

**Curriculum Vitae****Andrew B. Newberg, M.D.****Postgraduate Training and Fellowship Appointments:**

6/93-6/94	Internship in Internal Medicine, Graduate Hospital, Philadelphia, PA 19134
7/94-6/96	Residency in Internal Medicine, Graduate Hospital, Philadelphia, PA 19134
7/96-6/97	Chief Resident, in Internal Medicine, Graduate Hospital, Philadelphia, PA 19134
7/97-6/98	Fellow, Division of Nuclear Medicine, Department of Radiology, University of Pennsylvania School of Medicine, Philadelphia, PA 19104
7/97-1/98	Chief Fellow, Division of Nuclear Medicine, Department of Radiology, University of Pennsylvania School of Medicine, Philadelphia, PA 19104

**Military Service:**

Not applicable

**Faculty Appointments:**

7/94-6/97	Assistant Instructor, Department of Internal Medicine, University of Pennsylvania School of Medicine
7/98-11/99	Clinical Assistant Professor of Radiology, University of Pennsylvania School of Medicine
7/97-7/99	Instructor, Department of Psychiatry, University of Pennsylvania School of Medicine
12/99-6/06	Assistant Professor of Radiology, University of Pennsylvania School of Medicine
6/03-10/10	Assistant Professor of Psychiatry, University of Pennsylvania School of Medicine
10/05-10/10	Adjunct Assistant Professor, Department of Religious Studies, University of Pennsylvania, School of Arts and Sciences
7/06-10/10	Associate Professor of Radiology, University of Pennsylvania School of Medicine
10/10-present	Professor of Emergency Medicine, Thomas Jefferson University and Hospital
10/10-present	Professor of Radiology, Thomas Jefferson University and Hospital
7/15-present	Adjunct Professor, Department of Psychology, University of Pennsylvania, School of Arts and Sciences

**Hospital and Administrative Appointments:**

7/98-11/99	Staff Physician, Nuclear Medicine Service, Veterans Affairs Medical Center
12/99-10/10	Attending Staff, Division of Nuclear Medicine, Department of Radiology, Presbyterian Medical Center
12/99-10/10	Attending Staff, Division of Nuclear Medicine, Department of Radiology, University of Pennsylvania School of Medicine
4/02-10/10	Staff Physician, Division of Nuclear Medicine, Department of Radiology, Pennsylvania Hospital
8/02-10/10	Staff Physician, Division of Nuclear Medicine, Department of Radiology, Phoenixville Hospital
7/04-10/10	Staff Physician, Division of Nuclear Medicine, Department of Radiology, The Children's Hospital of Philadelphia
10/10-present	Staff Physician, Department of Emergency Medicine and Radiology, Thomas Jefferson Hospital
10/10-present	Director of Research, Marcus Institute of Integrative Health, Thomas Jefferson Hospital

**Specialty Certification:**

August, 1997	Diplomate American Board of Internal Medicine
September, 1998	Diplomate American Board of Nuclear Medicine

**Licensure:** Pennsylvania: MD-057772-L

**Awards, Honors, and Membership in Honorary Societies:**

2018	Castle Connolly "Top Docs". Top Doctor in Nuclear Medicine, Philadelphia
2017	Castle Connolly "Top Docs". Top Doctor in Nuclear Medicine, Philadelphia
2017	Teacher of the Year Award. Biological Basis of Behavior Program. University of Pennsylvania. Philadelphia, PA.
2016	Castle Connolly "Top Docs". Top Doctor in Nuclear Medicine, Philadelphia
2016	30 Most Influential Neuroscientists Alive Today. Online Psychology Degree Guide.
2016	Living Now Book Awards, Gold Medal Winner.
2015	Castle Connolly "Top Docs". Top Doctor in Nuclear Medicine, Philadelphia
2014	Castle Connolly "Top Docs". Top Doctor in Nuclear Medicine, Philadelphia
2013	Castle Connolly "Top Docs". Top Doctor in Nuclear Medicine, Philadelphia
2010	Teacher of the Year Award. Biological Basis of Behavior Program. University of Pennsylvania. Philadelphia, PA.
2010	Mani Bhaumik Award for "For Advancing the Understanding of the Brain and Conscious Mind in Healing Through Visionary Research, Books, and Education". Cousins Center for Psychoneuroimmunology at UCLA. Los Angeles, CA.
2006	City Paper Choice Awards for "Best Integration of Science and Religion". City Paper Philadelphia, PA.
2003	Semifinalist for "Most Influential Radiology Researcher Award, AuntMinnie.com, October, 2003

2002	Finalist for “Books for a Better Life” Award.
2001	Outstanding Books in Theology and the Natural Sciences for 1999 for “The Mystical Mind: Probing the Biology of Religious Experience”, sponsored by the Center for Theology and the Natural Sciences.
2000	Alavi-Mandell Prize for outstanding article on research by a Nuclear Medicine Trainee.
2000	Center for Theology and the Natural Sciences, Science and Religion Course Award for teaching the course, “The Biology of Spirituality,” in the Department of Religious Studies, University of Pennsylvania.
1998	Gold Medal for Intellectual Curiosity, Institute for Patient Advocacy.
1998	American College of Nuclear Physicians Residents Scientific Program Award.
1997	Philadelphia Nuclear Medicine Conference Award for Best Presentation.
1997	American College of Nuclear Physicians Residents Scientific Program Award.

### **Memberships in Professional and Scientific Societies:**

#### National Societies:

International Society for Science and Religion (2001-present)

Society of Nuclear Medicine (1996-present)

International Society for Neuroimaging in Psychiatry (2001-2006)

#### Local Societies:

Not applicable

#### National Scientific Committees:

Not applicable

#### Local Scientific Committees:

Not applicable

### **Editorial Positions:**

#### *Guest Editor*

2010	PET Clinics (Vol 5, Issue 1); PET in the Aging Brain
2010	PET Clinics (Vol 5, Issue 2); PET in CNS Disease
1998-2001	Hospital Physician, Series Editor on Alternative Medicine

#### *Reviewer*

2008-present	Archives of General Psychiatry
2006-present	Cortex
2006-present	Journal of the American Medical Association
2006-present	Neuropsychopharmacology

2006-present	Neuroscience Letters
2006-present	International Journal of Psychiatry in Medicine
2006-present	Pediatrics
2006-present	Cortex
2005-present	Nuclear Medicine Biology
2005-present	Neuroscience Research
2004-present	Brain and Cognition
2004-present	European Journal of Nuclear Medicine
2003-present	Aviation, Space and Environmental Medicine
2003-present	Perceptual and Motor Skills
2002-present	Academic Radiology
2002-present	Neuropsychiatry, Neuropsychology, and Behavioral Neurology
2002-present	Journal of Computer Assisted Tomography
2001-present	Psychiatry Research: Neuroimaging
2001-present	Journal of Nuclear Medicine
2000-present	Journal of Consciousness Studies
2000-present	Head and Neck
1997-present	Alternative Therapies in Health and Medicine

#### **Academic Committees:**

2011-2015	Kimmel Cancer Center Data Safety Monitoring Board, Thomas Jefferson University
2010-2015	Multidisciplinary Research Group, Gastrointestinal Oncology, Department of Oncology, Thomas Jefferson University
2000-2010	Resident Selection Committee, Department of Radiology, University of Pennsylvania
1997-2010	Education Committee, Division of Nuclear Medicine, University of Pennsylvania
1997-2010	Committee on Continuous Quality Assurance and Improvement, Division of Nuclear Medicine, University of Pennsylvania
2003-2010	Committee on Education and Academic Affairs, Department of Radiology, University of Pennsylvania
2002-2006	General Clinical Research Center Advisory Committee, University of Pennsylvania
1992-1993	Council on Undergraduate Medical Education, University of Pennsylvania, School of Medicine
1992-1993	Primary Care Course Development Committee, University of Pennsylvania, School of Medicine
1990-1993	Evaluations Committee, University of Pennsylvania, School of Medicine
1990-1993	Admissions Interviewing Panel, University of Pennsylvania, School of Medicine
1991-1992	Departmental Review Committee, Microbiology, University of Pennsylvania, School of Medicine
1990-1991	Departmental Review Committee, Anatomy, University of Pennsylvania, School of Medicine
1989-1990	Medical School Admissions Committee, University of Pennsylvania, School of Medicine

