CURRICULUM VITAE

JOHN W. GILBERT, M.D., FAANS, FACS

Spine & Brain Neurosurgical Care PLLC 3256 Loch Ness Drive Lexington, KY 40517 (859) 971- 0014

EDUCATION:

B.S. Chemistry University of Kentucky, 1979; M.D. University of Kentucky College of Medicine, 1984

INTERNSHIP/RESIDENCY:

- University of Kentucky Medical Center and Veterans Administration Hospital, Lexington, Kentucky General Surgery Internship, July 1984 – June 1985
- University of Kentucky Medical Center, Lexington, Kentucky Resident/Neurosurgery, July 1985 – June 1990
- Harvard Medical School, Boston, Massachusetts Neurosurgical Update, 1985
- University of Kentucky, Lexington, Kentucky Basic Neurosciences, 1986
- Woods Hole, Massachusetts Review and Update in Neurobiology for Neurosurgeons, 1987
- Cook County Neurosurgical Review and Update, Chicago, Illinois, 1988, 1989, 1990
- Veterans Administration Hospital, Lexington, Kentucky Chief Resident/Neurosurgery, 1988 1989
- University of Kentucky Medical Center, Lexington, Kentucky Chief Resident/Adult and Pediatric Neurosurgery, 1989 1990

HONORS:

- Analytical Chemistry Award, 1978
- Merck Index Award for Chemistry, 1979
- Ben Eiseman Surgical Scholar Award 1988 and 1989
- Continuing Education Award in Neurosurgery, January 1, 1993 December 31, 1995, 90 credit hours (valid through December 31,1998). Committee on Continuing Education of American Association of Neurological Surgeons.
- Fellow American college of surgeons 1995 (FACS)

- Honorary Member of Fraternal Order of Police Appreciation Award 1998, 1999, 2000, & 2002, Lexington, Kentucky.
- Continuing Education Award in Neurosurgery by Coordinating Committee on Continuing Education of the American Association of Neurological Surgeons – January 1, 1996 – December 31, 1998, 90 Neurosurgical Credit Hours (valid thru December 31, 2001).
- Selected for inclusion in "Guide to America's Top Surgeons" by Consumers' Research Council of America, February 2002, 2006, 2007, 2014, 2015.
- Continuing Education Award in Neurosurgery by Coordinating Committee on Continuing Education of American Association of Neurological Surgeons January 1, 1999 thru December 31, 2001. Neurosurgical Credit hours 103.5 (valid thru December 31, 2004).
- WHO'S WHO Strathmore's Award 2004 2005 Honored Member
- Selected for Inclusion in "Guide to America's Top Physicians" by the Consumers Research Council of America, "America's Top Physicians" John W. Gilbert, MD., Neurosurgery, Neuroimaging, Pain and Addiction Medicine. Consumer's Research Council of America, a Washington, D.C. based research organization provides consumers information for professional services throughout America and does not accept fees, donations, sponsorships, or advertising from any individuals, professionals, corporations or associations 2004, 2005, 2006, 2007.
- Selected for International Health Professional of the Year Award by International Biographical Centre, Cambridge, England 2006. International Biographical Association, International Biographical Centre, St. Thomas Place, ELY, CB74GG, Great Britain.
- Selected for Inclusion in "Guide to America's Top Physicians" by the Consumers Research Council of America 2006–2007 edition, America's Top Surgeons John W. Gilbert, MD., Pain and Addiction Medicine. Consumer Research Council of America, A Washington, DC based research organization provides consumers information for professional services throughout America and does not accept fees, donations, sponsorships, or advertising from any individuals, professionals, corporations or associations.
- PHYSICIANS RECOGNITION AWARD WITH COMMENDATION, in continuing Medical Education. Valid 11-01-2006 thru 11-01-2009. American Medical Association.
- 2007 asked by **US NEWS & WORLD REPORT** to nominate outstanding hospitals in Neurosurgery & Neurology
- Selected for Inclusion in **INTERNATIONAL ORDER OF MERIT** and Induction into the **ORDER OF MEDICAL MERIT** for outstanding accomplishment and Professional Excellence 2008.

