

CURRICULUM VITAE
MICHAEL R. DOBBS, M.D.
July 2009

DEMOGRAPHIC INFORMATION

Primary Appointment: Assistant Professor of Neurology
University of Kentucky College of Medicine

Titles:

Neurology Residency Program Director (June 1, 2007-present)
(ACGME accredited through 2012, no citations, total complement of 16 residents)

Medical Director, Kentucky Neuroscience Institute/ Community Hospital Stroke Care Affiliate
Network (July 2008-present)

Personal Data:

Business address:
740 South Limestone Street
Kentucky Clinic L-445
Lexington, KY 40536-0284

Telephone: 859-218-5038

Facsimile: 859-323-5943

Adjunct Appointment

2006- Faculty, Center for Health Hazards Preparedness, University of Louisville School of
Public Health and Information Sciences

Joint Appointments

2007- Assistant Professor, Graduate Center for Toxicology, University of Kentucky College of
Medicine

2008- Assistant Professor, Preventive Medicine, University of Kentucky College of Public
Health

Specialty Boards

2003- American Board of Psychiatry and Neurology—Certification in Neurology.

2009- American Board of Psychiatry and Neurology—Certification in Vascular Neurology.

Licensure: July 1999-present. Kentucky (35087)

Academic designation: Academic medical educator, special title series

CLINICAL FOCUS

Cerebrovascular disease and stroke, Neurotoxicology, Therapeutic botulinum toxin injection

RESEARCH AND SCHOLARLY FOCUS

- Cerebrovascular disease

- Neurotoxicology
- Neurology education
- The interface between primary care and neurology

EDUCATION AND TRAINING

COLLEGE: 1990-1994 B.S. Microbiology, University of Kentucky, Lexington, KY.

MEDICAL SCHOOL: 1994-1998 M.D., University of Kentucky College of Medicine, Lexington, KY.

RESIDENCY: 1998-2002 Department of Neurology, University of Kentucky Medical Center. (Chairman: Joseph R. Berger).

RESEARCH TRAINING

1992-1993: Undergraduate Research Fellowship in Pharmacology, Department of Pharmacology, University of Kentucky College of Medicine. (Lab Chief: R.M. Booze).

1995-1996: Medical Student Research Fellowship in Neurosurgery, Department of Surgery, University of Kentucky College of Medicine. (Lab Chief: B.C. Warf).

Jan-June 2003: Botulinum Toxin Injection for Neurological Disorders, Wilford Hall Medical Center, Lackland AFB, TX (Joyce A. Grissom).

Nov. 2008--: Endovascular Neurology, University of Kentucky, Lexington, KY. (Curtis A. Given)

PAST FACULTY POSITIONS

October 2005-August 2006: Assistant Professor of Neurology, University of Louisville School of Medicine

June 2003-September 2005: Assistant Professor, Department of Neurology, Uniformed Services University of the Health Sciences, Bethesda, MD (Based at San Antonio Uniformed Services Health Education Consortium).

February 2003-September 2005: Assistant Clinical Professor, Department of Medicine/Neurology, University of Texas Health Science Center of San Antonio.

ACTIVE DUTY MILITARY RECORD

DATES SERVED: July 2002-Sept 2005.

FINAL RANK/GRADE: Major/O-4

CURRENT STATUS: Inactive

SECURITY CLEARANCE: Secret

MILITARY TITLES

1. Officer in Charge of Neurological Research, Wilford Hall Medical Center, 2002-2005.
2. Deputy Flight Commander, Dept of Neurology, 59th Medical Operations Squadron, 2004-2005.

MILITARY TRAINING

Commissioned Officers' Training: July-August, 2002. Maxwell AFB, AL. Honors: Flight Commander.

Medical Management of Chemical and Biological Warfare Casualties: November 2003. USAMRIID, Ft. Detrick, MD and USAMRICD, Aberdeen, MD.

Global Medicine: January-February 2005. Brooks AFB, TX.

RESEARCH ACTIVITIES

PATENTS

Dobbs M, McArthur R. U.S. Patent number 6,300,026. "Novel composition and method for control and treatment of cutaneous inflammation." Issued October 2001.

Dobbs M. U.S. Patent Pending. "A method for recording and quantifying in vivo neural data."

GRANT ACTIVITY

Associate investigator: Health Resources and Services Administration. Bioterrorism Training and Preparedness Program, "Confronting the Spectrum of Public Health Hazards". WP McKinney, PI. Approved for funding 09/05. Total year 3 funding amount: \$1,078,164. Funding for 9/2006-9/2008: \$2.1 million. Supports 15% of salary/effort for 2006-2007, 2007-2008.

Principal investigator: Chemical Defense Preparedness, for DOD/CDHAM/USUHS online course, policy development. Grant via Vangent: Supports 10% of salary/effort for 2006-2007. [COMPLETE]

Senior investigator: Effects of aspirin on platelet function in healthy, human subjects. US Air Force Surgeon General's research fund, \$50,000, 2004-2005. [COMPLETE]

BOOKS

1. **Dobbs MR**, Editor, *Clinical Neurotoxicology—Syndromes, Substances, Environments*, Elsevier/Saunders, May 2009.
2. **Dobbs MR**, Smith CD, *Clinical Atlas of Neurology*, Elsevier, anticipated publication date 2011.
3. **Dobbs MR**, Neurology Section Editor, *Ferri's Clinical Advisor*, F. Ferri, ed., Mosby Elsevier, anticipated publication date July 2009.

JOURNAL EDITORSHIPS

1. **Dobbs M**, Wicklund M. Guest-editors, *Neurologic Clinics*, "Toxic and Environmental Neurology." May 2005.
2. Assistant Editor, *Horn of Africa Journal of AIDS*, a publication of the "People to People" charity organization. 2003-present.

JOURNAL REVIEWING

Ad hoc reviewer, *Southern Medical Journal*, 2007-present.