**Major Teaching Responsibilities:**

1. Lecture on General Nuclear Medicine (2 hour /year) Radiology resident training, Thomas Jefferson University (2012-present).
2. ID150 Course in Neuroscience (1 hour lecture/year), Thomas Jefferson University (2012-present).
3. Neurology Student Group (1 hour lecture/year), Thomas Jefferson University (2013-present)
4. Student Supervisor for the Masters in Positive Psychology program at the University of Pennsylvania (2011-present)
5. Nuclear Medicine Residency Director, University of Pennsylvania (2009-2010)
6. Human Brain Imaging, Biological Basis of Behavior Undergraduate Seminar Course 421 (weekly, Spring Semesters 2006-present).
7. Science and the Sacred, Department of Religious Studies Undergraduate Seminar Course 502 (weekly, Fall Semesters from 2004-2009).
8. Frontiers in Medicine Course, "Signals in Radiology" (½ hour lecture/year), Department of Radiology (2004-2010).
9. Spirituality and Bioethics Course (2 hour guest lecturer). Department of Bioethics, University of Pennsylvania School of Medicine (2004).
10. Psychiatry Resident Seminar on Neuroimaging (1/ year), Department of Psychiatry, University of Pennsylvania School of Medicine (2002-2010).
11. Nuclear Medicine Lectures (2/month), Division of Nuclear Medicine, University of Pennsylvania School of Medicine (1999-2010).
12. Nuclear Medicine Lectures for Radiology Residents (2/month), Department of Radiology Resident Lecture Series, University of Pennsylvania School of Medicine (1999-2010)
13. Radiology Resident Board Review (2 lectures/year), Department of Radiology, University of Pennsylvania School of Medicine (1999-2010)
14. Nuclear Medicine Fellow Training during Rotations on the General Nuclear Medicine Service, PET Center, and Nuclear Cardiology, (2 ½ days/week) Division of Nuclear Medicine, University of Pennsylvania School of Medicine (1999-2010).
15. Lecture on General Nuclear Medicine (2 hour /month) Radiology 300 Course, University of Pennsylvania School of Medicine (1998-2010).
16. Lecturer for Nuclear Medicine Course 210, (3 classes /year) University of Pennsylvania Medical Center, Philadelphia, PA 19104 (1998-2010)
17. Nuclear Medicine Fellow Training during Rotations at the Veterans Affairs Medical Center, Division of Nuclear Medicine, University of Pennsylvania School of Medicine (1998-2010).

**Lectures by Invitation:**

- August 14, 1997 "A Neuropsychological Analysis of Religion: Attempting to Find Why God Won't Go Away". Rediscovering Cosmos Conference. Syracuse University. Syracuse, New York.
- February 10, 1998 "The Neuropsychological Basis of Religion: Why God Won't Go Away". Evening Lecture on The Neurosciences and Religion, Sponsored by the American Association for the Advancement of Science Program for Dialogue Between Science and Religion. Philadelphia, Pennsylvania.
- February 26, 1998 "Scientific Research on Meditation". Graduate Student Association Council Multiculturalism Committee Forum on Complementary and Alternative Medicine, University of Pennsylvania. Philadelphia, Pennsylvania.
- April 17, 1998 "Physiological Response to Religious/Spiritual Experience". Spirituality Research Symposium, Presbyterian Medical Center. Philadelphia, Pennsylvania.
- June 5, 1998 "The Neuropsychology of Religious and Spiritual Experience". Cognitive Science and the Study of Religious Experience: A Working Symposium on Theory and Method. University of Vermont, Burlington, Vermont.
- October 4, 1998 "Meditation: Why It Works". Integrative Healthcare Choices from A to Z. New Health Symposium. Philadelphia, Pennsylvania.
- October 5, 1998 "The Effects of Spirituality on Health". Symposium entitled, Spirituality and Health: Exploring the Relationship Between Body, Mind, and Spirit. New Health Symposium. Philadelphia, Pennsylvania.
- October 17, 1998 "The Neuroscience of Spiritual Experience". Kundalini Research Network's 7th International Symposium. Norcross, Georgia.
- March 17, 1999 "The Health Benefits of Meditation". Graduate Student Association Council Multiculturalism Committee Forum on Complementary and Alternative Medicine, University of Pennsylvania. Philadelphia, Pennsylvania.
- April 12, 1999 "Respondent". Spirituality Research Symposium, Presbyterian Medical Center. Philadelphia, Pennsylvania.
- May 21, 1999 "Why God Won't Go Away". Embracing the Spirit Conference, The Caron Foundation. Wernersville, Pennsylvania.
- October 17, 1999 "The Neuropsychological Analysis of Religion: Why God Won't Go Away". C.G. Jung Society of West Jersey.
- October 24, 1999 "Images of the Mystical Mind". 25th Annual Conference of the Yoga Research Society, Philadelphia Pennsylvania.

- May 2, 2000 "The Mystical Mind". Philadelphia Center for Religion and Science, Philadelphia PA.
- June 19, 2000 "The Pathological Origins of Nuclear Medicine: In Vitro Studies". Grand Rounds, Department of Pathology, Hospital of the University of Pennsylvania, Philadelphia, PA
- April 18, 2000 "Stress Management in Medicine". Student Health Service Weekly Medical Conference, Department of Student Health, University of Pennsylvania, Philadelphia, PA
- October 17, 2000 "Managing Stress in the Medical Profession". FOCUS Health Seminar Series, Hospital of the University of Pennsylvania, Philadelphia, PA
- April 2, 2001 "Why God Won't Go Away". The Mind Science Foundation Speaker Series. San Antonio, TX.
- April 21, 2001 "Why God Won't Go Away". International Conference on Science and Consciousness. Albuquerque, NM. (April 21, 2001).
- April 23, 2001 "Why God Won't Go Away". Mind and Supermind Evening Lecture Series. Santa Barbara, CA.
- April 25, 2001 "Exploring the Link Between Spirituality and Health". Guest Lecturer, Department of Religion, Health and Human Value, Rush Presbyterian St.Luke's Hospital, Chicago, IL
- April 26, 2001 "Exploring the Link Between Spirituality and Mental Health". Guest Lecturer, Department of Psychiatry, Fairview University Medical Center, University of Minnesota, Minneapolis, MN
- April 28, 2001 "Spirituality and Health". The Spiritual Adventure Conference. Omega Institute, New York, NY.
- April 28, 2001 "Why God Won't Go Away". The Spiritual Adventure Conference. Omega Institute, New York, NY.
- May 30, 2001 "Wired to God: The Connection Between the Brain and God". Cathedral for the Episcopal Diocese of Pennsylvania Spring Lecture Series. Philadelphia, PA.
- June 2, 2001 "A Neuropsychological Analysis of Spiritual Experience". Summit for Clinical Excellence: Innovations in Addiction Treatment and Behavioral Health Care. Philadelphia, PA.
- June 2, 2001 "Why God Won't Go Away: The Biology of Belief". Summit for Clinical Excellence: Innovations in Addiction Treatment and Behavioral Health Care. Philadelphia, PA.

