

# CURRICULUM VITAE

## PART I: GENERAL INFORMATION

**Date Updated:** 25 February 2008

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Boston MA 02108

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**Place of Birth:** Allentown, PA

### Education:

1987-1991 B.A. Columbia University, New York, NY, Psychology  
1991-1993 M.A. Oxford University, Oxford, England, Philosophy & Psychology  
1993-1997 M.D. Harvard Medical School, Boston MA, Medicine

### Postdoctoral Training:

1997-1998 Internship, Adult Internal Medicine, Massachusetts General Hospital, Boston, MA  
1998-2001 Residency, Adult Psychiatry, Massachusetts General Hospital, Boston MA  
McLean Hospital, Belmont, MA  
2001-2004 NIH Mentored Research Fellow Ruth L. Kirschstein National Research Service Award  
Massachusetts General Hospital, Boston MA

### Licensure and Certification:

1999-present Full Medical License, Massachusetts  
2002-present Board Certified, National Board of Neurology and Psychiatry

### Academic Appointments:

1997-1998 Clinical Fellow in Medicine, Harvard Medical School, Boston MA  
1998-2001 Clinical Fellow in Psychiatry, Harvard Medical School, Boston MA  
2001-2007 Instructor in Psychiatry, Harvard Medical School, Boston MA  
2007-present Assistant Professor in Psychiatry, Harvard Medical School, Boston MA

**Hospital Appointments:**

1997-1998 Intern in Medicine, Massachusetts General Hospital, Boston, MA  
1998-2001 Resident in Psychiatry, Massachusetts General Hospital, Boston MA  
1998-2001 Resident in Psychiatry, McLean Hospital, Belmont, MA  
2001-present Clinical Assistant in Psychiatry, Massachusetts General Hospital, Boston MA

**Other Professional Positions and Major Visiting Appointments:**

Jan-Jun 2005 Visiting Lecturer, Program in Media Arts and Sciences, Human Dynamics Laboratory  
Massachusetts Institute of Technology, Cambridge MA

Oct 2005 Advisor, NASA Ames Research Center, Medical Technologies Division  
NASA Ames Research Center, Moffett Field CA

Nov 2005 Advisor, Los Alamos National Laboratory, Data Systems Group  
Los Alamos National Laboratory, Los Alamos NM

**Major Administrative Responsibilities:**

Jun 2002-pres Director of Social Neuroscience, Psychotherapy Research Program  
Department of Psychiatry, Massachusetts General Hospital, Boston MA

Sep 2007-pres Acting Chairman, Endowment for the Advancement of Psychotherapy  
Department of Psychiatry, Massachusetts General Hospital, Boston MA

**Major Committee Assignments:**

1998-2001 Residency Training Committee, Resident Representative, Massachusetts General  
Hospital & McLean Hospital

2003-2004 Psychiatry Longitudinal Medical Record Development Committee, Liaison for Feedback  
and Interface Usability Enhancement, Massachusetts General Hospital

2004-2005 HMS Psychopathology and Introduction to Clinical Psychiatry Task Force 700MJ  
Committee Member and Liaison to Peabody Society, Harvard Medical School

2001-present Psychotherapy Research Program Planning Committee, Chairperson, Neuroscience  
Subcommittee, Massachusetts General Hospital

2001-2007 Endowment for the Advancement of Psychotherapy, Advisory Board Member,  
Chairperson Internet Committee, Webmaster ([www.advancepsychotherapy.org](http://www.advancepsychotherapy.org))  
Massachusetts General Hospital

2002-present Outpatient Psychiatry Division Planning Committee, Psychotherapy Research Program  
Representative, Massachusetts General Hospital

- 2003-present Psychotherapy Research Program, Chairperson Internet Committee, Webmaster  
(www.mghprp.org), Massachusetts General Hospital
- 2005-present Endowment for the Advancement of Psychotherapy, Executive Committee Member,  
Advisory Board Selection Committee, Vice-Chair for Fundraising Events  
Massachusetts General Hospital

### **Professional Societies:**

- |              |   |        |
|--------------|---|--------|
| 1993-present | Association of American Rhodes Scholars | Member |
| 1994-present | American Medical Association            | Member |
| 1994-present | Massachusetts Medical Association       | Member |
| 2000-present | Massachusetts Psychiatric Society       | Member |
| 2000-present | American Psychiatric Association        | Member |