Ad hoc reviewer, *Clinical Nephrology*, 2006-present.
2006-07: 1 manuscript reviewed

JOURNAL PUBLICATIONS (#denotes peer-reviewed)

Original Research

1. #Manalai P, Bhalavat R, **Dobbs, MR**, Lippmann S, "Coma Falsely Attributed to Lyme Disease." *JKMA*, July, 2008, 106:7.
2. #McGlasson DL, Chen M, Fritsma G, Knight ZA, **Dobbs M**. "Urinary 11-Dehydrothromboxane B2 Levels in Healthy Individuals Following a Single Dose Response to Two Concentrations of Aspirin," *Journal of Clinical Ligand Assay*, Volume 28, Number 3, Fall 2005, pp. 147-150(4).
3. #**Dobbs M**, Fakhoury T. "Bilateral abducens nerve palsy from mild trauma with force applied at an oblique angle: A case report and review of the literature." *J Ky Med Assoc*. 2003 Nov;101(11):507-10.
4. #**Dobbs M**, Berger J. "Cervical myelopathy secondary to violent tics of Tourette's syndrome." *Neurology* 2003; 60: 1862.
5. #Nath A, Hall E, Tuzova M, **Dobbs M**, Jons M, Anderson C, Woodward J, Guo Z, Fu W, Kryscio, Wekstein D, Smith C, Markesbery WR, Mattson MP. "Autoantibodies to amyloid beta-peptide (Abeta) are increased in Alzheimer's disease patients and Abeta antibodies can enhance Abeta neurotoxicity: implications for disease pathogenesis and vaccine development." *Neuromolecular Med* 2003;3(1):29-39.
6. #Berger JR, **Dobbs MR**, Terhune MH, Maragos WF. "The neurologic complications of scleromyxedema." *Medicine (Baltimore)* 2001 Sep;80(5):313-9.
7. #Berger JR, Levy RM, Flomenhoft D, **Dobbs M**. "Predictive factors for prolonged survival in acquired immunodeficiency syndrome-associated progressive multifocal leukoencephalopathy." *Ann Neurol* 1998 Sep;44(3):341-9.

Invited Reviews

8. **Dobbs MR**, Antivenom for Critically Ill Children with Neurotoxicity from Scorpion Stings, *Journal Watch Neurology*, May 2009.
9. Osterbauer P, **Dobbs M**. "Neurobiological weapons," *Neurol Clin*. 2005 May;23(2):599-621.
10. **Dobbs M**, Wicklund M. "Toxic and environmental neurology," *Neurol Clin*. 2005 May;23(2):xiii-xiv.
11. Osterbauer PJ, **Dobbs MR**. "The management of benign headaches in the HIV positive patient." *Horn of Africa Journal of AIDS*, July 2004.
12. **Dobbs M**. "Venezuelan equine encephalitis virus as an agent of terrorism." *International Society of Neurovirology Newsletter*, May 2004.

INTERNET COURSES WRITTEN

1. Chief Subject Matter Expert, Author, Chemical component. *Uniformed Services University of the Health Sciences Online Preparedness Education Program*, 2008, 26 CME hours, www.o pep.usuhs.edu
2. *NEUROTERRORISM: CHEMICAL THREATS TO HUMAN HEALTH*, course director, 2006, 2.0 CME/CE hrs, www.chse.louisville.edu/dobbscourse.html

IN PROGRESS

1. **Dobbs MR**, Berger JR. HIV and AIDS stroke risk, for *Expert Reviews in Cardiology*, October 2009.
2. Berger JR, Houff SA, **Dobbs MR** et al. The Neurological and Psychiatric Complications of Chronic Carbon Monoxide Poisoning: Report of 31 Patients with Industrial Exposure. Manuscript submitted.
3. **Dobbs MR**, Given CA, Ramsey C et al. "Intracranial angioplasty and Stenting" In progress.
4. **Dobbs MR**, Kundu E, Berger JR. "Foreign accent syndrome after thrombolysis in acute ischemic stroke." Submitted.

BOOK CHAPTERS

1. **Dobbs MR**. "Overview of Clinical Neurotoxicology," in *Clinical Neurotoxicology—Syndromes, Substances, Environments*, Elsevier/Saunders. May 2009.
2. **Dobbs MR**. "Approach to the outpatient with suspected neurotoxic symptoms," in *Clinical Neurotoxicology—Syndromes, Substances, Environments*, Elsevier/Saunders. May 2009.
3. Burtis DB, **Dobbs MR**. "Tetanus toxin," in *Clinical Neurotoxicology—Syndromes, Substances, Environments*, May 2009.
4. **Dobbs MR**. "Cyanide," in *Clinical Neurotoxicology—Syndromes, Substances, Environments*, Elsevier/Saunders. May 2009.
5. Berger JR, **Dobbs MR**, "Temperature extremes," in *Clinical Neurotoxicology—Syndromes, Substances, Environments*, Elsevier/Saunders. May 2009.

ABSTRACTS AT PEER-REVIEWED RESEARCH MEETINGS

1. #**Dobbs MR**, Houff SA, Berger JR, "Autoimmune disorders associated with carbon monoxide poisoning," 61st American Academy of Neurology Annual Meeting, 2009, Seattle, WA.
2. #**Dobbs MR**, "Does Susac's Syndrome explain Goya's artistic evolution?" 61st American Academy of Neurology Annual Meeting, 2009, Seattle, WA.
3. #Hess C, ...**Dobbs M** et al., "Dose Escalation Study of IV Minocycline in Acute Ischemic Stroke," International Stroke Conference, San Diego, Ca, 2009.

4. #Vaishnav A, Pettigrew C, **Dobbs M**, Ryan S, Jhavari M, Jhavari M, Bellamy L. "JCAHO primary Stroke Center Core measures: Influence of Stroke Care Unit." 60th American Academy of Neurology Annual Meeting, 2008, Chicago, IL.
5. #Chen M, **Dobbs M**, McGlasson D, Vogt M, Jones L. "Low-dose aspirin therapy in the acute setting results in significantly less biochemical platelet inhibition compared to standard-dose aspirin." 58th American Academy of Neurology Annual Meeting, 2006, San Diego, California.
6. #McGlasson DL, Chen MV, Knight ZA, **Dobbs M**. Are Different Platelet Function Comparable When Taking Aspirin? *Clin Lab Sci* 2006;19(3):156.
7. #McGlasson DL, Chen MV, Knight ZA, **Dobbs M**. Urinary 11-Dehydrothromboxane B2 levels in Healthy Individuals following a Single Dose Response to Two Concentrations of Aspirin. *Clin Lab Sci* 2006;19(3):160.
8. #McGlasson DL, Chen MW, Knight ZA, **Dobbs M**. Urinary 11-Dehydrothromboxane B2 levels in Healthy Individuals following a Single Dose Response to Two Concentrations of Aspirin. *Blood* 2005;106(11): pg. 74b, Suppl 1, abs 3979.
9. #Avery E, **Dobbs M** "Gluten Sensivity Is More Prevalent Than Expected in Patients with Peripheral Neuropathy" 56th American Academy of Neurology Annual Meeting, 2004, San Francisco, California.
10. #**Dobbs M**, Sladky J, Jaffee M, Williams C. "Prion disease in a former combat medic—a delayed casualty of the Vietnam War?" *J Neurovirol* 2003;9(S3):103.
11. #**Dobbs M**, O'Connell R. "Venezuelan Equine Encephalitis Virus can be a highly effective biological weapon." *J Neurovirol* 2003;9(S3):42.
12. #**Dobbs M**, "An Unusual Case of Foramen Magnum Syndrome." Society of Air Force Physicians Annual Scientific Meeting, March 2003.
13. #Avery E, **Dobbs M** "Anti-gliadin Antibodies in a Series of Neuropathy Patients with Unmatched Controls." Society of Air Force Physicians Annual Scientific Meeting, March 2003.
14. #Dobbs M, Nath A et. al. "Patients with Alzheimer's disease have increased antibody responses to A-beta peptide that promotes A-beta aggregation." Society of Air Force Physicians Annual Scientific Meeting, March 2003.
15. #Berger JR, Levy RM, Flomenhoft D, **Dobbs M**. "Predictive factors for prolonged survival in AIDS-associated PML." *J NeuroVirol* 1998;4(3):342.