- June 3, 2001 “A Neuropsychological Analysis of Spiritual Experience”. Neuroscience, Religious Experience, and the Self. CTNS Science & Religion Course Program. Montreal, Canada
- June 16, 2001 “Physical and Mental Health in Relation to Spirituality: Clinical and Research Perspectives”. Complementary Medicine 2001: From Evidence to Integration. University of Toronto, Toronto, Ontario.
- August 16, 2001 “Why God Won’t Go Away: The Biology of Belief”. The Ross Institute. East Hampton, NY.
- September 19, 2001 “Neuropsychology of Religious Experience: Exploring the Link Between Religion and Health”. Philadelphia College of Osteopathic Medicine. Philadelphia, PA
- October 2, 2001 “Imaging Spirituality”. Radiology Grand Rounds. University of Pennsylvania Health System, Philadelphia, PA
- October 3, 2001 “The Neuropsychology of Religious Experience: Implications for Theology and Religious Studies”. Colloquium for the Department of Religious Studies. University of Pennsylvania, Philadelphia, PA
- October 13, 2001 “The Neuropsychology of Religious Experience”. Guest Lecturer for Organizational Dynamics Course. University of Pennsylvania, Philadelphia, PA
- October 21, 2001 “Why God Won’t Go Away”. Pickwick Salon Presentation for the Free Library of Philadelphia, Philadelphia, PA (October 21, 2001).
- October 25, 2001 “Balancing Work, Marriage, and Children”. FOCUS Health Seminar Series, Hospital of the University of Pennsylvania, Philadelphia, PA
- November 1, 2001 “Functional Brain Imaging in Neuropsychiatric Disorders”. Grand Rounds, Department of Neurosurgery. Hospital of the University of Pennsylvania, Philadelphia, PA
- November 8, 2001 “The Neuropsychology of Religious Experience: Why God Won’t Go Away”. Guest Lecturer. Introduction to Medical Anthropology Course. University of Pennsylvania, Philadelphia, PA
- November 14, 2001 “The Neuropsychology of Religious Experience”. CAM Seminar Series, Center for Complementary and Alternative Medicine. Johns Hopkins University Hospital, Baltimore, MD
- December 3, 2001 “The Neuropsychology of Religious Experience: Why God Won’t Go Away”. Spirituality in Healthcare Dialogue, William Temple



Episcopal Center. University of Texas Medical Branch, Galveston, TX

- December 12, 2001 “Why God Won’t Go Away”. Har Zion Synagogue Adult Education Program, Philadelphia, PA.
- January 13, 2002 “Why God Won’t Go Away”. Health Care Professionals’ Division of the Jewish Federation of Southern New Jersey’s Allied Jewish Appeal. Cherry Hill, NJ.
- February 10, 2002 “Spirituality: The Connection to Physical and Mental Health”. Mind, Body & Medicine Conference, 92<sup>nd</sup> Street Y. New York, NY.
- February 20, 2002 “States of Consciousness and Clinical Implications”. Guest Lecturer, Doctors in Medicine Course, Jefferson Health System School of Medicine, Philadelphia, PA
- February 21, 2002 “Why God Won’t Go Away”. Greek Orthodox Society Distinguished Lecture Series, University of Pennsylvania, Philadelphia, PA (February 21, 2002).
- February 26, 2002 “The Neurobiology of Religious Experience: Why God Won’t Go Away”. Distinguished Lecturer Series, Department of Psychology, Haverford College, Haverford, PA
- February 27, 2002 “Why God Won’t Go Away: Brain Science and the Biology of Belief”. American Association for the Advancement of Science, Public Seminar Series. Washington, DC
- March 20, 2002 “Why God Won’t Go Away: Brain Science and the Biology of Belief”. Old Donation Episcopal Church. Norfolk, VA.
- March 20, 2002 “Why God Won’t Go Away: Brain Science and the Biology of Belief”. St. Paul’s Episcopal Church. Virginia Beach, VA.
- March 23, 2002 “Spirituality, the Brain, and God”. The Greater Philadelphia Philosophy Consortium, The 8<sup>th</sup> Annual Public Issues Forum: A Dialogue on Science and Spirituality: Exploring the Emerging Integrative Paradigms. Haverford College, Haverford, PA.
- March 23, 2002 “Spirituality, the Brain, and God”. The Greater Philadelphia Philosophy Consortium, The 8<sup>th</sup> Annual Public Issues Forum: A Dialogue on Science and Spirituality: Exploring the Emerging Integrative Paradigms. Haverford College, Haverford, PA (March 23, 2002).
- March 26, 2002 “Perspectives on Neuroscience and Theology”. Spirituality Research Symposium, University of Pennsylvania. Philadelphia, PA.

- March 29, 2002 “Careers in Neuroscience”. Clinical Neuroscience Track Seminar, University of Pennsylvania School of Medicine. Philadelphia, PA
- April 8, 2002 “The Neurochemical Correlates of Meditation”. Toward a Science of Consciousness Conference, University of Arizona. Tucson, AZ.
- May 4, 2002 “A Neuropsychological Analysis of Religion; Why God Won’t Go Away”. Harvard Medical School Department of Continuing Education: Science and Mind/Body Medicine Conference. Cambridge, MA.
- June 14, 2002 “Why God Won’t Go Away: Brain Science and the Biology of Belief”. Spirituality and Health Seminar Series, Howard University, Washington, DC.
- June 23, 2002 “Hardwired for God: A Neuropsychological Model for Developmental Spirituality”. Hardwired to Connect: Commission on Children at Risk Working Conference, Dartmouth Medical School, New Hampshire.
- August 24, 2002 “The Neuropsychological Correlates of the Self in Religious Experience”. Science and the Spiritual Quest Symposium, Center for Theology and the Natural Sciences, Granada Spain.
- September 12, 2002 “Why God Won’t Go Away: Brain Science and the Biology of Belief”. Memorial Health Lecture Series. Savannah, Georgia.
- September 24, 2002 “Why God Won’t Go Away: Brain Science and the Biology of Belief”. Integris Health System Women’s Health Forum, Oklahoma City, OK.
- September 25, 2002 “Imaging Spirituality” Guest Lecturer, Department of Psychiatry, Integris Baptist Medical Center. Oklahoma City, Oklahoma.
- October 7, 2002 “Why God Won’t Go Away: Brain Science and the Biology of Belief”. Chestnut Hill College, Chestnut Hill, PA.
- October 24, 2002 “Why God Won’t Go Away: Brain Science and the Biology of Belief”. Languages Sacred and Profane Series, Sponsored by The Catholic Studies Program and the Faculty of Languages and Linguistics. Georgetown University, Washington, DC.
- January 9, 2003 “Brain, Mind, and Soul: Science at the Limits”. Grand Rounds, Department of Neurosurgery. Hospital of the University of Pennsylvania, Philadelphia, PA.
- February 20, 2003 “Spirituality and Pain”. Symposium presenter, American Academy of Pain Medicine, Annual Meeting, New Orleans, LA.

- April 2, 2003 “Spirituality and Neurobiology”. Integrating Research on Spirituality and Health and Well-Being Into Service Delivery: A Research Conference, Natcher Conference Center, National Institutes of Health Campus, Bethesda, MD.
- April 10, 2003 “Why God Won’t Go Away: Brain Science and the Biology of Belief”. Thomas P. Johnson Distinguished Lecturer, Rollins College, Winter Park, FL.
- April 24, 2003 “Why God Won’t Go Away: Brain Science and the Biology of Belief”. Honors Society Guest Lecturer. Albright College, Reading, PA.
- May 1, 2003 “Why God Won’t Use Statistics”. Clinical Epidemiology Seminars / Health Services Research Lecture, Center for Clinical Epidemiology and Biostatistics. University of Pennsylvania, Philadelphia, PA.
- June 21, 2003 “Molecular Imaging in Nuclear Medicine from Head to Toe”. Eugene P. Pendergrass Symposium, Department of Radiology. University of Pennsylvania, Philadelphia, PA.
- September 5, 2003 “Spirituality and Pain: Exploring the Link”. Keynote Speaker. American Academy of Pain Management Annual Meeting. Denver, CO.
- September 12, 2003 “Research in Mind Body Medicine”. Complementary and Alternative Medicine Research Seminar. University of Pennsylvania Health System. Philadelphia, PA.
- October 8, 2003 “Why God Won’t Go Away: Brain Science and the Biology of Belief”. Penn Humanities Forum. University of Pennsylvania. Philadelphia, PA.
- November 6, 2003 “Why God Won’t Go Away: Brain Science and the Biology of Belief”. 9<sup>th</sup> Norman Vincent Peale Lecture, Hershey Medical Center, Penn State College of Medicine. Hershey, PA.
- November 20, 2003 “Why God Won’t Go Away: Brain Science and the Biology of Belief”. Medical University of South Carolina, Spirituality and Health Interest Group. Charleston South Carolina.
- November 21, 2003 “Why God Won’t Go Away: The Neuropsychology of Religious Experience”. Grand Rounds, Department of Psychiatry. Medical University of South Carolina. Charleston South Carolina.
- February 6, 2004 “The Spiritual Side of Medicine”. 7<sup>th</sup> Annual Spirituality and Medicine Seminar Series. Howard University Hospital. Washington DC.