### **Community Service Related to Professional Work:**

- 2001-2006 Volunteer School Consultant to City on the Hill Charter School, Boston MA. Duties included student tutorials, multiple site visits to develop suicide prevention protocols, mental health outreach, and faculty education programs.
- 2005-2006 Volunteer Consultant to Museum Exhibition on “Getting Emotional” for the Institute of Contemporary Art, Boston MA. Duties included multiple meetings to discuss emotional impact of the display of provocative contemporary art to the public.
- 2006-present Volunteer Consultant to Afghanistan Mini Circus for Children, Kabul, Afghanistan. Duties included consultation and supervision to Harvard Divinity Student trip to Afghanistan in effort to assess mental health of children in war torn regions.
- 2006-present Volunteer Advisory Board Member to the Global Association for Interpersonal Neurobiology Studies (GAINS), Orange County, CA. Duties to support a non-profit organization to increase neuroscience learning in the fields of psychotherapy, parenting, education, public policy, spiritual life, art, and daily living.
- 2007-present Volunteer Advisory Board Member to the Wellness Advisory Council for Culver Academy, Culver, IN. Duties include offering expert consultation on mental health to a high-pressured private co-educational academy with emphasis on social intelligence.

### **Editorial Boards:**

- 2005 Ad-hoc reviewer, Cognitive, Affective, and Behavioral Neuroscience
- 2006 Ad-hoc reviewer, Journal of Nervous and Mental Disease

2006 Ad-hoc reviewer, Psychotherapy Research  
2007 Ad-hoc reviewer, Biological Psychology

### **Awards and Honors:**

1991 Rhodes Scholarship  
1991 NCAA Postgraduate Scholarship Award  
1991 USA Today College Academic All-American Award  
1991 TIME Magazine College Achievement Award  
1993 Leopold Schepp Foundation Research Award  
1997 Education and Research Foundation Rock Sleyster Memorial Scholarship Award  
2001 American College of Psychiatrists Laughlin Award  
2002 MGH Endowment for the Advancement of Psychotherapy Research Award  
2002 Harvard Medical School Mysell Psychiatry Research Day Honorable Mention  
2003 MGH Endowment for the Advancement of Psychotherapy Research Award  
2003 Harvard Medical School Mysell Psychiatry Research Day Fellows Award  
2004 NARSAD Young Investigator Award  
2005 Research Partners Program, Lieber Investigator Award  
2006 Partners HealthCare, MGH Revere Mental Health Team, Partners in Excellence Award  
2007 Consumer Research Council of America, America's Top Psychiatrist Award

## **PART II: RESEARCH, TEACHING AND CLINICAL CONTRIBUTIONS**

**CLINICAL EXPERIENCE:** As a staff psychiatrist in the MGH Outpatient Psychiatry Division and MGH Revere Mental Health Center, I operate integrated psychotherapy and psychopharmacology practices. At the main campus, most of the patients are employed and struggle with chronic mood and anxiety disorders. Invariably, these disorders have a psychosocial impact on the patient and having the ability to offer both sophisticated state-of-the-art research informed psychotherapy and psychopharmacology has afforded great success. Referrals come from recruitment for research protocols and outside physicians including leaders in the MGH Departments of Medicine and Neurology. In the more community-oriented clinic in Revere, this under-served population comes from a very different socio-economic stratum. In this population, the mood and anxiety disorders often come with co-morbid trauma and substance abuse issues. In this population, the major focus is on medication management with less time for intensive therapy. Substance abuse counselors and social workers offer extra support and the team approach was recognized with a 2006 Partners in Excellence Award.

**RESEARCH EXPERIENCE:** Mentorship from Drs. Scott Orr and Roger Pitman has lead to two NIH training fellowships, several awards, and multiple private foundation grants. The major focus of my research has been to bring the latest in technologies and improvements in psychophysiology, signal processing, and statistical analyses informed by advances in social neuroscience toward understanding the patient-doctor relationship. Using psychotherapy as a model for patient-doctor communication, my work has lead to novel scoring algorithms for the quantification of patient-clinician physiologic concordance. The results of several novel studies now published in peer-review journals demonstrate with certainty the ability of the social-emotional processes between patients and clinicians to mutually influence physiology as measured by skin conductivity, a direct measure of the sympathetic influences on arousal via the autonomic nervous system. These results are then interpreted in the context of discoveries in the last decade of "mirror" mechanisms in the brain, the neurobiological cornerstones of social behavior. Converging evidence suggests that the central areas of control for skin conductivity overlap with

networks involved in empathy suggesting that physiologic concordance is tapping into neurologically relevant social representational networks. Studies are on going to investigate the role of physiologic concordance in outcomes for short-term treatments for depression and applications are under review for funding to integrate physiologic measures with functional neuroimaging during clinically relevant tasks.