PRESENTATIONS AT PEER-REVIEWED RESEARCH MEETINGS

1. #**Dobbs MR**, Houff SA, Berger JR, "Autoimmune disorders associated with carbon monoxide poisoning," Platform Presentation for neurologic Manifestations of Systemic Disease, 61st American Academy of Neurology Annual Meeting, 2009, Seattle, WA.

2. #Dobbs MR, “Does Susac’s Syndrome explain Goya’s artistic evolution?” Poster Presentation for History of Neurology, 61st American Academy of Neurology Annual Meeting, 2009, Seattle, WA.
3. #Chen M, Dobbs M, McGlasson D, Vogt M, Jones L. “Low-dose aspirin therapy in the acute setting results in significantly less biochemical platelet inhibition compared to standard-dose aspirin.” Poster presentation, 58th American Academy of Neurology Annual Meeting, 2006, San Diego, California.
4. #McGlasson D, Chen M, Knight Z, Dobbs M “Urinary 11-Dehydrothromboxane B2 Levels in Healthy Individuals Following a Single Dose Response to Two Concentrations of Aspirin.” American Society of Hematology Annual Meeting 2005, Miami, Florida.
5. #Avery E, Dobbs M "Gluten Sensivity Is More Prevalent Than Expected in Patients with Peripheral Neuropathy" Poster presentation, 56th American Academy of Neurology Annual Meeting, 2004, San Francisco, California.
6. #Eicher T, Dobbs M, Williams C. “Mental status changes in acute stroke—edema or seizure?” Abstract and poster, Research Appreciation Day, Wilford Hall Medical Center, May 2004.
7. #Dobbs M, O’Connell R. “Venezuelan Equine Encephalitis Virus can be a highly effective biological weapon.” Platform presentation, 5th International Symposium on Neurovirology, Baltimore, MD, September 5, 2003.
8. #Avery E, Dobbs M “The Prevalence of Gluten Sensitivity in a Population of Peripheral Neuropathy Patients,” Platform Presentation (Grollman Lecture), Society of Air Force Physicians Annual Scientific Meeting, March 2004, San Antonio, TX.
9. #Avery E, Dobbs M. “Increased prevalence of gluten sensitivity in peripheral neuropathy patients.” Abstract and poster, Research Appreciation Day, Wilford Hall Medical Center, May 2003.
10. #Dobbs M, Nath A et. al. “Patients with Alzheimer’s disease have increased antibody responses to A-beta peptide that promotes A-beta aggregation.” Abstract and poster, American Academy of Neurology national meeting, April 2002.
11. #Nath A, Dobbs M et. al. “Amyloid-beta Peptide Autoantibodies are Increased in Alzheimer’s Disease and Enhance Peptide Neurotoxicity: Implications for Disease Pathogenesis and Vaccine Development.” Society of Neuroscience national meeting, Orlando, FL, November 2002.
12. #Berger JR, Levy RM, Flomenhoft D, Dobbs M. “Predictive factors for prolonged survival in AIDS-associated PML.” Neuroscience of HIV Conference, Chicago, IL, June 3-6, 1998.
13. #Dobbs M, Warf B, Smolinske D. “Transforming growth factor beta does not uniformly promote migration across human glioma cell lines in vitro.” Presented at AOA student research day, University of Kentucky February 1996.

CLINICAL RESEARCH STUDIES

University of Kentucky College of Medicine

Stroke/cerebrovascular disease

Principal Investigator

Carotid Occlusion Surgery Study (COSS): A randomized multicenter trial of bypass surgery versus medical management for symptomatic occlusive carotid disease

Associate Investigator

Albumin in Acute Stroke (ALIAS) Trial: A Phase III Randomized Multicenter Clinical Trial of High-dose Human Albumin for Neuroprotection in Acute Ischemic Stroke

Principal Investigator: L. Creed Pettigrew, M.D

Warfarin versus Aspirin in Reduced Cardiac Ejection Fraction (WARCEF) Study

Principal Investigator: L. Creed Pettigrew, M.D

Secondary Prevention of Small Subcortical Strokes (SPS3)

Principal Investigator: Anand G. Vaishnav, M.D

*NeuroThera[®] Effectiveness and Safety Trial – 2 (NEST-2). A double blind, randomized, controlled, parallel group, multicenter, pivotal study to assess the safety and effectiveness of the treatment of acute ischemic stroke with the NeuroThera[®] Laser System within 24 hours from stroke onset.

Principal Investigator: L. Creed Pettigrew, M.D

**A Phase IIa Randomized, Double-Blind, Parallel-Groups, Placebo-Controlled Clinical Trial to Study the Efficacy and Safety of MK-0724 Intravenous Infusion on the Amelioration of Neurological Damage and Recovery from Middle Cerebral Artery Ischemic Stroke

Principal Investigator: Anand G. Vaishnav, M.D

Minocycline to Improve Neurologic Outcome (MINO) Trial: A Multicenter Clinical Trial of Minocycline for Neuroprotection in Acute Ischemic Stroke

Principal Investigator: L. Creed Pettigrew, M.D

Multiple Sclerosis and related disease (sub-investigator on all studies)

(P.I. Joseph Berger, M.D.)

A randomized, rater-blinded study to explore the effect of Mefloquine in subjects with progressive multifocal leukoencephalopathy (PML)

Cognition C105 Study (PI: Dr. Berger)

Randomized, Double-Blind, Placebo-Controlled, Dose-Titration Study to Assess the Safety, Tolerability, and Efficacy of C105 in persons with Multiple Sclerosis with Cognitive Impairment

Sanofi Aventis EFC6260 Teriflunomide Study (PI: Dr. Chan)

An international, multi-center, randomized, double-blind, placebo-controlled, parallel group study to evaluate the efficacy and safety of two year treatment with teriflunomide 7 mg once daily and 14 mg once daily versus placebo in patients with a first clinical episode suggestive of multiple sclerosis.