- February 27, 2004 “Why God Won’t Go Away: The Neuropsychology of Religious Experience”. Trzesniewski Distinguished Lecturer Series. University of California, Davis. Davis, CA
- April 14, 2004 “PET Imaging in Therapy”. Image-Guided Radiation Therapy. American Association of Physicists in Medicine, Delaware Valley Chapter. CME Program. Philadelphia, PA.
- April 21, 2004 “Why God Won’t Go Away: The Neuropsychology of Religious Experience”. Gallagher Distinguished Lecturer Series. Albright College. Reading, PA
- May 14, 2004 “The Role of PET Scanning in the Diagnosis and Staging of NSCLC”. Update in the Multidisciplinary Management of Early-stage Non-small Cell Lung Cancer. CME Program. University of Pennsylvania, Philadelphia, PA.
- May 20, 2004 “Neuroimaging as Support for the Study of Spirituality and Health”. Spirituality Research Symposium, Presbyterian Medical Center. Philadelphia, Pennsylvania.
- August 28, 2004 “Why God Won’t Go Away: Brain Science and the Biology of Belief”. Emotional Transformation Therapy Annual Conference. Philadelphia, Pennsylvania.
- October 7, 2004 “Why God Won’t Go Away”. Liberal Studies Program Lecture Series. Rutgers University. Camden, New Jersey.
- October 28, 2004 “PET in Oncology”. Pennsylvania Hospital Oncology Group Monthly Seminar. Philadelphia, Pennsylvania.
- November 10, 2004 “Guest Lecturer”. Freshman Seminar in Religious Studies. Washington University. St. Louis, Missouri.
- November 10, 2004 “Why God Won’t Go Away: Brain Science and the Biology of Belief”. Religion in Medicine Symposium. Washington University. St. Louis, Missouri.
- November 11, 2004 “The Neurobiology of Spiritual Experiences”. 16th Annual Advances in Psychiatry Continuing Medical Education Program. University of Michigan School of Medicine. Ann Arbor, Michigan.
- December 2, 2004 “PET in Head and Neck Cancer”. Grand Rounds, Department of Otorhinolaryngology. University of Pennsylvania School of Medicine. Philadelphia, Pennsylvania.
- December 9, 2004 “Why God Won't Go Away: Neuroscience, Brain Function and Spiritual Expression”. Annual Symposium entitled, Illness Narratives:

Embracing the Spiritual and Emotional in Healthcare Conversations.  
Thomas Jefferson University. Philadelphia, Pennsylvania.

- March 10, 2005      “Neuroimaging, Psychiatry, and God”. Grand Rounds, Department of Psychiatry. University of Pennsylvania School of Medicine. Philadelphia, Pennsylvania.
- April 1, 2005      “Why Morality Won't Go Away”. 8th National Undergraduate Bioethics Conference. University of Pennsylvania. Philadelphia, Pennsylvania.
- April 2, 2005      “Brain Imaging Technologies”. 8th National Undergraduate Bioethics Conference. University of Pennsylvania. Philadelphia, Pennsylvania.
- April 12, 2005      “How do you measure God? Methodological Problems for the Study of Religious Experience”. Seminar at Saint Thomas Moore Chapel, Yale University. New Haven, Connecticut.
- April 12, 2005      “Is God Good for you? Effects of Religion on Physical and Mental Health”. Seminar at Saint Thomas Moore Chapel, Yale University. New Haven, Connecticut.
- April 12, 2005      “Why God Won’t Go Away: Brain Science and the Biology of Belief”. Thomas E. Golden Fellowship Lecture. Yale University. New Haven, Connecticut.
- April 25, 2005      “The Intersection Between Science and Religion”. Robert A. Fox Leadership Program. University of Pennsylvania. Philadelphia, Pennsylvania.
- April 29, 2005      “Why God Won’t Go Away: Brain Science and the Biology of Belief”. Temple Sinai, Summit, NJ.
- May 9, 2005      “Why God Won’t Go Away”. Guest Lecturer. Reconstructionist Rabbinical College. Wyncote, Pennsylvania.
- May 11, 2005      “Why God Won’t Go Away: Brain Science and the Biology of Belief”. Episcopal Academy Community Forum. Merion, Pennsylvania.
- June 7, 2005      “Spiritual Development During Childhood: A Neuropsychological Model”. 8<sup>th</sup> Annual Spirituality Research Symposium. Children’s Hospital, Philadelphia, PA.
- June 30, 2005      “Spirituality and Cardiovascular Health”. Cardiology Grand Rounds, Presbyterian Hospital. Philadelphia, PA.
- July 31, 2005      “The Neuropsychology of Spiritual Transformation”. Institute for Religion in an Age of Science, 52<sup>nd</sup> Annual Conference, Star Island, NH.

- September 21, 2005 "Measuring Faith: How Religion and Spirituality Influence Substance Abuse". Panel Discussion, National Center on Addiction and Substance Abuse at Columbia University Conference, New York, NY.
- October 6, 2005 "Why God Won't Go Away: Brain Science and the Biology of Belief". Dickinson College, Carlisle, PA.
- November 2, 2005 "Why God Won't Go Away: Brain Science and the Biology of Belief". Vivian J. Lamb Lecture Series, Villanova University, Villanova, PA.
- July 31, 2005 "The Neuropsychology of Spiritual Transformation". Institute for Religion in an Age of Science, 52<sup>nd</sup> Annual Conference, Star Island, NH.
- December 2, 2005 "Impact on Our Health of What We Believe". Tai Sophia Institute Annual Academic Symposium, Laurel, MD.
- February 3, 2006 "Neuroimaging, Psychiatry, and God". Psychiatry Grand Rounds, Temple University Hospital. Philadelphia, PA.
- March 22, 2006 "Neuroimaging in Complementary and Alternative Medicine". CAM Symposium. Hospital of the University of Pennsylvania, Philadelphia, PA.
- March 27, 2006 "Why God Won't Go Away". Guest Lecturer, Rhodes College, Memphis, TN.
- April 25, 2006 "The Neurophysiological Correlates of Beliefs". 9<sup>th</sup> Annual Spirituality Research Symposium. Hospital of the University of Pennsylvania, Philadelphia, PA.
- May 18, 2006 "Neuroimaging, Psychiatry, and God". Psychiatry Grand Rounds, Drexel University Hospital. Philadelphia, PA.
- May 22, 2006 "Spirituality and Physical/Mental Health: Clinical and Research Perspectives". Olaus Petri Lectures, Uppsala University, Uppsala, Sweden.
- May 23, 2006 "The Neuropsychology of Forgiveness". Olaus Petri Lectures, Uppsala University, Uppsala, Sweden.
- May 24, 2006 "Why We Believe What We Believe: The Relationship Between Theology and Neuroscience". Olaus Petri Lectures, Uppsala University, Uppsala, Sweden.
- July 28, 2006 "Functional Neuroimaging in Galactosemia". 2006 Galactosemia Conference, Philadelphia, PA.