**TEACHING EXPERIENCE:** Teaching residents and medical students is an opportunity to educate trainees on the importance of the patient-doctor relationship. In my introduction to psychotherapy for the core-psychiatry HMS students, I often state, “you would never get a lecture on cardiology without talking about the heart, why should you get a lecture on psychotherapy without talking about the brain.” The latest in social neuroscience is integrated into a dynamic lecture covering the origins of psychoanalyses through the cognitive and behavioral models at the center of modern cognitive-behavioral therapy. In addition, our weekly research seminar offers faculty, residents and psychology trainees an open forum for discussing and teaching issues ranging from the complexities of study design in the social sciences to updates on psychoneuroendocrinology, the role of the placebo effect in patient-doctor interactions, updates on statistical modeling, and the ethics of conflicts of interest in research. In addition, the monthly psychophysiology seminar that I co-founded and run affords an open forum for researchers in the Boston area to communicate about issues related to psychophysiology research, receive consultation in methodology and statistical analyses, and discuss the latest technologies and integration challenges associated with multi-modal processing and neuroimaging. These vibrant forums bring together clinicians and researchers with multi-disciplined perspectives to discuss the latest topics in social neuroscience. Beyond these core offerings, annual lectures to Harvard College students in a course on the Science of Happiness plus regional and national guest lectures along with popular media appearances allow promotion of ideas beyond the Boston area. Finally, a major initiative is in the process of being launched to continue to development of a novel approach to teaching patient-doctor communication skills with Drs. Helen Riess and Steven Schlozman. Plans for integrating a social neuroscience approach with demonstrations, didactics and computer-based learning are in place with course modules for HMS II year, residents, and continuing education curriculums.

**Funding Information:**

- 2000-2001 Harvard Medical School Livingston Award, Mentored Research Fellow  
A Pilot Study of Psychophysiology during Psychotherapy, Research Fellow
- 2001-2002 Harvard Medical School Kaplan Award, Psychophysiology during Psychotherapy,  
Mentored Research Fellow
- 2002-2004 NIMH T32MH16259-23 National Research Service Award/Clinical Research Training  
Program, Physiologic Concordance during Psychotherapy, Mentored Research Fellow
- 2003-2006 NIH CR-LRP Clinical Research Loan Repayment Program, Award winner includes two-  
year service requirement for 50% research effort. Principal Investigator
- 2004-2005 NIMH F32MH072073-01 Independent National Research Service Award  
Social and Emotional Correlates of Physiologic Concordance, Mentored Research Fellow
- 2004-2006 NARSAD National Alliance for Research on Schizophrenia and Depression Young  
Investigator Award, Prospective Physiologic Measures of Empathy and Alliance during  
Psychotherapy, Principal Investigator

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- 2004-2006 American Psychoanalytic Association Fund for Research, Physiologic and Psychosocial Measures of Empathy and Alliance during Psychotherapy, Principal Investigator
- 2001-present MGH Endowment for the Advancement of Psychotherapy, Psychophysiology during Psychotherapy, Principal Investigator
- 2005-2007 NIH R21 AT002564-01 National Center for Complementary and Alternative Medicine, Patient Variables and Placebo Response in IBS, Co-Investigator
- 2007-2008 NIH R43 MH079573-01A1 National Institutes of Mental Health, Signal Processing for Individualized Mood Assessment, Consultant