- Awarded Hippocrates Award 2010 for excellence in the field of medicine by the American Biographical Institute, Inc.
- The Harvey Cushing Society Fellow of American Association of Neurological Surgeons, July2010. (FAANS)
- AMA Award PRA Category I, Certificate of CME 190 hours (2009–2011) October 5, 2011 for published articles.
- Continuing Education Award in Neurosurgery 2013.
- Leading Physicians of the World 2014.

LICENSURE:

Kentucky (1984)

BOARD CERTIFICATION:

- Diplomate and Board Certification, American Board of Neurological Surgeons, 1993, Grand Fathered.
- Diplomate and Board Certification, American Board of Pain Medicine, 2002 2009, 2009 –2022.
- Diplomate and Board Certification, American Society of **Neuroimaging** (MRI/CT), 2003, Grand Fathered.
- Diplomate and Board Certification, American Board of **Addiction Medicine**, 2004, 2009, 2014, (Nov 15, 2014, thru Dec 31, 2024- certificate #001163)
- Diplomate and Board Certification, **Certified Administrator** in Physician Practice Management, The American Academy of Medical Management, 2003, Recertification 2006.
- Diplomate and Board Certification Status, **Medical Review Officer** Certification Council, (MROCC), Certified Medical Review Officer, (MRO) 2007, 2013.

MEDICAL EDUCATION APPOINTMENTS:

- Assistant Professor University of Kentucky College of Medicine
- Clinical Professor of Neurosurgery Pikeville Medical School
- Spinal Surgery Advisory Panel St. Joseph & St. Joseph East Hospitals
- Clinical Professor of Pain Management Pikeville Medical School
- Chief, Division of Neurosurgery, UK Healthcare Good Samaritan Hospital

MEDICAL SOCIETY MEMBERSHIPS/FELLOWSHIPS:

- American Board of Neurological Surgery
- American Association of Neurological Surgeons (FAANS, FACS)

- American Medical Association (AMA)
- Kentucky Medical Association (KMA)
- Lexington Medical Society (LMS)
- Fellow American College of Surgeons (FACS)
- American Board of Pain Medicine
- American Society of Neuroimaging (MRI/CT)
- Fellowship American Society of Neuroimaging (FASN)
- American Board of Addiction Medicine
- The Harvey Cushing Society Fellow American Association of Neurological Surgeons (FAANS)

HOSPITAL APPOINTMENTS:

- <u>Chief, Division of Neurosurgery</u> 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010 U K Healthcare Good Samaritan Hospital, Lexington, Kentucky
- Chief, Division of Neurosurgery 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010 Select Specialty Hospital, Lexington, Kentucky
- Chief, Division of Neurosurgery 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007 Saint Joseph East Hospital, Lexington, Kentucky
- Attending/Courtesy Neurosurgeon Central Baptist Hospital, Lexington, Kentucky and Saint Joseph Hospital, Lexington, Kentucky

PATENT:

United States Patent number 5,690,117 November 25 1997, Ultrasonic-Fiberoptic Imaging Ventricular Catheter

PUBLICATIONS:

- Gilbert M.D., J.W., Simultaneous Elemental Determination of Aluminum and Silicon in Soils by Gamma-Ray Detection Following Inelastic Neutron Scattering. Journal of Radio Analytical Chemistry 54 (1-2): 235 239, 1979.
- Gilbert M.D., J.W., et al.: Hematocrit Monitor. Critical Care Medicine 17(9): 929
 933, September, 1989. PMID 2766768
- Gilbert M.D., J.W., et al.: Repeat Cerebral Pan Angiography in Subarachnoid Hemorrhage. Surgical Neurology 22(1): 19 21,1990. PMID 2300874
- Gilbert M.D., J.W., et al.: The Re-Sealability of the Rickman Reservoir after Puncture by Various Gauge Needles. (Letter to the Editor) Surgical Neurology 33(2), February, 1990. PMID 2315838