CAMMS323 (PI: Dr. Houff)

A Phase 3 Randomized, Rater-Blinded Study Comparing Two Annual Cycles of Intravenous Alemtuzumab to Three-Times Weekly Subcutaneous Interferon Beta-1a (Rebif[®]) in Treatment-Naïve Patients with Relapsing-Remitting Multiple Sclerosis

A Randomized, Double-Blind, Placebo-Controlled, Dose-Titration Study to Assess the Safety, Tolerability, and Efficacy of C105 in Persons with Multiple Sclerosis with Cognitive Impairment.

Double-blind, placebo-controlled, randomized, parallel-group Phase II study in subjects with relapsing forms of multiple sclerosis (MS) to evaluate the safety, tolerability, and effects of two doses of CDP323 over 24 weeks with a rater-blind MRI follow-up over 12 weeks.

A randomized, multicenter, two arm, open label, 12 week phase IIIb study to evaluate the tolerability of Rebif[®] (Interferon (IFN) beta-1a) (New Formulation) and Betaseron[®] (Interferon (IFN) beta-1b) in interferon-naïve subjects with relapsing remitting multiple sclerosis; followed by a single-arm, 24 week, Rebif[®] (New Formulation)-only safety **IRB Approved**

A Multinational, Multicenter, Randomized, Parallel-Group, Double-Blinded Study, to Compare the Efficacy, Tolerability and Safety of Glatiramer Acetate Injection 40 mg/ml to that of Glatiramer Acetate Injection 20 mg/ml Administered Once Daily by Subcutaneous Injection in Subjects with Relapsing Remitting (R-R) Multiple Sclerosis **TEVA CLOSED**

International, randomized, multicenter, phase III study in patients with relapsing-remitting multiple sclerosis comparing over a treatment period of 104 weeks: **BEYOND Closed**

A Multicenter, Randomized, Blinded, Parallel-Group Study of AVONEX Compared with AVONEX in Combination with Oral Methotrexate, Intravenous Methylprednisolone, or Both in Subjects with Relapsing-Remitting Multiple Sclerosis Who Have Breakthrough Disease on Avonex Monotherapy. (pharmaceutical company funded – Biogen) **CLOSED**

University of Louisville Health Sciences Center (2005-2006)

Sub-investigator

PROFESS

Prevention Regimen For Effectively avoiding Second Strokes

CLOSURE I

Prospective, multicenter, randomized controlled trial to evaluate the safety of the Starflex septal closure system versus best medical therapy in patients with a stroke and/or TIA due to presumed paradoxical embolism through a patent foramen ovale

FAST

Recombinant Factor VIIa in Acute Intracerebral Haemorrhage

DIAS-2

Desmoteplase in Acute Ischemic Stroke-2

Wilford Hall Medical Center (2002-2005)

Principal investigator (institutional).

CLOSURE I Prospective, multicenter, randomized controlled trial to evaluate the safety of the Starflex septal closure system versus best medical therapy in patients with a stroke and/or TIA due to presumed paradoxical embolism through a patent foramen ovale. IRB approval July 2003.

Aspirin resistance in a healthy adult population. Associate investigators: M. Chen, D. McGlasson.

Co-investigator and preceptor. An ongoing study to determine the incidence of gluten sensitivity in peripheral neuropathy patients. Resident: E. Avery.

Co-investigator, co-preceptor. Aspirin-Failure in Non-Cardioembolic Ischemic Stroke: Is It Predictable? Resident: M. Vogt. IRB approval July 2003.

Principal investigator (institutional). PREADVISE (Prevention of Alzheimer's Disease with Vitamin E and Selenium) study. This is a study to define the effect of selenium and Vitamin E in the reduction of AD in a population of men participating in the SELECT study.

Co-investigator and preceptor. A pilot study of the BIS-monitor as a field indicator of seizure activity. Resident: Ella Kundu. Associate investigator: C.S. Williams.

Associate Investigator. *"Genetic epidemiology of HIV-associated dementia."* PI: Sunil Ahuja, UTAHSC depts. of medicine, microbiology, and immunology. Co-investigator: Maj Brian Agan, M.D., WHMC.

HOSPITAL APPOINTMENTS

2006-present: Staff Neurologist, University of Kentucky Medical Center, Lexington, Kentucky.
 2007-present: Staff Neurologist, UK Healthcare Good Samaritan Hospital, Lexington, Kentucky.
 2005-06: Staff Neurologist, University of Louisville Medical Center, Louisville, Kentucky.
 2005-06: Staff Neurologist, Jewish Hospital, Louisville, Kentucky.
 2005-06: Staff Neurologist, Norton Hospital, Louisville, Kentucky.
 2005-06: Staff Neurologist, VA Medical Center, Louisville, Kentucky.
 2002-05: Staff Neurologist, Wilford Hall Medical Center, Lackland AFB, Texas.

EDUCATIONAL ACTIVITIES

TEACHING

UNIVERSITY OF KENTUCKY (1998-2002)

Continuing medical education lectures

"Examples of neurologic illness in classical literature," University of Kentucky Neurology Grand Rounds, November 1999.

"Multiple Sclerosis overview," CE lecture for Lexington VAMC nursing staff, November 2000.

"Neuropathy overview," CE lecture for Lexington VAMC nursing staff, April 2001.

Resident teaching lectures

"West syndrome and the ketogenic diet," University of Kentucky Department of Neurology Epilepsy conference, September 2000.

"Coma," University of Kentucky Department of Internal Medicine noon conference series, October 2000.

"Stroke associated with prosthetic heart valves," University of Kentucky joint Neurology/Neurosurgery stroke conference, December 2000.

“Peripheral Neuropathy,” University of Kentucky Department of Internal Medicine noon conference series, April 2001.

“EMG and NCS of the leg,” Neurophysiology residents’ teaching conference, July 2001.

“Nerve conduction studies of the Median Nerve, and the Martin-Gruber anastomosis” Neurophysiology residents’ teaching conference, July 2001.

“Neuropathy—an approach,” University of Kentucky neuromuscular conference, February 2002.

“Inherited Metabolic Diseases that Involve the Nervous System,” University of Kentucky Pediatric Neurology conference, February 2002.

Medical Student Teaching

Lab tutor, Neuroanatomy, basic neuroscience course for 1st year medical students (2 months per year for 3 years).

WILFORD HALL MEDICAL CENTER/UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER SAN ANTONIO (2002-2005)

Medical education lectures

“Neurologic ailments described in classical literature,” Grand Rounds University of Texas Health Science Center San Antonio Department of Neurology, September 2002.