**Report of Current Research Activities:**

- 2004-present Physiologic Concordance during Mother-Infant Interaction, The Children's Hospital of Boston, Harvard Medical School, Physiology Consultant
- 2004-present Continuous Physiologic and Behavioral Monitoring of ECT Treatment for Depression Massachusetts General Hospital & The Media Laboratory, Massachusetts Institute of Technology, Principal Investigator
- 2001-present Psychophysiological Measures of Laughter and Concordance in Small Group Interactions, Massachusetts General Hospital & The Media Laboratory, Massachusetts Institute of Technology, Principal Investigator
- 2003-present Physiologic Concordance during Parent-Adolescent Interactions, Massachusetts General Hospital & The Cambridge Hospital, Harvard Medical School, Co-Investigator
- 2004-present Psychophysiological Correlates of Empathy and Alliance in Psychotherapy for Depression, Massachusetts General Hospital, Principal Investigator
- 2005-present Patient Variables and Placebo Responses in Irritable Bowel Syndrome, Massachusetts General Hospital & Osher Institute, Harvard Medical School, Co-Investigator
- 2007-present Use of Non-Invasive Continuous Wearable Monitoring in Patient-Clinician Interactions, Massachusetts General Hospital, Principal Investigator

**Report of Local Teaching: Medical Students**

- 2001-present HMS Core Clinical Psychiatry Didactics, Lecturer, Overview of Psychotherapy Massachusetts General Hospital, 2-6 Harvard Medical Students, 1-2 hours per month

**Report of Local Teaching: Graduate Medical Courses**

- 2002-2006 MGH/McLean Adult Psychiatry Training Mock Boards, Preceptor Massachusetts General Hospital, 1 Psychiatry Resident, 2 hours per year

- 2003-2006      Advanced Couples Seminar, Lecturer, Physiologic Concordance in Dyadic Interaction  
Massachusetts General Hospital, Boston MA, 5-10 Psychiatry Residents and Psychology  
Trainees, 2 hours per year
- 2003-2006      Children’s Hospital Developmental Neuroscience Course, Lecturer  
Physiologic Concordance in Dyadic Interaction, HMS Consolidated Department of  
Psychiatry, Boston MA, 6-12 Child Fellows, 2 hours per year
- 2002-present    Psychotherapy Research Seminar, Course Co-Founder, Administrator and Leader  
Massachusetts General Hospital, 2-4 Psychiatry Residents and Psychology Trainees, 10  
staff, 2-3 hours per week
- 2002-present    Psychophysiology Research Seminar, Seminar Co-Founder, Administrator and Leader  
Massachusetts General Hospital, 5-10 Researchers from MGH and Regional Hospitals  
and Academic Centers, 1-2 hours per month
- 2005-present    MGH/McLean Adult Psychiatry Training Didactics Seminar, Course Preceptor  
Psychotherapy Research, Massachusetts General Hospital, PGY3 Psychiatry Residents  
4-6 hours per year

**Report of Local Teaching: Invited Teaching Presentations**

- May 2004      Mind-Body Institute Research Seminar, Invited Lecturer  
“Physiologic Concordance in Dyadic Interaction”  
Mind-Body Institute, Boston MA
- Oct 2004      Department of Psychiatry Grand Rounds, Invited Co-Presenter  
“Psychotherapy Process Research: What’s New and Why it Matters”  
Massachusetts General Hospital, Boston MA
- Nov 2004      Boston Psychoanalytic Institute Psychotherapy Seminar, Invited Lecturer  
“Physiologic Concordance during Psychotherapy”  
Boston Psychoanalytic Institute, Boston MA
- Apr 2005      Harvard College Psychology 987: The Science of Happiness, Invited Lecturer  
“Physiologic Evidence for the Interpersonal Role of Laughter during Psychotherapy”  
Harvard University, Boston MA
- May 2005      Clinical Research Training Program in Biological and Developmental Research  
Spring Lecture Series on Emotion Regulation, Invited Lecturer  
“Physiologic Correlates of Laughter, Emotional Distance, and Empathy”  
Judge Baker Children’s Center, Boston MA
- Jun 2005      Grand Rounds, Department of Psychiatry, Invited Presenter  
“Physiologic Correlates of Laughter, Emotional Distance, and Empathy”