- Gilbert M.D., J.W., et al.: X-Ray Puzzles: Complete Malrotation of the Large Colon. Hospital Physician 29(2): 57, February 1992.
- Gilbert M.D., J.W., et al.: CSF Glucose Biosensor and Artificial Pancreas.
 ASAIO (American Society of Artificial Internal Organs) 38(2): 82087, April-June. 1992. PMID 1421610
- Gilbert M.D., J.W., et al.: Recurrent Disc Herniation by Repeat Discectomy and Fusion. North American Spine Society, October 1994.
- Gilbert M.D., J.W., et al.: Teaching Video for Neurosurgeons Using Ventricular Endoscopy, Innervision PS Medical, Inc., 1995.
- Gilbert M.D., J.W., et al.: Instruction Pamphlet and Diagrams for Ventricular Endoscopy Innervision PS Medical, Inc., 1995.
- Gilbert M.D., J.W., et al.: Health Front America TV Program, Latest Neurosurgical Techniques Ventricular Endoscopy & Stereotactic Radiosurgery, 1996.
- Gilbert M.D., J.W., et al.: Health Front America TV Program, MED & LINAC Scalpel, 1997.
- Gilbert M.D., J.W., et al.: The Ten C's of Chronic Noncancer Pain: Universal Precautions for the Chronic Noncancer Pain Patient, American Journal of Pain Management, 15(2004) 22 32.
- Gilbert M.D., J.W., Letter to the Editor: Ten C's of Chronic Noncancer Pain, American Journal of Pain Management, 15(2005) 45 47.
- Gilbert M.D., J.W., Wheeler, G.R., Lingreen, R.A., and Johnson, R.K., Open Stand Up MRI: A New Instrument for Positional Neuroimaging, Journal of Spinal Disorders and Techniques, April 2006, volume 19 (2) pages 151-154. PMID 16760793
- Gilbert M.D., J.W., Wheeler, G.R., Lingreen, R.A., Johnson, R.K., Scheiner, S.J., and Gibbs, R.D., Upright Weight Bearing Cervical Flexion/Extension Dynamic Magnetic Resonance Imaging: Case Report and Review of the Literature, European Journal of Radiology Extra 60 (2006) page 121 124.
- Gilbert M.D., J.W. et al., Wheeler, G.R., Lingreen, R.A., Upadhyay, S.P., Compliance in Chronic Noncancer Pain Patients on Long-acting Opiates, Shortacting Opiates, or Non-opiates, American Journal of Pain Management, Vol. 17 No. 1 January 2007.
- Gilbert M.D., J.W., et al.: Surgical Neurology (International Neurosurgery and Neuroscience Journal) Imaging in the position that causes pain. Vol 69, Issue 5, Pages 463 465 (May 2008). PMID 17707470
- Gilbert, M.D., J.W., et al., Radiology, July 2007 Vol. 244, Number 1, First Neurosurgery Office in the world to offer Open Positional Weight Bearing Imaging.

- Gilbert, M.D., J.W., et al., the INTERNATIONAL JOURNAL OF NEUROSCIENCE, Suicidality in Chronic Non Cancer Pain Patients. (Reviewed and accepted for publication 10/2007) International Journal of Neuroscience; 2009; 119 (10): 1968 1979. PMID 19922396
- Gilbert, M.D., J.W., Patterns of an Addiction, [Letter] Medical Economics 2008; 85 (21):16
- Gilbert, M.D., J.W., et al.: Journal of Neurosurgery: Spine Volume 8, May 2008, Prognosis in Spine Surgery. 2008 May; 8 (5): 498 499. PMID 18447702
- Gilbert, M.D., J.W., Detecting Noncompliance. [Letter] Medical Economics 2009; 86 (1): 16 17
- Gilbert, M.D., J.W., et al.: Journal of Manipulative and Physiological Therapeutics, Vol. 31, No. 8, 10/2008. Repeat Upright Positional Magnetic Resonance Imaging for Diagnosis of Disorders Underlying Chronic Noncancer Lumbar Pain; page 627 63. PMID 18984246
- Gilbert, M.D., J.W., Self-Referral Does Not Imply Overutilization: Journal of Neuroimaging 2009 October; 19 (4): 398 99. PMID 19453833
- Gilbert, M.D., J.W., et al.: Journal of Neurosurgery, Ventriculostomy Catheter Placement 2009; 110: 194 195. PMID 1911984
- Gilbert, M.D., J.W., Practical Pain Management [Letter] UDT/BAT/Behavioral Health July/August 2009
- Gilbert, M.D., J.W., et al.: Angiographically Obliterated Aneurysms, Neurosurgery. Neurosurgery 2009; 64 (3): E 577. PMID 192405587
- Gilbert, M.D., J. W., et al: Lumbar MRI Hypolordosis in Symptomatic Patients: Association with Paraspinal Muscle Spasms, Journal of Chiropractic Medicine 2009; 8 (3) page95 100. PMID 19703664
- Gilbert, M.D., J.W., Wheeler, M.D., G.R, Richardson, M.D., G.B., Herder, M.D., S.L., Mick, M.D., G.E., Gyarteng-Dakwa, M.D., K., Kenney, M.D., CM., Broughton, P.G. Guidance of Magnetic Resonance Imaging and Placement of Skin-Marker Localization Devices. J Neurosurg Sci. 2011 Jun; 55(2): 85 8. PMID 21623319
- Gilbert, M.D., J.W. Telemedicine By Cell Phone Technology. Pediatr Neurosurg. 2010; 46(5):408. Epub 2011 Mar 18. PMID 21412030
- Gilbert, M.D., J.W. RE: Bussing A, et al. Are Spirituality and Religiosity Resources for patients with chronic Pain Conditions & Pain Medicine 2009; 10: 327 339. Pain Med. 2009 Nov; 10(8): 1501 2 author reply 1502 4. PMID 20021604
- Gilbert, M.D., J.W., et al. Upright MR Imaging. J Neurosurg Spine. 2009 Dec; 11(6):768. PMID 19951032
- Gilbert, M.D., J.W., Wheeler, M.D., G.R, Mick, M.D., G.E., Herder, M.D., S.L., Richardson, M.D., G.B., Storey, M.D., B.B., Broughton, P.G., MS Nursing,