“Neurological Weapons,” Grand Rounds University of Texas at San Antonio Department of Neurology, January 2003.

“Foramen Magnum Syndrome,” Grand Rounds University of Texas Health Science Center of San Antonio Department of Neurology, March 2003.

“Update on the prevention of secondary stroke” for physician’s assistants, July 2003.

“The management of cerebrovascular disease” for medical science managers, Bristol-Myers Squibb company, August 2003.

“Management of stroke in the young adult patient,” Internal Medicine Grand Rounds, Wilford Hall Medical Center, October 2003.

“Management of acute ischemic stroke,” Emergency Medicine Grand Rounds, Wilford Hall Medical Center/Brooke Army Medical Center, December 2003.

“Nipah and other emerging paramyxoviral encephalitides,” Grand Rounds University of Texas Health Science Center San Antonio Department of Neurology, February 2004.

“Acute stroke and ICU care,” Division of Pulmonary Medicine, Wilford Hall Medical Center, March 2, 2004.

“Pre-hospital stroke care,” for citywide emergency medical technicians, March 10, 2004, San Antonio, Texas.

“Acute stroke care for nurses,” Wilford Hall Medical Center Nursing Division, June 29, 2004 (on on-demand TV, audience of 1500).

“Stroke prevention for nurses,” Wilford Hall Medical Center Nursing Division, June 30, 2004 (on on-demand TV, audience of 1500).

“Acute stroke management,” Critical Care Anesthesia, Wilford Hall Medical Center, October 6, 2004.

Military unique lectures

“Biological and chemical weapons affecting the nervous system,” Wilford Hall Medical Center Mental Health Flight, training day, February 18, 2003.

“Neurological Warfare,” Wilford Hall Medical Center Neurology Flight, training day, August 19, 2003.

“Venezuelan Equine Encephalitis Virus as a Biological Weapon,” Wilford Hall Medical Center Neurology residents, August 29, 2003.

“Neurological weapons of terrorism,” Lecture to visiting international flight surgery students (AAMIMO course) at Brooks AFB, January 28, 2004.

Neurology Residents

Director, basic neuroscience course (weekly)

Journal club (3/yr)

Mock oral board exams (2/yr)

Urgent neurology lecture series (2/yr)—headache and spinal cord compression

Neurophysiology lecture series (1/yr)—therapeutic botulinum toxin

Neurology core lecture series (4/yr)—multiple sclerosis, Parkinson's disease, cerebrovascular disease

Neurology ethics lecture series—research ethics (1/yr)

Internal Medicine Residents

Neurology lecture series (2/yr)

Psychiatry Residents

Neurology lecture series (3/yr)

Critical Care Anesthesia Fellows

Neurology lecture series—acute stroke (1/yr)

Medical Students

Direct supervision and instruction in patient care and principles of neurology (about 10 students/yr)

Teaching lab—the neurological exam, UTHSCSA 1st year medical students, July 19, 2004.

UNIVERSITY OF LOUISVILLE SCHOOL OF MEDICINE (2005-06)

Continuing medical education lectures

Neurology Residents

Journal club (about 3x/yr)

Didactic conferences (about 12x/yr)

Mock oral board exams for residents (2/yr)

Internal Medicine Residents

Direct supervision and instruction in patient care and principles of neurology (about 20 residents/yr)

Internal medicine core lecture series, "Toxic/Environmental Neurology" (1hour)

Other residents (neurosurgery, geriatrics, PM&R, etc)

Direct supervision and instruction in patient care and principles of neurology (about 5 residents/yr)

Medical Students

Direct supervision and instruction in patient care and principles of neurology (about 50 students/yr)

2nd year med student neuroscience course lecturer, 1 lecture per year (2006 Toxic Neurology)

4th year medical students clerkship, cerebrovascular diseases lecture (6x per year)

Nurses

Lecturer, quarterly stroke symposium for nurses (4x/yr)

UNIVERSITY OF KENTUCKY COLLEGE OF MEDICINE (2006-)

Grand rounds

"Treatment of hypotension in acute ischemic stroke," Neurology, Feb 14, 2007

"Overview of clinical neurotoxicology," Graduate Center in Toxicology, Mar 5, 2007

"Monks, magic, and medicines: a clinical history of ergot," Neurology, Apr 2008

"Carotid artery occlusion reconsidered," Neurology, Aug 2008

"The cutting edge of stroke care," Internal Medicine, Aug 2008

"Goya: His Illness and his Art," Neurology, March 3, 2009

Neurology residents' didactics

"Determining Brain Death," Dec 13, 2006 (includes ethics discussion)

"Neurotoxicology," Jan 2, 2007

"Neurochemistry," Feb 7, 2007

“Brain tumors,” Feb 14, 2007
“Neuropharmacology,” Feb 21, 2007
“Spinal emergencies,” July 12, 2007
“Neurocritical care,” July 23, 2007
“Basics of Multiple Sclerosis,” August 15, 2007
“Determining Brain Death,” Sept 12, 2007 (includes ethics discussion)
“Brain tumors overview,” Oct 3, 2007
“Chemical Warfare Agents,” Mar 5, 2008
“Stroke and ICU care,” July 14, 2008
“Spinal cord compression,” July 21, 2008
“Death, brain death, and organ donation,” July 28, 2008 (includes ethics discussion)
“Cerebrospinal fluid and related disorders,” September 3, 2008
“Nervous system toxins,” September 9, 2008
“Primary CNS tumors,” October 8, 2008
“Cerebrovascular pathology,” November 18, 2008

Internal Medicine Residents

Bedside teaching

Direct supervision and instruction in patient care and principles of neurology (about 10 residents/yr)

Didactic

Internal medicine noon conference lecture series

“Acute stroke and stroke prevention,” (1hour), April 2007.

“Board review for neurology,” (1hour), May 2008.