The Cambridge Hospital, Cambridge MA

- Sep 2005      Public Seminar, Guest Panelist and Presenter  
                  “‘What is Emotion?’”  
                  Institute for Contemporary Art, Boston MA
- Oct 2005      Psychiatric Neuroimaging Series, Invited Lecturer  
                  “‘The Neurobiology of Empathy’”  
                  Massachusetts General Hospital, Boston MA
- Oct 2005      Department of Medicine Resident Report, Invited Lecturer  
                  “‘The Neurobiology and Psychophysiology of Empathy’”  
                  Massachusetts General Hospital, Boston MA
- Mar 2006      Center for Sleep & Cognition Research Seminar, Invited Lecturer  
                  “‘The Physiology and Neurobiology of Skin Conductance Responses’”  
                  Beth Israel Deaconess Medical Center, Boston MA
- Apr 2006      Harvard College Psychology 987: The Science of Happiness, Invited Lecturer  
                  “‘Physiology and Neurobiology of Empathy’”  
                  Harvard University, Boston MA
- Sep 2006      Department of Medicine Primary Care Grand Rounds, Invited Co-Presenter  
                  “‘Physiology and Neurobiology of Empathy’”  
                  Massachusetts General Hospital, Boston MA
- Oct 2006      Department of Psychiatry, Center for Psychoanalytic Studies  
                  “‘New Trends in Psychotherapy Process Research’”  
                  Massachusetts General Hospital, Boston MA
- Nov 2006      Psychophysiology Research Seminar, Invited Lecturer  
                  “‘Psychophysiology and PET Imaging of Autobiographic Recall of Emotions’”  
                  Massachusetts General Hospital, Boston MA
- Apr 2007      Harvard College Psychology 987: The Science of Happiness, Invited Lecturer  
                  “‘Physiologic Evidence for the Interpersonal Role of Laughter during Psychotherapy’”  
                  Harvard University, Boston MA
- Oct 2007      Massachusetts General Hospital Pastoral Care Lecture Series  
                  “‘Empathy: Mind, Heart and Soul’”  
                  Massachusetts General Hospital, Boston MA
- Oct 2007      Harvard Medical School Department of Social Medicine Healing, Rituals, and Placebo  
                  “‘Physiology and Neurobiology of Empathy in the Patient-Doctor Relationship’”  
                  Osher Institute, Harvard Medical School, Boston MA

### **Report of Local Teaching: Continuing Medical Education Course**

May 2006      Psychiatric Neuroscience: A Primer for Clinicians, Invited Co-Presenter  
                  “Investigating the Neuroscience of Psychotherapy”  
                  Massachusetts General Hospital Department of Psychiatry  
                  Division of Postgraduate Education, Boston MA

### **Report of Local Teaching: Advisory and Supervisory Responsibilities**

2001-present    Psychotherapy Research Program, Resident and Psychology Intern Preceptor  
                  Massachusetts General Hospital, Boston MA  
                  1-2 Psychiatry Residents and Psychology Interns, 1-2 hours per week

2007-present    MGH/McLean Adult Psychiatry Training Resident Psychotherapy Supervisor  
                  Massachusetts General Hospital, 1 PGY3 Psychiatry Resident  
                  1 hour per week

### **Names of Advisees**

Anmol Madan, M.A., Massachusetts Institute of Technology  
Michael Sung, Ph.D., Massachusetts Institute of Technology  
Caleb Siefert, Ph.D., Massachusetts General Hospital  
Daniel Zimmerman, M.D., Massachusetts General Hospital

### **Report of Local Teaching: Teaching Leadership**

2001-2006      MGH/McLean Adult Psychiatry Training Elective, Course Founder and Preceptor,  
                  School Based Psychiatry in the Community, allows interested residents to go to a local  
                  Charter School, City on a Hill, as a liaison to the faculty and administers to facilitate  
                  development and execution of mental health plans for this minority inner city high  
                  school. Massachusetts General Hospital

2002-present    Psychotherapy Research Seminar, Course Co-Founder, Administrator and Leader for a  
                  forum for psychologists, psychiatrists, residents and trainees to get educated on issues  
                  related to psychotherapy research. Massachusetts General Hospital

2002-present    Psychophysiology Research Seminar, Seminar Co-Founder, Administrator and Leader for  
                  a multidisciplinary forum for psychophysiology researchers in the Boston area to meet to  
                  discuss issues related to methods, study design, statistics, and data interpretation related  
                  to the growing field of social neuroscience. Massachusetts General Hospital

2005-present    Neurobiology and Physiology of the Patient-Doctor Relationship, Course Co-Founder,  
                  Administrator and Co-Leader for a course that is currently in development for  
                  undergraduate and graduate medical level as well as continuing education for medical  
                  students, residents, physicians, and allied health professionals.