- August 21-25, 2006 "Mind, Brain and Spirituality: Exploring the Link". 5 day continuing education course. Cape Cod Institute, Cape Cod, MA.
- September 15, 2006 "Why We Believe What We Believe: How Our Beliefs Affect Health". Integrative Medicine Grand Rounds. Thomas Jefferson University Hospital, Philadelphia, PA.
- October 3, 2006 "Why We Believe What We Believe: Uncovering Our Biological Need for Meaning". Frazee Lecture. Linfield College, Minnefield, OR.
- October 4, 2006 "Why We Believe What We Believe". Center for Theology and the Natural Sciences, Public Forum. Berkeley, CA.
- October 5, 2006 "Why We Believe What We Believe". Canyon Institute for Advanced Studies, Public Lecture Series. Phoenix, AZ.
- October 19, 2006 "Neuroimaging, Psychiatry, and God". Psychiatry Grand Rounds, Pennsylvania Hospital. Philadelphia, PA.
- October 19, 2006 "Why We Believe What We Believe". Epic of Creation Lectures, Zygon Center for Religion and Science. Chicago, IL.
- October 26, 2006 "Where We Believe What We Believe". Interfaith Forum on Religion, Art, and Architecture Annual Meeting. San Diego, CA.
- October 29, 2006 "Why We Believe What We Believe". Mind Body Spirit Expo. Valley Forge, PA.
- November 2, 2006 "Why God Doesn't Use Biostatistics". 2006 Humanities and Social Sciences Lecture. University of the Sciences in Philadelphia. Philadelphia, PA.
- November 14, 2006 "Neuroimaging, Psychiatry, and God". Barbour-Bonner Lecture Department of Psychiatry, University of Virginia School of Medicine. Charlottesville, VA.
- November 15, 2006 "Why We Believe What We Believe: How Beliefs Affect Health". Medical Center Hour, University of Virginia School of Medicine. Charlottesville, VA.
- December 20, 2006 "PET Imaging in Lung Cancer". Cooper Oncology Grand Rounds. Cooper Medical Center. Camden NJ.
- January 26, 2007 "The Neuropsychology of Forgiveness". Firearm & Injury Center at Penn Forum. Philadelphia, PA.
- March 1, 2007 "Beliefs in Health". Council for Relationships Monthly Conference. Philadelphia, PA.

- April 15, 2007 "Why We Believe What We Believe". Delaware Dialogues on Science, Ethics, and Religion. Wilmington, DE.
- June 16, 2007 "Beliefs in Health". Mind, Body, and Health Conference. Upstate Medical University. Syracuse, NY.
- August 25, 2007 "Neuroscience and the Mystical Mind". Beyond the Brain Conference. Science and Medical Network. Bath Spa University. Bath, England.
- September 26, 2007 "Born to Believe: God, Science, and the Origin of Ordinary and Extraordinary Beliefs". Princeton Lectures in Religion and Cognition. Center for the Study of Religion. Princeton University, Princeton, NJ.
- October 1, 2007 "The Neuroscience of Meditation". Smithsonian Associates Lecture Series on Exploring Meditation: Meaning and Practice. Washington, DC.
- October 18, 2007 "Born to Believe: God, Science and the Origin of Ordinary and Extraordinary Beliefs". Arcadia University Distinguished Speaker Series. Arcadia University. Glenside, PA.
- October 28, 2007 "Meditation, Brain Imaging, and Alzheimer's Disease". Alzheimer's Foundation of America. 2nd National Concepts in Care Conference. Philadelphia, PA.
- November 6, 2007 "Born to Believe: God, Science and the Origin of Ordinary and Extraordinary Beliefs". Cabrini College Local Societies Initiative Series. Cabrini College. Radnor, PA.
- December 5, 2007 "Why We Believe What We Believe: How Our Beliefs Affect Our Health". National Institute for the Clinical Application of Behavioral Medicine 2007 Annual Conference. Hilton Head, SC.
- January 14, 2008 "Brain Imaging and the Neuroscientific Study of Religion". Research Seminar Presentation. Cognitive Neuroscience Section in the National Institute of Neurological Disorders and Stroke in the National Institutes of Health. Bethesda, MD.
- January 24, 2008 "Born to Believe". Illahee Lecture Series, Illahee Institute. Portland, OR.
- April 16, 2008 "Why We Believe What We Believe". American Visionary Art Museum Lecture Series. Baltimore, MD.
- April 17, 2008 "Why We Believe What We Believe: How Our Beliefs Affect Our Health". Integrative Medicine Program Lecture Series. M.D. Anderson Cancer Center. Houston, TX.



- April 29, 2008 "Functional Brain Imaging in Parkinson's Disease". Translational Research in Lewy Body Disorders Conference. Institute on Aging. University of Pennsylvania. Philadelphia, PA.
- May 3, 2008 "Why Belief in God Persists: Why We Believe What We Believe". The Pew Forum on Religion and Public Life. Key West, FL.
- May 28, 2008 "PET and SPECT Imaging in Neuropsychiatric Disorders". Neurology Grand Rounds. University of Medicine and Dentistry of New Jersey. Newark, NJ.
- August 18-22, 2008 "Spirituality, the Mind, and Beliefs". 5 day continuing education course. Cape Cod Institute, Cape Cod, MA.
- September 11, 2008 "Why God Doesn't Use Biostatistics: Science and the Study of the Mind, the Body, and Spirituality". Beyond the Mind-Body Problem Conference. United Nations, New York, NY.
- October 17, 2008 "Why We Believe What We Believe: How Our Beliefs Affect Our Health". 2008 Turner Conference on Faith and Medicine. Ball Memorial Hospital. Muncie, IN.
- November 6, 2008 "Why We Believe What We Believe: How Our Beliefs Affect Our Health". Spirituality and the Mind: Investigation and Application. 2008 Spiritual Care Research Conference. Mayo Clinic. Rochester, MN.
- November 17, 2008 "Why God Won't Go Away". 2008 Stoner Clark Lecture. California Lutheran University. Thousand Oaks, CA.
- November 17, 2008 "Why We Believe What We Believe". 2008 Stoner Clark Lecture. California Lutheran University. Thousand Oaks, CA.
- February 5, 2009 "How God Changes Your Brain". 2009 Brown Symposium: Science and Religion: Conflict or Convergence. Southwestern University. Georgetown, TX.
- March 14, 2009 "Probing the Biology of Belief: Psychiatry, Neuroimaging, and God". Keynote Speaker at the 2009 38<sup>th</sup> Annual Meeting of the American Association of Directors of Psychiatric Residency Training. Tucson, AZ.
- April 3, 2009 "How God Changes Your Brain". Division 36 of the American Psychological Association Annual Meeting. Loyola College. Columbia, MD.
- April 5, 2009 "Brain Wave Lecture Program". Rubin Museum of Art Lecture Series. New York, NY.

- May 14, 2009 "How God Changes Your Brain". Nour Foundation Lecture Series. New York, NY.
- May 21, 2009 "The Aging Brain and Spiritual Capacity". 12<sup>th</sup> Annual Spirituality Research Symposium. University of Pennsylvania. Philadelphia, PA.
- July 17, 2009 "How God Changes Your Brain". Chautauqua Institution Annual Speaker Series. Chautauqua, NY.
- October 1, 2009 "How God Changes Your Brain". Spirituality, Theology, and Health Seminar Guest Lecturer. Duke University School of Medicine. Raleigh, NC.
- December 2, 2009 "Spirituality and Health". Thomas Jefferson University Guest Lecturer. Philadelphia, PA.
- December 3, 2009 "How God Changes Your Brain". American Anthropological Association. Distinguished Lecture for the Society for the Anthropology of Consciousness. Philadelphia, PA.
- January 21, 2010 "Why We Believe What We Believe: How Beliefs Affect Health". Bowles Chapel Lecture Series. Memorial Hermann Healthcare System. Houston, TX.
- January 21, 2010 "How God Changes Your Brain". Bowles Chapel Lecture Series. Memorial Hermann Healthcare System. Houston, TX.
- April 22, 2010 "Does Spirituality Change Your Brain?" Cousins Center for Psychoneuroimmunology at UCLA. Los Angeles, CA.
- May 18, 2010 "Meditation and Memory?" 13<sup>th</sup> Annual Spirituality Research Symposium. University of Pennsylvania. Philadelphia, PA.
- October 13, 2010 "Beyond Belief: Is Religion in Our Genes?" Ohio State University Lecture Series on The Intersection of Science and Faith. Columbus, OH.
- October 22, 2010 "Why We Believe What We Believe". 11<sup>th</sup> Annual Spirituality and Health Seminar. Chambersburg Hospital, Chambersburg, PA.
- October 22, 2010 "Spirituality and Health: Clinical and Research Perspectives". 11<sup>th</sup> Annual Spirituality and Health Seminar. Chambersburg Hospital, Chambersburg, PA.
- October 22, 2010 "Brain Imaging Cases in PET and SPECT" Society of Nuclear Medicine Northeast Regional Meeting, Philadelphia, PA.
- October 26, 2010 "Principles of Neurotheology". University of Pennsylvania Pastoral Care Conference. University of Pennsylvania. Philadelphia, PA.