Psychiatry residents

Bedside teaching

Direct supervision and instruction in patient care and principles of neurology (about 2-3 residents/yr)

Didactic

Director, neurology component of psychiatry lecture series 2007-08-09

Lectures given: “Cranial nerve disorders,” Feb 2008;

“Movement disorders,” March 2008

“Neurochemistry/pharmacology,” Mar 2008

“Neurodiagnostic tests,” Mar 2008

“Traumatic brain injury,” Mar 2008

“Neuroinfectious diseases,” Oct 2008

“Movement disorders basics,” Oct 2008

“Diagnostic tests in neurology,” Oct 2008

Other residents (neurosurgery, orthopedic surgery, PM&R, etc)

Direct supervision and instruction in patient care and principles of neurology (about 5 residents/yr)

Medical Students

Bedside

MD 832 3rd year clerkship

Direct supervision and instruction in patient care and principles of neurology (about 25 students/yr)

Didactic

MD 832 3rd year clerkship,

“Multiple sclerosis and other demyelinating diseases,” 1 hr lecture, June 2007

“Parkinson’s disease and other movement disorders,” 1hr lecture, July 2007

“Altered mental status,” 1hr lecture, Sept 2007

“Movement disorders,” 1hr lecture, July 2008

“Cerebrovascular disease,” 1hr lecture, May 2009.
Neurology/Neurosurgery combined stroke conference
“‘Brachial Plexopathy’ in a high school principal,” Oct 2006
“Stroke Jeopardy,” Dec 2006
“Aortic atheroma and stroke,” April 2007
“Basilar artery thrombosis,” August 2007
“Stroke Jeopardy II,” March 2008
“Acute ischemic stroke management,” July 2008
“The Foreign Accent Syndrome after Stroke,” October 2008
“Stroke Jeopardy III,” June 19, 2009

Journal Club

February 2007

Graduate Students in Toxicology

TOX 680, “Neurotoxicology of chemical warfare agents,” Feb 2007.
TOX 680, “Mechanisms of neurotoxic chemical warfare agents,” Feb 2008.
TOX 680, “Mechanisms of neurotoxic chemical warfare agents,” March 2, 2009.

Nurses and EMS personnel

Course director and developer, “**Triage in mass casualty situations**,” 2006-2007

Dates and locations of course

January 29, 2007, Louisville, KY

June 7, 2007, New Albany, IN

Other Students

RC 515 “Multiple sclerosis—clinical and social implications,” 1 hr lecture for video, to be used in the rehabilitation counseling course (multiple universities)

MASS DISASTER DRILLS

1. “Operation Foul ball,” September 2006, Location: Louisville, KY. Role: planning committee, content expert, standardized patient trainer, evaluator at Audobon hospital. Scenario: organophosphate release at train derailment
2. “Operation Jericho,” October 2007, Location: Louisville, KY Role: evaluator at VAMC. Scenario: building collapse

ORGANIZATIONAL ACTIVITIES

Professional Societies

American Academy of Neurology, 1999-present
Member, section on neuroinfectious disease
Consortium of Neurology Program Directors (2007-present)
American Stroke Association/American Heart Association, 2005-present
American Medical Association, 1994-present
Chapter president, University of Kentucky College of Medicine 1997-1998
Voting delegate, 2 national meetings
Association of University Professors of Neurology, 2004-present
American Association of University Professors, 2007-present
International Neurotoxicology Association, 2007-present
Society of Air Force Physicians, 2002-2005
National Brain Tumor Foundation, 2001-present

Committees and boards**International**

Board of Directors, Environmental Neurology Research Group (ENRG)/World Federation of Neurology (WFN). 2006-present.

Editorial Board, *HAJA (Horn of Africa Journal of AIDS)*, a publication of the “People to People” charity organization. 2003-present.

National

US Air Force Mental Health Bio-Chem Warfare Working Group, The Pentagon, 2004-2005.

American Academy of Neurology “Neurometabolic/Neurotoxicology/Neuroendocrinology” 2008 Topic Work Group.

Regional

Selection Committee, Texas Neurological Society Young Investigator Award, 2003-2005.

Program Services Committee, Lexington-Bluegrass march of Dimes, 1999-2001.

Local

Content expert, Disaster Drill Committee, Metro Government, Louisville, KY, 2006 (creating a disaster scenario to test response of local hospitals).

Neurology grand rounds speaker selection committee, UTHSCSA and WHMC, 2004-2005.

Stroke symposium planning committee, University of Kentucky College of Medicine, 2007.

Institutional

Stroke leadership committee, University of Kentucky Chandler Medical center, 2007-

Stroke symposium planning committee, University of Kentucky, 2007

Institutional Review Board, Wilford Hall Medical Center/Brooke Army Medical Center, March 2003-September 2005.

Neuro-oncology Tumor Board, Wilford Hall Medical Center, 2002-2005.

Editorial Board, *The Other Side* Literary Journal, University of Kentucky Press, 2001-present.

Graduate Medical Education Committee, University of Kentucky College of Medicine, 2006-

MENTORING**DESIGNATED FACULTY MENTOR**

Peter Osterbauer, M.D. (Neurology Resident) 2003-05, Wilford Hall Medical Center.

Tracey Eicher, M.D. (Neurology Resident) 2003-05, Wilford Hall Medical Center.

JUNIOR FACULTY MENTOR

Chad Domangue, M.D., Instructor in Neurology, 2007-08, University of Kentucky

RESEARCH AND SCHOLARLY MENTORING

Eleanor Avery, M.D., 2003-04 “Anti-gliadin antibodies and peripheral neuropathy”

Awards: Resident Research Day winner, Wilford Hall Medical Center, 2003

Texas Neurological Society Clinical Research 1st Place award 2003

Selected as AAN poster presentation 2004 national meeting

Honored as Grollman Lecture keynote presentation, Society of Air Force Physicians, 2004

Tracey Eicher, M.D. 2004-05 “EEG abnormalities in a prospective series of acute stroke patients”

Awards: Resident Research Day winner, Wilford Hall Medical Center, 2004

Texas Neurological Society Clinical Research 1st Place award 2004

Michael Chen, D.O. 2005 “Biochemical ASA resistance in a healthy population”

Awards: Resident Research Day winner, Wilford Hall Medical Center, 2005

Texas Neurological Society Basic Science Research 1st Place award 2005

Selected as an abstract presentation for the American Society of Hematology national meeting, 2005.

- Selected as a poster presentation for the American Academy of Neurology national meeting, 2006.
 Published, J clin ligand assay (peer-reviewed), 2005.
 Terri Postma, M.D., 2006-2007 “Neurotoxic Envenomations,” Chapter in *Clinical Neurotoxicology*, Elsevier, pub date 2009.
 Hani Kushlaf, M.D., 2006-07 “Solitary midbrain abscess,” case report.
 Kara Kennedy, D.O., 2007-2008, “Neurotoxicity of common pharmaceuticals,” Chapter in *Clinical Neurotoxicology*, Elsevier, pub date 2009.
 Brandon Burtis, D.O., 2007-2008, “Tetanus toxin,” Chapter in *Clinical Neurotoxicology*, Elsevier, pub date 2009.

COMMUNITY SERVICE

Institutional

Interviewer, Medical School candidates, University of Kentucky College of Medicine, 2007-2008
 Family liaison officer, 59th Medical Operations Squadron, 2004-2005. (Helps families in times of crisis such as a military death).