**Report of Regional Teaching: Invited Teaching Presentations**

- Mar 2003 MIT Media Laboratory Digital Innovation Seminar, Invited Lecturer & Co-Instructor  
“Psychophysiology and Neurobiology of Social Interaction”  
Massachusetts Institute of Technology, Cambridge MA
- Apr 2003 Annual Creativity and the Brain Lecture Series, Invited Lecturer  
“Psychophysiology and Neurobiology in Social Interaction”  
Middlebury College, Middlebury VT
- Jun 2006 NIH Roadmap Initiative Multidisciplinary Conference, Invited Panelist  
“Placebo & Healing in Irritable Bowel Syndrome”  
Harvard Medical School, Boston MA
- Sep 2006 History of Science and Literature, Invited Lecturer  
“Neurobiology and Physiology of Laughter during Social Interaction”  
Boston Society for Adult Education, Boston MA
- Nov 2006 Seminar for Innovation in Research, Invited Lecturer  
“Innovations in Social Psychophysiology and Social Neuroscience”  
Endicott College, Beverley MA
- May 2007 Harvard University Graduate School of Education, Mind Brand & Education Program  
Learning and the Brain Conference, Invited Lecturer  
“Neurobiology and Physiology of Empathy and Learning”  
Harvard University, Cambridge MA
- May 2007 MIT Media Laboratory, Neurotechnology Ventures Seminar 961, Invited Lecturer  
“Applied Social Neuroscience”  
Massachusetts Institute of Technology with simulcast to Hong Kong, Cambridge MA

**Report of National Teaching: Invited Teaching Presentations**

- Sep 2005 Masters Series in Positive Psychology Teleconference, Invited Lecturer  
“The Role of Psychophysiology in Measuring Social Interaction.”  
Oregon Health and Science University, Portland OR
- Oct 2005 Mindsight Symposium, Invited Lecturer  
“The Neurobiology and Psychophysiology of Empathy”  
Annual Symposium, Portland OR
- Feb 2006 17<sup>th</sup> Annual AATH Conference, Keynote Address  
“The Social Contagion of Laughter”  
Association for Applied and Therapeutic Humor, Austin TX

- Apr 2007      Advertising Research Foundation Annual Conference, Invited Lecturer  
                  “I Know Just How You Feel: The Role of Emotions in Market Research”  
                  Advertising Research Foundation, New York City, NY
- Jun 2007      Social Cognition Think Tank, Attias Family Foundation, Invited Lecturer  
                  “Physiology and Neurobiology of Empathy in Patient-Doctor Relationship”  
                  University of California at Los Angeles, Los Angeles CA
- Oct 2007      Center for Research on Emotional Intelligence in Organizations, Invited Lecturer  
                  “Physiology and Neurobiology of Empathy in Patient-Doctor Relationship”  
                  Annual Meeting, Boston MA

### **Report of Clinical Activities:**

- 2001-present    Adult Outpatient Psychiatry, Mental Health Division  
                  Massachusetts General Hospital, Revere Community Health Center, Revere MA  
                  Attending Psychiatrist, 1.5 clinical days per week
- 2001-present    Adult Outpatient Psychiatry, Outpatient Psychiatry Division, Department of Psychiatry  
                  Massachusetts General Hospital, Boston MA  
                  Attending Psychiatrist, 1 clinical day per week
- 2001-present    Acute Psychiatry Service  
                  MGH/McLean Adult Psychiatry Residency Training  
                  Massachusetts General Hospital, Boston MA  
                  Attending On-Call Back-up, 1 week per year

### **PART III: BIBLIOGRAPHY**

#### **Original Articles:**

1. **Marci CD**, Roberts TG. The Increasing Debt of Medical Students: How Much is Too Much? *Journal of the American Medical Association*. 1998; 280:1879-80.
2. **Marci CD**, Anderson WB, Viechnicki MB, Greenspan SL. Bone Mineral Density Substantially Influences Health-Related Behaviors of Postmenopausal Women. *Calcified Tissue International*. 2000; 66:113-18.
3. Dougherty DD, Rauch SL, Deckersbach T, **Marci CD**, Loh R, Shin LM, Alpert NM, Fischman AJ, Fava M. Ventromedial Prefrontal Cortex and Amygdala Dysfunction during Anger Induction Positron Emission Tomography Study in Patients with Major Depression with Anger Attacks. *Archives of General Psychiatry*. 2004; 61:795-804.
4. **Marci CD**, Moran EK, Orr SP. Physiologic Evidence for the Interpersonal Role of Laughter during Psychotherapy. *Journal of Nervous & Mental Disease*. 2004; 192:689-695.