- November 5, 2010 “How God Changes Your Brain” The Open Center Lecture Series. The Open Center. New York, NY.
- December 6, 2010 “Principles of Neurotheology”. Center for Consciousness and Transformation Guest Lecture. George Mason University. Fairfax, VA.
- January 4, 2011 “Principles of Neurotheology”. Integrative Medicine Grand Rounds. Thomas Jefferson University Hospital, Philadelphia, PA.
- January 5, 2011 “Principles of Neurotheology”. Spirituality, Religion, and Health Interest Group. Hospital of the University of Pennsylvania. Philadelphia, PA.
- March 30, 2011 “Functional Brain Imaging with PET and SPECT: Clinical and Research Perspectives”. Radiology Grand Rounds. Thomas Jefferson University Hospital, Philadelphia, PA.
- April 6, 2011 “God and the Brain: Where Do Science and Religion Meet?” Department of Religious Studies Discussion Series. Michigan State University. Lansing, MI.
- April 29, 2011 “Principles of Neurotheology” 15<sup>th</sup> Annual Academic Symposium. Siena Women’s Center. Molloy College. Rockville Centre, NY.
- September 23, 2011 “Why God Won’t Go Away”. First United Methodist Church. Downers Grove, IL.
- September 24, 2011 “Why We Believe What We Believe”. First United Methodist Church. Downers Grove, IL.
- September 24, 2011 “How God Changes Your Brain”. First United Methodist Church. Downers Grove, IL.
- September 24, 2011 “Principles of Neurotheology”. First United Methodist Church. Downers Grove, IL.
- October 20, 2011 “Definitions of Religion and Spirituality”. Spirituality and Health Grand Rounds. Thomas Jefferson University Hospital. Philadelphia, PA.
- October 22, 2011 “Maintaining a Healthy Brain”. Philadelphia Corporation for Aging. Senior Education Fair. Philadelphia, PA.
- October 25, 2011 “Principles of Neurotheology”. Driesen Lecturer, Reconstructionist Rabbinical College of Philadelphia. Wyncote, PA.
- October 28, 2011 “How God Changes Your Brain”. Mind, Body, Spirit Expo. Oaks, PA.

- October 30, 2011 "Principles of Neurotheology". 4<sup>th</sup> Annual Meeting of, The Judaism, Science, and Medicine Group. Center for Ethics, Emory University. Atlanta, GA.
- November 12, 2011 "Principles of Neurotheology". Applied Mindfulness Conference. West Chester University. West Chester, PA.
- December 7, 2011 "Neurotheology: God and the Brain". Medical Humanities Grand Rounds. Drexel University School of Medicine. Philadelphia, PA.
- February 28, 2012 "Bottom of the Cup Lecture Series". University of St. Thomas. Houston, TX.
- March 7, 2012 "Principles of Neurotheology". Invited Lecture, Princeton University Center for the Study of Religion. Princeton University. Princeton, NJ.
- March 29, 2012 "Lifestyle and Brain Health: Promoting Brain Health Through Spirituality, Socialization, and Mental Stimulation". American Society on Aging, National Forum on Brain Health. Washington, DC.
- May 11, 2012 "Principles of Neurotheology". Invited Lecture. Center for Inquiry. Buffalo, NY.
- May 14, 2012 "Principles of Neurotheology". Graduate Studies Colloquium. Brown University. Providence, RI.
- June 11, 2012 "The Spiritual Brain: Implications for Spirituality and Medicine". Spirituality and Medicine Seminar. Vidant Health System. Greenville, NC.
- June 11, 2012 "Biology of Belief: How God Changes Your Brain". Spirituality and Medicine Seminar. Vidant Health System. Greenville, NC.
- June 11, 2012 "Biology of Belief: How God Changes Your Brain". Spirituality and Medicine Seminar. Vidant Health System. Greenville, NC.
- November 4, 2012 "How God Changes Your Brain". 38<sup>th</sup> Annual Yoga Research Society Symposium. Philadelphia, PA.
- November 6, 2012 "Communication in Health and Wellness: How Words Can Change Your Brain". Integrative Medicine Grand Rounds. Thomas Jefferson University. Philadelphia, PA.
- November 13, 2012 "Neuroimaging, Psychiatry, and God". Psychiatry Grand Rounds. Cooper University Hospital. Camden, NJ.
- December 14, 2012 "Spirituality and the Brain: Implications for Neurology". Neurology Grand Rounds. Thomas Jefferson University. Philadelphia, PA.

- January 17, 2013 "Meditation and Neurodegenerative Disease". Advances in Meditation Research: Neuroscience and Clinical Applications. New York Academy of Sciences. New York, NY.
- January 19, 2013 "Communication In Health and Wellness: How Words Can Change Your Brain and Develop Your Leadership Potential". Clinical Nursing Leadership Summit. American Association of Colleges of Nursing. New Orleans, LA.
- March 5, 2013 "Beliefs, Brain Science, and Neurotheology Across the Lifespan". Guest Lecturer. Richard Stockton College of NJ. Galloway, NJ.
- March 16, 2013 "Principles of Neurotheology". Institute for Religion and Science Lecture. Chestnut Hill College. Chestnut Hill, PA.
- March 20, 2013 "Neuroimaging, Psychiatry, and God II". Psychiatry Grand Rounds, Temple University Hospital. Philadelphia, PA.
- April 17, 2013 "Functional Brain Imaging in Neurodegenerative Diseases". Radiology Department Guest Lecture. Thomas Jefferson University Hospital. Philadelphia, PA.
- May 19, 2013 "The Neuropsychology of Forgiveness: How Words Can Change Your Brain". Philadelphia Society for Clinical Hypnosis. Philadelphia, PA.
- May 22, 2013 "Meditation and Brain Health". Cummings Centre Program. Montreal, Quebec.
- June 22, 2013 "Words Can Change Your Brain". The Open Center Guest Lecture. New York, NY.
- July 23, 2013 "Neurotheology: The Connection Between God, Your Brain, and Health". Pennsylvania Lupus Foundation Annual Meeting. Drums, PA.
- October 14, 2013 "Lectures on Neurotheology: The Connection of Neuroscience and Religious Beliefs". Pennsylvania Society of Chaplains Annual Conference. Carlisle, PA.
- October 25, 2013 "This is Your Brain on Spirituality: Neurotheology Explored". Chrysalis Institute. Richmond, VA.
- October 26, 2013 "Consciousness At Many Levels". Chrysalis Institute. Richmond, VA.
- October 30, 2013 "How God Changes Your Brain". Georgetown University. Catholic Studies Program. Washington, DC.