- Psychiatric Mental Health Nurse Practitioner, Kenney, M.D., CM. Magnetic Resonance Angiography of the Circle of Willis in Patients with Symptomatic Intracranial Neuropathy: Medicare LCD L25367 (R4). J Neuroimaging. 2011 Jan 31 doi: 10.1111/j. 1552–6569.2010.00500. [Epub ahead of print] PMID 21281379
- Gilbert, M.D., J.W. "God Image and Happiness in Chronic Pain Patients; The Mediating Role of Disease Interpretation" (Pain Medicine 2010; 11(5):765–73. Pain Med. 2011 Apr; 12(4):684. doi:10.111 l/j.1526–4637.2010.01036.x. Epub 2011 Jan 11. PMID 21223497
- Gilbert, M.D., J.W., Wheeler, M.D., G.R, Mick, M.D.,G.E., Herder, M.D., S.L., Richardson, M.D., G.B. Paraparesis Following Spinal Cord Stimulator Trial, Implantation and Revision. Pain Physician. 2010 Nov–Dec; 13(6):E377. PMID 21102978
- Gilbert, M.D., J.W., Martin, M.D., J.C., Wheeler, M.D., G.R, Storey, M.D., B.B., Mick, M.D.,G.E., Herder, M.D., S.L., Gyarteng-Dakwa, M.D., K., Broughton, P.G. Lumbar Disk Protrusion Rates of Symptomatic Patients Using Magnetic Resonance Imaging. J Manipulative Physiol Ther. 2010 Oct; 33(8):629–9. PMID 21036285
- Gilbert, M.D., J.W. Numerous Studies Show Urine Drug Testing a Critical Tool in Treatment of Chronic Noncancer Pain. Pain Physician. 2010 Sep–Oct; 13(5):503; author reply 504. PMID 20859320
- Gilbert, M.D., J.W., Wheeler, M.D., G.R, Mick, M.D., G.E., Herder, M.D., S.L.. RE: The Use of Flexion-Extension Magnetic Resonance Imaging for Evaluating Signal Intensity Changes of the Cervical Spinal Cord. J Neurosurg Spine. 2010 Aug; 13(2):294; author reply 295. PMID 20672969
- Gilbert, M.D., J.W., Wheeler, M.D., G.R, Mick, M.D., G.E., Herder, M.D., S.L. Computed Tomography –Guided Percutaneous Cordotomy. Neurosurgery. 2010 Aug; 67(2):E521; author reply E521. PMID 20644389
- Gilbert, M.D., J.W., Wheeler, M.D., G.R, Mick, M.D., G.E., Herder, M.D., S.L., Richardson, M.D., G.B., Wyttenbach, M.D., W.H., Broughton, P.G. Positional MR Imaging. J Neurosurg Spine. 2010 Apr; 12(4):440; author reply 440. PMID 20367382
- Gilbert, M.D., J.W., RE: Xu N, Zhou W, Shuy L, Zhou G, Zhang N. Clinical and MRI Characteristics of Levamisole-Induced Leukoencephalopathy in 16 Patients. J Neuroimaging 2009; 13:326–331. J Neuroimaging. 2011 Apr; 21(2):el88. doi:10.1111/j.1552–6569.2010.00466.x. PMID 20136695
- Gilbert, M.D., J.W., Wheeler, M.D., G.R, Mick, M.D.,G.E., Storey, M.D., B.B., Herder, M.D., S.L., Richardson, M.D., G.B., Watts, M.D., E., Gyarteng-Dakwa, M.D., K., Marino, M.D., B.S., Kenney, M.D., C.M., Siddiqi, M.D., M., Broughton, P.G. Urine Drug Testing in the Treatment of Chronic Noncancer Pain