5. Sung M, **Marci CD**, Pentland A. Wearable Feedback Systems for Rehabilitation. *Journal of NeuroEngineering and Rehabilitation*. 2005; 2:2-17.
6. **Marci CD**, Riess H. The Clinical Relevance of Psychophysiology: Support for the Psychobiology of Psychodynamic Process. *American Journal of Psychotherapy*. 2005; 59:213-226.
7. Sung M, **Marci CD**, Pentland A. Objective Physiological and Behavioral Measures for Identifying and Tracking Depression State in Clinically Depressed Patients. MIT Technical Report. 2005;595:1-20.
8. **Marci, CD**. A Biologically Based Measure of Emotional Engagement. *Journal of Advertising Research*. 2006; 46:381-387.
9. Principe J, **Marci CD**, Glick D, Ablon JS. The Therapeutic Alliance, Patient Contemplation, and Continuation in Early Psychotherapy. *Psychotherapy: Theory, Research, Practice, Training*. 2006; 43: 139-141.
10. **Marci CD**, Orr SP. The Effects of Emotional Distance on Psychophysiologic Concordance and Perceived Empathy between Patient and Interviewer. *Applied Psychophysiology and Biofeedback*. 2006; 31:115-128.
11. **Marci CD**, Ham J, Moran EK, Orr SP. Physiologic Concordance, Empathy, and Social-Emotional Process during Psychotherapy. *Journal of Nervous & Mental Disease*. 2007;195:103-111.
12. Fraguas R, **Marci CD**, Fava M, Iosifesco DV, Bankier D, Loh R, Dougherty D. Autonomic Reactivity to Induced Emotion as Potential Predictor of Response to Antidepressant Treatment. *Psychiatry Research*. 2007; 151: 169-172.
13. **Marci CD**, Glick DM, Loh R, Dougherty DD. Physiologic and PET Imaging Responses to Autobiographical Recall of Emotions. *Cognitive, Affective, & Behavioral Neuroscience*. 2007; 7:243-250.

#### **Chapters and Reviews:**

1. **Marci CD**, Prager D. A Review of the Clinical Indications for the Plasma Heparin Assay. *American Journal of Clinical Pathology*. 1993; 99:546-50.
2. Clancy TE, Fiks AG, Gelfand, JM, Grayzel DS, **Marci CD**, Roberts TG, Smith AL, Winnokoff JP. A Call for Health Policy Education in the Medical School Curriculum. *JAMA*.1995; 274:1084-85.
3. **Marci CD**, Gottlieb G, Jellinek MS, Summergrad P. Managed Care and Psychiatry. In: *Psychiatry Update and Board Preparation*. Stern TA, Herman JB, Editors. McGraw Hill. New York: 2000:569-572.

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4. **Marci CD**, Gottlieb G, Jellinek MS, Summergrad P. Managed Care and Psychiatry. In: Psychiatry Update and Board Preparation (second edition). Stern TA, Herman JB, Editors. McGraw Hill. New York: 2004:571-579.
5. Ablon JS, **Marci CD**. Psychotherapy Process: The Missing Link. Comment on Weston, Novotny and Thompson- Brenner. Psychological Bulletin. 2004; 130:664-668.
6. Roffman JL, **Marci CD**, Glick DM, Dougherty DD, Rauch SL. Neuroimaging and the Functional Neuroanatomy of Psychotherapy. Psychological Medicine. 2005; 35:1385-1398.
7. Rauch SL, Milad MR, **Marci CD**, Roffman JL, Pitman RK. Fear Conditioning Models and Psychoanalysis: From Theory to Treatment. Neuro-Psychoanalysis. 2005; 7: 157-161.
8. **Marci CD**. Social Neuroscience: People Thinking about Thinking People. Journal of Nervous & Mental Disease. 2007; 195(5): 456-457.
9. **Marci CD**, Riess H. Physiology Monitoring in Psychodynamic Psychotherapy Research. In: Evidence-Based Psychodynamic Psychotherapy. Ablon JS, Levy RA, Editors. Humana Press. New Jersey. 2008 (in press).
10. **Marci CD**. Evolutionary Origins of the Social Brain. Journal of Nervous & Mental Disease. 2008 (in press).

