In addition, while a faculty member within the Faculty of Arts and Sciences at Harvard University, I developed three graduate

courses and four undergraduate courses, which included introductory survey courses (e.g., *Abnormal Psychology*), advanced undergraduate lecture courses (e.g., *Neurobiological Aspects of Psychopathology*), undergraduate seminars (e.g., *Mood Disorders*), undergraduate laboratory courses (e.g., *Affective Neuroscience: Research Seminar*), and graduate seminars (e.g., *Clinical Neuroscience*). Finally, in my roles as Director of the Center for Depression, Anxiety and Stress Research and Director of the Neuroimaging Center at McLean Hospital, I have major administrative duties over two large centers, which include 41 and 62 investigators/staff, respectively. In sum, it is my hope that, by fostering the integration of various disciplines and levels of analysis, my research program will contribute to a better understanding of major depression, with the ultimate goal of increasing prevention and improving treatment of this debilitating illness.