- in a Kentucky Private Neuroscience Practice: The Potential effect of Medicare Benefit Changes in Kentucky. PMID 20309384
- Gilbert, M.D., J.W., Wheeler, M.D., G.R, Mick, M.D.,G.E., Storey, M.D., B.B., Herder, M.D., S.L., Richardson, M.D., G.B., Watts, M.D., E., Gyarteng-Dakwa, M.D., K., Marino, M.D., B.S., Kenney, M.D., CM., Siddiqi, M.D., M., Broughton, P.G. Importance of Urine Drug Testing in the Treatment of Chronic Noncancer Pain: Implications of Recent Medicare Policy Changes in Kentucky. Pain Physician. 2010 Mar–Apr; 12(2):167–86. Review. PMID 20309383
- Gilbert, M.D., J.W., et.al Lumbar Stenosis Rates in Symptomatic Patients using Weight-Bearing and Recumbent Magnetic Resource Imaging 2011 J Manipulative Physical Ther. 2011. PMID 21907413
- Gilbert, M.D., J.W., et.al Technique for Steering Spinal Cord Stimulator Electrode 2012 Neurosurgery May 70(5) PMID 22286344
- Gilbert, M.D., J.W., et.al, Filum Terminale 2013 J Neurosurg Pediatr. Apr. 11(4)485. PMID 23350680
- Vogt MS, Gilbert, M.D., J.W., et.al, Scolosis Rates in Symptomatic Patients as Demonstrated with Weight-Bearing or Supine MR Imaging 2013 J Am Osteopath Assoc. March 113(3):210–4 PMID 23485981
- Gilbert, M.D., J.W., et.al. Vestibular Dysfunction in patients with Chronic Pain or Underlying Neurologic Disorders 2014 Mar; 114(3):172–8 J Am Osteopath Assoc. PMID 24567270

PRESENTATIONS:

- Conservative Treatment of Neck and Back Pain. Urgent Treatment Center Medical Staff, 1993.
- Stereotactic Radiosurgery (LINSAC Scalpel) for Treatment of Brain Tumors and AVMs. Good Samaritan Hospital Medical Staff, 1994.
- Lumbar Microdiscetomy and Foraminotomy for Ruptured Disc and Stenosis. Kentucky Spine Symposium, 1994.
- Tissue Plasminogen Activator (TPA) for Treatment of Acute Ischemic Cerebrovascular Accident. Samaritan Medical Center, 1998.
- Conservative Treatment of Vertebral Fractures. General Medical Staff Lexington, Kentucky. 2002
- Percutaneous Kyphoplasty for Treatment of Vertebral Fractures. General Medical Staff Lexington, Kentucky, 2002.
- Percutaneous Kyphoplasty for Treatment of Vertebral Fractures. General Medical Staff Frankfort, Kentucky, 2005.
- Insight to Your Health Television Program, Guest Speaker. Neurosurgery and Kyphoplasty. Florence, Kentucky, June 2005.