### **Clinical Communications:**

1. **Marci CD**, Riess H. Empathy and the Patient-Doctor Relationship. *The Curbside Consultant*. 2006; 4(7):3-4.
2. **Marci CD**, Riess H. The Importance of Empathy in the Patient-Clinician Relationship. *Global Association of Interpersonal Neurobiology Studies Quarterly Newsletter*. 2007; Spring Quarterly: 3-4.
3. Riess H, **Marci CD**. The Role of Neurobiology and Physiology of Empathy in Enhancing the Patient-Doctor Relationship. *American Academy of Communication in Healthcare: Medical Encounter*. 2007; 21: 38-39.

### **Abstracts and Posters:**

1. Bush G, Williams Z, Eskandar E, Rauch SL, Dougherty DD, **Marci CD**, Milad M, Cosgrove R. Combined Functional MRI & Intracranial Recordings in Cingulotomy Patients Confirm a Role for Dorsal Anterior Cingulate in Human Decision Making. *MGH Clinical Research Day*. November 2004.
2. Riess H, **Marci CD**. A New Course for Enhancing Patient-Physician Communication Using Physiologic Measurements of Empathy. In: *Harvard Medical School Medical Education Day, Book of Abstracts. The Academy and the Program in Medical Education at Harvard Medical School*. Boston: 2005; 57.
3. **Marci CD**, Riess H. A New Course to Teach Empathy. *American Academy on Communication in Healthcare Forum*. October 2006.
4. Ham J, Tronick E, **Marci CD**. Relational Psychophysiology: Mother-Infant Skin Conductance, Cardiac Activity and Behavior during the Face-to-Face Still-Face. *Society for Research in Child Development*. March 2007.
5. Evans, K, Deckersback T, Rauch SL, **Marci CD**, Jameson ML, Fischman AJ, Fava M, Dougherty DD. An O-15 PET Study of Differential Brain Activation and Peripheral Autonomic Responses in Depressed Patients During Mood Induction. *Society for Nuclear Medicine*. June 2007.
6. Riess H, **Marci CD**. From Neurobiology and Physiology of Empathy to Mindful Practice. *Harvard Medical School Medical Education Day*. October 2007.

### **Nonprint Materials:**

1. **Marci CD**. Psychophysiology and Psychotherapy: The Neurobiology of Human Relatedness. *Practical Reviews in Psychiatry (audiotape)*. 2002; 25(3).
2. **Marci CD**. Biology and Psychoanalysis: A Philosophical Inquiry into Why the Merger has been So Slow. *Practical Reviews in Psychiatry (audiotape)*. 2003; 27(9).

**Popular Media References & Appearances:**

1. Channel 4 News (WCBS Boston), October 15, 2004. Television News Report: "Laughter in Psychotherapy."
2. Boston Herald, October 14, 2004. News Report. "Doc Finds Deep Meaning in Laughs."
3. Yahoo! Health, October 14, 2004. Internet News Report. "Laughter Breaks Ice during Psychotherapy."
4. Mental Health Channel, October 15, 2004. Internet News Report. "Therapists Find Deep Meaning in Laughs."
5. Harvard Gazette, October 21, 2004. News Report. "Laughing It Up in Psychotherapy."
6. Harvard Medical Alumni Bulletin, Autumn 2004. News Report. "A Laughing Matter."
7. Boston Globe, June 14, 2005. News Report. "Getting Wired Could Help Predict Emotions."
8. WBZ News Radio 1030, June 14, 2005. Radio News Report. "New Research in Depression."
9. Fox News at 10, June 16, 2005. Television News Report. "New Approach to Depressed Patients."
10. International Herald Tribune, June 17, 2005. News Report. "Emotional Health Checked by Wire."
11. Fox News at 10, August 17, 2005. Television News Report. "The Role of Gossip in Mental Health."
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