- November 7, 2013 “Principles of Neurotheology”. Texas Health Resources Attending Clergy Association Annual Meeting. Texas Health Presbyterian Hospital. Dallas, TX.
- November 8, 2013 “Beliefs in Health”. Texas Health Resources Attending Clergy Association Annual Meeting. Texas Health Presbyterian Hospital. Dallas, TX.
- November 8, 2013 “How God Changes Your Brain”. Texas Health Resources Attending Clergy Association Annual Meeting. Texas Health Presbyterian Hospital. Dallas, TX.
- January 24, 2014 “Neuroimaging in Traumatic Brain Injury”. 3rd Annual Neurocritical Care Symposium: A Case-Based Approach. Thomas Jefferson University. Philadelphia, PA.
- January 28, 2014 “Spirituality and the Brain: Neuroscientific Perspectives”. Guest Lecturer. Center for Neuroscience and Society. University of Pennsylvania. Philadelphia, PA.
- February 5, 2014 “Neurotheology and Positive Psychology”. Guest Lecturer. New York Open Center. New York, NY.
- February 26, 2014 “How God Changes Your Brain”. Guest Lecturer. Peachtree Road United Methodist Church. Atlanta, GA.
- June 30, 2014 “Spirituality, Psychology, and the Brain: Exploring the Link”. Guest Lecturer. School of Psychology, Interdisciplinary Center (IDC). Herzliya, Israel.
- July 15, 2014 “Why We Believe What We Believe: How Beliefs Affect Health”. Pennsylvania Lupus Foundation Annual Meeting. Drums, PA.
- September 2, 2014 “Words Can Change Your Brain”. Integrative Medicine Grand Rounds. Thomas Jefferson University. Philadelphia, PA.
- October 8, 2014 “Your Brain On God”. Episcopal Diocese of Central New York Annual Meeting. Syracuse, NY.
- October 18, 2014 “Why God Won’t Go Away: Brain Science and the Biology of Belief”. Beaven Lecture. University of Rochester. Rochester, NY.
- November 12, 2014 “Principles of Neurotheological Research”. Invited Lecturer. Behavioral Pharmacology Research Unit, Department of Psychiatry and Behavioral Sciences. Johns Hopkins University School of Medicine. Baltimore, MD.

- November 14, 2014 “The Mystical Mind”. Invited Lecturer. Department of Religion, Rice University. Houston, TX.
- November 15, 2014 “Why God Won’t Go Away”. Guest Lecturer. Foundation for Contemporary Theology. Houston, TX.
- February 22, 2015 “Doctoral Conference Presentation”. Department of Religion, Psychology and Culture. Vanderbilt University. Nashville, TN.
- February 22, 2015 “Wholeness: Exploring the Link Between the Brain and Spirituality”. Key Note Talk. National Association of College and University Chaplains Annual Meeting. Nashville, TN.
- March 4, 2015 “The Metaphysical Mind and Health”. Spirituality, Religion, and Health Interest Group. Hospital of the University of Pennsylvania. Philadelphia, PA.
- March 17, 2015 “How God Changes Your Brain”. Key Note Talk. Central Conference of American Rabbis Annual Meeting. Philadelphia, PA.
- September 15, 2015 “The Biology of Belief”. Guest Lecturer. Intellectual Heritage Program. Temple University. Philadelphia, PA.
- October 4, 2015 “Is the Human Brain Hard Wired for God”. Guest Lecture. One Day University Program. Philadelphia, PA.
- October 6, 2015 “PET-MR Guided Integrative Medicine”. Integrative Medicine Grand Rounds. Thomas Jefferson University. Philadelphia, PA.
- November 6, 2015 “Neuroimaging In Neurodegenerative Disorders”. Neurology Grand Rounds. Thomas Jefferson University. Philadelphia, PA.
- December 6, 2015 “The Psychology of Religion: How God Changes Your Brain”. Guest Lecture. One Day University Program. New York, NY.
- December 9, 2015 “Neurotheology: Exploring the Link Between Spirituality and Health”. Medicine Grand Rounds. Paoli Hospital. Paoli, PA.
- January 20, 2016 “Religion, Art, and the Brain”. Guest Lecture. Arthur Ross Gallery Series. University of Pennsylvania. Philadelphia, PA.
- February 9, 2016 “Principles of Neurotheology”. Guest Lecture. New Perspectives on Religious Experience Lecture Series. University of Pennsylvania. Philadelphia, PA.
- April 2, 2016 “How Enlightenment Changes Your Brain”. Keynote Speaker. Global Philosophy Forum. Haverford College. Haverford, PA.

- April 14, 2016 "The Spiritual Mind". 2016 Boardman Lecture. University of Pennsylvania. Philadelphia, PA.
- June 27, 2016 "Functional Brain Imaging With PET and SPECT". Princeton Neuroscience Institute Clinical Seminar. Princeton University. Princeton, NJ.
- July 20, 2016 "How Enlightenment Changes Your Brain". Pennsylvania Lupus Foundation Annual Meeting. Drums, PA.
- September 23, 2016 "How Enlightenment Changes Your Brain". Southern Headache Society 6th Annual Scientific Meeting. Mountain Area Health Education Center, Asheville, NC.
- September 27, 2016 "The Psychology of Religion: How God Changes Your Brain". Guest Lecture. One Day University Program. Philadelphia, PA.
- October 23, 2016 "Spirituality, the Brain, and Well Being". Plenary Speaker. Masters of Applied Positive Psychology Annual Summit. University of Pennsylvania, Philadelphia, PA.
- October 29, 2016 "How God Changes Your Brain". Keynote Speaker. Symposium at the Institute for Theological Studies at St. Margaret's. Little Rock, AR.
- November 20, 2016 "The Brain and Spiritual Practices". Guest Lecture. St. Peter's Church. Philadelphia, PA.
- December 6, 2016 "Neuroimaging in Integrative Psychiatry". Integrative Medicine Grand Rounds. Thomas Jefferson University. Philadelphia, PA.
- March 21, 2017 "How God Changes Your Brain". Guest Lecture. Oakwood University. Huntsville, AL.
- April 6, 2017 "How Enlightenment Changes Your Brain: Implications for Education". Key Note Lecture. New Jersey Association of Independent Schools Conference. Gladstone, NJ.
- August 14, 2017 "Faith and the Brain". Guest Lecturer. City of Philadelphia Department of Behavioral Health & Intellectual disAbility Services. Philadelphia, PA.
- August 14, 2017 "Principles of Neurotheology". Guest Lecturer. New Brunswick Theological Seminary. Philadelphia, PA.
- September 28, 2017 "Religion on the Brain". Guest Lecturer. Neuroscience and Society Lecture Program. American Association for the Advancement of Science. Washington, DC.



- February 7, 2018 “Neurotheology: Future Directions and Implications”. Guest Lecturer. Spirituality, Religion, and Health Interest Group. Hospital of the University of Pennsylvania. Philadelphia, PA.
- March 19, 2018 “Principles of Neurotheology”. Guest Lecturer. University of Pittsburgh Brain Institute. Pittsburgh, PA.
- March 19, 2018 “How Enlightenment Changes Your Brain”. Guest Lecturer. University of Pittsburgh Department of Religious Studies. Pittsburgh, PA.
- April 18, 2018 “Neuroscience and Religious Experience”. Wesley College Scholars Day Program Key Note Lecture. Wesley College, Dover, DE.
- May 4, 2018 “How Enlightenment Changes Your Brain”. Key Note Lecturer. Association for Comprehensive Energy Psychology Annual Meeting. Orlando, FL.

### **Organizing Roles in Scientific Meetings:**

- July 30-August 6, 2005 Co-chair of Annual Meeting for the Institute for Religion in an Age of Science, Star Island, NH.

### **Bibliography:**

#### **Research Publications (peer reviewed):**

- Alavi A, Newberg AB, Souder E, Reivich M. Comparison of quantitative MRI and PET between patients with dementia of the Alzheimer type and multi-infarct dementia. *Journal of Stroke and Cerebrovascular Disease* 2: 218-221, 1992.
- Kumar A, Newberg AB, Alavi A, Smith R, Berlin J, Reivich M. Regional cerebral glucose metabolism in late life depression and Alzheimer's disease: A preliminary positron emission tomography study. *Proceedings of the National Academy of Sciences* 90:7019-7023, 1993.
- Alavi A, Newberg AB, Souder E, Berlin J. Quantitative analysis of PET and MRI data in normal aging and Alzheimer's disease: Atrophy weighted total brain metabolism and absolute whole brain metabolism as reliable discriminators. *Journal of Nuclear Medicine* 34:1681-1687, 1993.
- d'Aquili EG, Newberg AB. Religious and mystical states: a neuropsychological model. *Zygon* 28: 177-200, 1993.
- d'Aquili EG, Newberg AB. Liminality, trance and unitary states in ritual and meditation. *Studia Liturgica* 23: 2-34, 1993.