Local

Content Expert, organophosphates, for Louisville city-wide disaster drill March-September 2006.
 Mentor, Clemens High School Independent Study/Mentorship program, 2003-2004, Schertz, TX.
 Student: Aubrie Umipeg.

Regional

1 hour lecture to University of Kentucky Pre-medical students March 28, 2006 in Lexington KY.

State

Interviewed for WTVQ 36 evening news, “Stroke: the top 5 killers of men.” Air date: Feb 5, 2008.
 Interviewed for WVLK AM 590, “Aneurysms and subarachnoid hemorrhage.” Air date: Aug 21, 2008.
 Interviewed for *Healthy Insight*, “The JUPITER trial, cholesterol, and stroke risk.” November 2008.

RECOGNITION

AWARDS AND DISTINCTIONS

1992: Alpha Epsilon Delta pre-medical honor society, chapter president.
 1993: Undergraduate research fellowship in Pharmacology, University of Kentucky, Lexington, Kentucky.
 2000: American Neurological Association resident scholarship: Academic Neurology - Preparing for the Future
 2001-02: Chief Resident, Department of Neurology, University of Kentucky Medical Center, Lexington, Kentucky.
 2003: U. S. Surgeon General’s Certificate of Appreciation for Outstanding Educational Presentations
 2006: The Innominate Society (medical history) of Louisville, inducted as full member (40 members total per charter)
 2007: Abraham Flexner Master Educator Award for Outstanding Teaching Contribution, University of Kentucky College of Medicine

MILITARY AWARDS AND MEDALS

2002: National Defense Medal
 2003: Outstanding Unit Award (1st Oak leaf cluster for repeat award in 2004)
 2004: Global War on Terror Ribbon
 2005: Meritorious Service Medal

INVITED PRESENTATIONS (# denotes CME/CE)

Local

#“Chemical Toxic Syndromes,” Caritas Hospital staff and nursing, Louisville, KY, July 2006.

#“Chemical Toxic Syndromes,” Norton Suburban Hospital staff and nursing, Louisville, KY, August 2006.

“Chemical Toxic Syndromes,” Norton Audubon Hospital staff and nursing, Louisville, KY, August 2006.

#October 2006. “Cerebrovascular disease cases,” University of Kentucky annual stroke symposium, Lexington, KY.

#October 2007, “Outpatient management of cerebrovascular disease,” University of Kentucky annual stroke symposium, Lexington, KY.

June 7, 2008. “Treating dystonia with botulinum toxin injection,” University of Kentucky, Kentucky Neuroscience Institute, open to the public.

#September 4, 2008. “Acute ischemic stroke management,” University of Kentucky, Kentucky Neurosciences Institute, for regional Emergency Medicine Physicians

#October 27, 2008. “Acute ischemic stroke,” and “The stroke work-up and prevention,” for Georgetown Community Hospital.

Lectures at regional meetings

#Nov. 2005. “Recognition and management of chemical casualties,” Valley Regional Medical Center Bioterrorism Symposium, Harlingen, TX.

April 2006. “Acute stroke update,” Kentucky Emergency Nurses Association meeting, Shelbyville, KY.

#May 2006. “Botulinum toxin therapy in neurology,” Kentucky Academy of Family Physicians Annual Meeting, Louisville, KY.

#October 2006. “Integrated stroke cases” Annual University of Kentucky Stroke Symposium, Lexington, KY.

#December 2006. Keynote address, “Chemical and Radiation Toxicology,” 10th Annual Internal Medicine Update, Louisville, KY.

#June 5, 2008. “Neurotoxic Environmental Contaminants,” 17th Annual AHEC Summer Conference, Mt. Vernon, KY.

#November 4, 2008. “Acute ischemic stroke care,” 40th annual Family Medicine Symposium, Lexington, KY.

#May 12, 2009. “Acute ischemic stroke care in 2009,” 40th annual Family Medicine Symposium, Lexington, KY.

Lectures at national meetings

#Nov. 2003. "Protection from chemical and biological weapons that target the nervous system," (and)
"Traumatic head injury—a neurologist's perspective," at the national meeting of the Association of Military Surgeons of the United States, San Antonio, TX.

Lectures at international meetings

#Sept. 2003. "The potential bioterrorism aspects of neurotropic viruses," at the 5th International Symposium on Neurovirology, International Society of Neurovirology, Baltimore, MD.

Visiting professor lectures

Nov. 2003. "Cases in cerebrovascular disease," at the University of Utah Medical School Department of Neurology, Salt Lake City, UT.

#May 2004. "Neurological weapons and warfare," at the University of Kentucky Department of Neurology Grand Rounds, Lexington, KY.

Sept. 2004. "New trends in the management of stroke and TIA's," at the Temple VA Medical Center, Temple, TX.

#Oct. 2004. "Terrorism, warfare, and the neurologist," at the University of Louisville Departments of Neurology and Neurosurgery Grand Rounds, Louisville, KY.

July 2005. "Emergency headaches," and "Spinal cord disorders" at Keesler AFB Medical Center, Keesler AFB, MS.

#Sept. 2005. "Neuroterrorism," at a special conference for the Center for Deterrence of Biowarfare and Bioterrorism, University of Louisville School of Public Health, Louisville, KY.

Sept. 2006. "Acute stroke cases," at Methodist Hospital, Henderson, KY.

#Nov. 2006. "Blood pressure in acute stroke and controversies in management," Grand Rounds at Virginia Commonwealth University Department of Neurology, Richmond, VA.

May 2007. "Update on ischemic stroke care," Grand Rounds Department of Physical Medicine and Rehabilitation, Schwab Rehab Center, University of Chicago College of Medicine, Chicago, IL.

April 2008. "What it means to be a primary stroke center," Tallahassee Regional Medical Center, Tallahassee, FL.

May 2008. "Ischemic stroke prevention update," Pikeville Community Hospital Family Medicine Residency Program, Pikeville, KY.

October 14, 2008. "Polyvascular risk reduction in stroke patients," Grandview (Kettering) Emergency Medicine Program Journal Club, Dayton, OH.

October 24, 2008. "Emergency neurology," Grandview (Kettering) Emergency Medicine Department, Dayton, OH.

#November 10, 2008. "Inpatient stroke care," Rockcastle Co Hospital, Mt. Vernon, KY.

#February 17, 2009. “Acute stroke—update for 2009,” St Joseph’s Mt Sterling Community Hospital, Mt. Sterling, KY.

June 17, 2009. “New stroke treatments,” Perry County Medical Society, Hazard, KY.

#July 28, 2009. “Acute stroke care,” Casey County Hospital, Liberty, KY.

#July 29, 2009. Acute stroke update,” Knox County Hospital, Barbourville, KY.