- Kumar A, Newberg AB, Alavi A, Miller D, Berlin J, Gur RE, Gottlieb G. MRI volumetric measures in Alzheimer's disease: Relationship to clinical and neuropsychological variables. *American Journal of Geriatric Psychiatry* 2:21-31, 1994.
- Newberg AB. Changes in the central nervous system and their clinical correlates during long-term space flight. *Aviation, Space, and Environmental Medicine* 65:562-572, 1994.
- Newberg AB, d'Aquili EG. The near death experience as archetype: A model for prepared neurocognitive processes. *Anthropology of Consciousness* 5:1-15, 1994.
- Newberg AB. Space motion sickness (reply). *Aviation, Space, and Environmental Medicine* 66:87, 1995. [letter]
- Newberg AB, Alavi A. The study of the neurological disorders using positron emission tomography and single photon emission computed tomography. *Journal of the Neurological Sciences* 135:91-108, 1996.
- Newberg AB, Alavi A. The study of the brain using PET and SPECT: Implications for space and underwater neurology. *Journal of the Neurological Sciences* 136:1-9, 1996.
- d'Aquili EG, Newberg AB. Consciousness and the machine. *Zygon* 31:235-252, 1996.
- Alavi A, Newberg AB. Metabolic consequences of acute brain trauma: Is there a role for PET? *Journal of Nuclear Medicine* 37:1170-1172, 1996.
- Newberg AB, Alavi A. Neuroimaging in patients with traumatic brain injury. *Journal of Head Trauma Rehabilitation* 11(6):65-79, 1996.
- Newberg AB, d'Aquili EG. Unitary states, free will and ultimate reality. *Ultimate Reality and Meaning* 19(4):298-311, 1996.
- Kumar A, Miller D, Ewbank D, Yousem D, Newberg A, Samuels S, Cowell P, Gottlieb G. Quantitative anatomic measures and comorbid medical illness in late-life major depression. *American Journal of Geriatric Psychiatry* 5(1):15-25, 1997.
- Newberg AB, Newberg SK, d'Aquili EG. The philosophy and psychology of consciousness. *American Psychologist* 52(2):177-178, 1997.
- Mozley PD, Sadek AM, Alavi A, Gur RC, Muenz LR, Bunow BJ, Kim H-J, Stecker M, Jolles P, Newberg A. Effects of aging on the cerebral distribution of technetium-99m hexamethylpropylene amine oxime in healthy humans. *European Journal of Nuclear Medicine* 24:754-761, 1997.

- Alavi A, LaRiccia PJ, Sadek AH, Newberg AB, Lee L, Reich H, Lattanand C, Mozley PD. Neuroimaging of acupuncture in patients with chronic pain. *Journal of Alternative and Complementary Medicine* 3(suppl 1):S47-S53, 1997.
- Alavi A, Mirot A, Newberg A, Alves W, Gosfield T, Reivich M, Gennarelli T. F-18 PET evaluation of crossed cerebellar diaschisis in head injury. *Journal of Nuclear Medicine* 38(11):1717-1720, 1997.
- Newberg AB, Newberg SK. Incorporating stress management into clinical practice. *Hospital Physician* 34(6): 52-58, 1998.
- Newberg AB, Alavi A. Changes in the central nervous system during long-duration space flight: Implications for neuroimaging. *Advances in Space Research* 22(2):185-196, 1998.
- Newberg AB, Alavi A, Bhatnagar A, Baime M, d'Aquili E. The neurophysiological correlates of meditation: Implications for neuroimaging. *Journal of the Indian Academy of Clinical Medicine* 3:13-18, 1998.
- d'Aquili EG, Newberg AB. The neuropsychology of aesthetic, spiritual and mystical states. *Zygon* 35(1): 39-52, 2000.
- Newberg AB, d'Aquili EG. The creative brain / The creative mind. *Zygon* 35(1): 53-68, 2000.
- Newberg AB, Alavi A, Alavi J. Contralateral cortical diaschisis in a patient with cerebellar astrocytoma after radiation therapy. *Clinical Nuclear Medicine* 25(6): 431-433, 2000.
- Newberg AB, Mozley PD, Sadek AH, Grossman M, Alavi A. The regional cerebral distribution of [Tc-99m] HMPAO in patients with progressive aphasia. *Journal of Neuroimaging* 10:162-168, 2000.
- Buchpiquel C, Alavi A, Crawford D, Freeman E, Newberg AB. Changes in cerebral blood flow associated with premenstrual syndrome: a preliminary study. *Journal of Psychosomatic Obstetrics and Gynecology* 21: 157-165, 2000.
- Newberg AB, d'Aquili EG. The neuropsychology of religious and spiritual experience. *Journal of Consciousness Studies* 7(11-12): 251-266, 2000.
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- Newberg AB, Alavi A, Baime M, Pourdehnad M, Santanna J, d'Aquili EG. The measurement of regional cerebral blood flow during the complex cognitive task of meditation: A preliminary SPECT study. *Psychiatry Research: Neuroimaging* 106: 113-122, 2001.

- Yun M, Yeh D, Araujo L, Jang S, Newberg A, Alavi A. F-18 FDG uptake in the large arteries: a new observation. *Clinical Nuclear Medicine* 26: 314-319, 2001.
- Litt H, Sinha P, Newberg AB. Demonstration of uterus didelphys on renal transplant scan in a patient with multiple cloacal anomalies. *Clinical Nuclear Medicine* 26(3):259-60, 2001.
- Newberg A. The neuropsychology of ritual and meditative states. *Psyche & Geloof* 4:174-183, 2002.
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- Newberg A, Hassan A, Alavi A. Cerebral metabolic changes associated with Lyme disease. *Nuclear Medicine Communications* 23:773-777, 2002.
- Newberg A, Alavi A, Reivich M. Determination of regional cerebral function with FDG-PET imaging in neuropsychiatric disorders. *Seminars in Nuclear Medicine* 32(1):13-34, 2002.
- Newberg A, Alavi A, van Rhijn S, Cotter A, and Reilly P. Radiologic diagnosis of brain death. *Journal of the American Medical Association* 288:2121-2122, 2002.
- Newberg A, Alavi A. Normal patterns and variants in single-photon emission computed tomography and positron emission tomography brain imaging. *Seminars in Nuclear Medicine* 33(1):42-55, 2003.
- Newberg AB, Alavi A. Neuroimaging in patients with head injury. *Seminars in Nuclear Medicine* 33(2): 136-147, 2003.
- Newberg AB, Iversen J. The neural basis of the complex mental task of meditation: Neurotransmitter and neurochemical considerations. *Medical Hypothesis* 61(2): 282-291, 2003.
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Weintraub D, Newberg A, Cary MS, Siderowf AD, Moberg PJ, Kleiner-Fisman G, Duda JE, Stern MB, Mozley PD, Katz IR. [<sup>99m</sup>Tc]TRODAT-1 SPECT imaging correlates with neuropsychiatric symptoms in Parkinson's disease. *Journal of Nuclear Medicine* 46: 227-232, 2005.

Swanson RL, Newberg AB, Acton PD, Siderowf A, Wintering N, Alavi A, Mozley PD, Plossl K, Udeshi M, Hurtig H. Differences in [<sup>99m</sup>Tc] TRODAT-1 SPECT binding to dopamine transporters in patients with multiple system atrophy and Parkinson's disease. *European Journal of Nuclear Medicine* 32(3):302-307, 2005.

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Lee B, Newberg A. Neuroimaging in traumatic brain injury. *Journal of the American Society of NeuroTherapeutics* 2:372-383, 2005.

Lee B, Newberg A. Religion and health: A review and critical analysis. *Zygon* 40:443-468, 2005.

Newberg A, Lee B. The neuroscientific study of religious and spiritual phenomena: Or why God doesn't use biostatistics. *Zygon* 40:469-489, 2005.

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