OTHER CME LECTURES—REVIEW COURSES

“Clinical Neurotoxicology,” *Martin A. Samuels Neurology Review Course*, Oakstone Medical Publishing, 2009, available on DVD.

Neurology board examination candidates

Osler organization—lectures on neurochemistry and neuropharmacology, mock oral board examinations, New Orleans, LA, June 2004 (2 CME hours).

Osler organization—lectures on neurochemistry, neuropharmacology, multiple sclerosis, and neuro-oncology, mock oral board examinations, Dallas, TX, September 2004 (4 CME hours).

Osler organization—lectures on neurochemistry, neuropharmacology, neurophysiology, multiple sclerosis, spinal cord compression, toxic/environmental neurology and neuro-oncology, mock oral board examinations, Washington, DC, March 2005 (7 CME hours).

Osler organization—lectures on cerebrospinal fluid, spinal cord compression, toxic/environmental neurology and neuro-oncology, mock oral board examinations, Minneapolis, MN, September 2005 (4 CME hours).

Osler organization—lectures on HIV and CNS infections, spinal cord compression, toxic/environmental neurology, multiple sclerosis, dementia, movement disorders, dementia, aphasia and neuro-oncology, mock oral board examinations, San Francisco, CA, January 2006 (7 CME hours).

Osler organization—lectures on neurochemistry, neuropharmacology, neurophysiology, cerebrospinal fluid, spinal cord compression, toxic/environmental neurology and neuro-oncology, mock oral board examinations, Philadelphia, PA, May 2006 (7 CME hours).

Osler organization— lectures on cerebrospinal fluid, toxic/environmental neurology and neuro-oncology, mock oral board examinations, Philadelphia, PA, May 2006 (3 CME hours).

Osler organization— lectures on cerebrospinal fluid, toxic/environmental neurology, multiple sclerosis, spinal cord, and neuro-oncology, mock oral board examinations, Pittsburgh, PA, Sept 2006 (5 CME hours).

Osler organization— lectures on toxic/environmental neurology, brain trauma, neuroinfectious diseases and neuro-oncology, Tampa, FL, Feb 2007 (4 CME hours).

Osler organization— lectures on toxic/environmental neurology, brain trauma, neuroinfectious diseases, stroke critical care and neuro-oncology, Washington, DC, Mar 2007 (4 CME hours).

Osler organization— lectures on neuroinfectious disease, toxic/environmental neurology, cerebrospinal fluid and neuro-oncology, New York, NY, May 2007 (4 CME hours).

Osler organization— lectures on neurochemistry, neuropharmacology, neurophysiology, cerebrospinal fluid and neuro-oncology, Indianapolis, IN, June 2007 (5 CME hours).

Osler organization— lectures on spine injury, head injury, cerebrospinal fluid, neuroinfectious diseases, Neurotoxicology, and neuro-oncology, Milwaukee, WI, September 2007 (7 CME hours).

Osler organization— lectures on neuroinfectious diseases, Neurotoxicology, and neuro-oncology, Tampa, FL, February 2008 (3 CME hours).

Osler organization— lectures on spine injury, head injury, cerebrospinal fluid, neuroinfectious diseases, Neurotoxicology, and neuro-oncology, Chicago, IL, May 2008 (6 CME hours).

Osler organization— lectures on spine injury, head injury, cerebrospinal fluid, neuroinfectious diseases, Neurotoxicology, and neuro-oncology, Baltimore, MD, June 2008 (6 CME hours).

Osler organization— lectures on spine injury, head injury, cerebrospinal fluid, neuroinfectious diseases, Neurotoxicology, neurochemistry, neuropharmacology and neuro-oncology, St. Louis, MO, September 2008 (8 CME hours).

Osler organization— lectures on neuroinfectious diseases, Neurotoxicology, traumatic brain injury, spinal cord, cerebrospinal fluid, and neuro-oncology, Tampa, FL, February 2009 (6 CME hours)

Osler organization— lectures on neuroinfectious diseases, Neurotoxicology, traumatic brain injury, spinal cord, cerebrospinal fluid, and neuro-oncology, Boston, MA, May 2009 (6 CME hours)

Vascular Neurology board examination candidates

Osler organization—lectures on stroke pathophysiology, management, rehabilitation, and brain death, Washington, DC, March 2005 (4 CME hours).

Osler organization—lectures on stroke pathophysiology, management, rehabilitation, pathology, and brain death, Philadelphia, PA, May 2006 (5 CME hours).

Osler organization—lectures on stroke pathophysiology, management, rehabilitation, pathology, and brain death, Tampa, FL, February 2008 (5 CME hours).

Osler organization—lectures on stroke pathophysiology, management, rehabilitation, pathology, and brain death, Boston, MA, May 2009 (5 CME hours).

Psychiatry board examination candidates

Osler organization—lectures on neurochemistry, neuropharmacology, cranial nerve disorders, and neurodiagnostic testing, New Orleans, LA, June 2004 (4 CME hours).

Osler organization—lectures on neurochemistry, neuropharmacology, cranial nerve disorders, neuroanatomy and neurodiagnostic testing, Dallas, TX, September 2004 (5 CME hours).

Osler organization—lectures on neurochemistry, neuropharmacology, cranial nerve disorders, neuroanatomy and neurodiagnostic testing, Washington, DC, March 2005 (4 CME hours).

Osler organization—lectures on neurochemistry, neuropharmacology, cranial nerve disorders, movement disorders, CNS infections and neurodiagnostic testing, Minneapolis, MN, September 2005 (5 CME hours).

Osler organization—lectures on neurochemistry, neuropharmacology, cranial nerve disorders, movement disorders, CNS infections and neurodiagnostic testing, Philadelphia, PA, May 2006 (5 CME hours).

Osler organization—lectures on cranial nerve disorders, movement disorders, CNS infections, and neurodiagnostic testing, Pittsburgh, PA, September 2006 (4 CME hours).

Osler organization— lectures on cerebrovascular disease, cranial nerve disorders, movement disorders, multiple sclerosis, CNS infections, and neurodiagnostic testing, New York, NY, May 2007 (5 CME hours).

Osler organization—lectures on neuroanatomy, neuroinfectious disease, cranial nerve disorders, head injury, and neurodiagnostic testing, Milwaukee, WI, September 2007 (6 CME hours).

Osler organization— lectures on cerebrovascular disease, cranial nerve disorders, movement disorders, multiple sclerosis, CNS infections, and neurodiagnostic testing, Chicago, IL, May 2008 (6 CME hours).

Osler organization— lectures on cerebrovascular disease, cranial nerve disorders, movement disorders, multiple sclerosis, CNS infections, and neurodiagnostic testing, Boston, MA, May 2009 (6 CME hours).