- Insight to Your Health Television Program, Guest Speaker. Pain Management and the Benefits of Open StandUp MRI. Florence, Kentucky, June 2005.
- Kyphoplasty/Biopsy for treatment of high risk unstable Vertebral Fractures. Lexington, Kentucky, 2006

COURSES/SPECIAL TRAINING:

- LINAC Stereotactic Radiosurgery Course, Harvard Medical School, Boston, Massachusetts, 1991.
- Neuroendoscopy Course, Barrows Neurological Institute, Phoenix, Arizona, September, 1992.
- Osier Neurosurgical Review Course, 1993.
- AANS American Association of Neurological Surgeons Annual Meeting, Chicago, Illinois, 1994.
- CPT Information Services Update, SBNC Office, Lexington, Kentucky. Sponsored by AMA for CPT Coding Consultation, January 1996.
- Anterior/Posterior Fusion with Threaded Bone Dowel & Microendoscopic Discectomy MED & TSRH Update, Sofamor Danek Spine Course, July, 1997.
- Coding Seminar Update, Karen Zupko & Associates. Kim Pollock, American Associates of Neurological Surgeons Course, July, 1997.
- The Back Lumbar Interbody Fusion Course, Spine Tech, Inc., July, 1997. MED/LINAC Scalpel, Micro-Endoscopic Discectomy Course & Stereotactic Radiosurgery Course, 1997.
- Billing & Coding Seminar, SBNC Office, Lexington, Kentucky. Karen Zupko & Associates. Kim Pollock, American Associates of Neurological Surgeons, July 2–3, 1997.
- RFCA Seminar, Lexington, Kentucky Office with Bob Friam and Debbie Mills for Coding, Billing, Collection, and Compliance, November 1997.
- Spinal Bio Mechanics 1998: Ed Benzyl, M.D., Vincent Traynelis, M.D., Eric Woodard, M.D., Ben Baldwin, M.D.
- Cervical Spine Instability: Instrumentation and Other Methods of Management 1998: Vockar Sonnthag, M.D., Stephen Papadopoulos, M.D.
- Surgical Exposure, Decompression, and Stabilization of the Cervical Spine 1998: Dennis Vollner, M.D., Richard Somners, M.D.
- Management of Spinal Cord Tumors 1998: Paul Cooper, M.D., Fred Epstein, M.D.
- Basilar Tip Aneurysms 1998: John Tew, M.D., Alex Burstein, M.D. Nick Hopkins, M.D.
- Surgery of the Anterior Thoracic and Lumbar Spine; Indications and Current Techniques 1998: Paul McCormick, M.D.

- Indication and Techniques of Lumbar Interbody Fusion 1998: Peter Klara, M.D., Charles Ray, M.D., David Cahill, M.D., Charles Brants, Jr., M.D., Kent Grewe, M.D.
- Paladotomy for Parkinson's Disease 1998: Roy A.E. Bakay, M.D., Atlanta, Georgia.
- Pain Symposium with Margo McCathery: Comprehensive look at Pain Management, March 5, 1998.
- The Stealth Station Stereotactic Course, Sofamor Danek, April 1998.
- Billing, Coding, Collection, and Compliance Seminar, Lexington, Kentucky Office. Debbie Mills (NASS) with RCFA, April 14, 1998.
- American Association of Neurological Surgeons 66th Annual Meeting, Philadelphia, Pennsylvania, April 25 thru April 30, 1998. General Scientific Sessions: Indications/Techniques Cervical/Thoracic/Lumbar Fusion.
- OSHA Compliance Course, Spring 1998 in Lexington, Kentucky Office.
- Coding, Billing, Collection, and Compliance Seminar, Lexington, Kentucky Office. Update on RFCA Debbie Mills (NASS), July 23, 1998.
- Coding, Billing, Collection, and Compliance Seminar, Lexington, Kentucky Office. Update on RFCA Debbie Mills (NASS), August 11, 1998.
- Congress of Neurological Surgeons 1998 Annual Meeting, October 2–8, 1998, Posterior Circulation, Aneurysm, Outcomes and Clinical Guidelines, Critical Pathways for Practice Improvement, Surgical Exposure to Thoracic and Lumbar Spine Abnormalities, Lumbar Interbody Fusion, Spinal Surgical, Complications, General Neurosurgical Scientific Sessions, Neurosurgical Coding. CME Credits – 46.
- Advanced Video Course Coding, Billing by Dr. Roski, AANS, October 6, 1998.
- Advanced Coding and Reimbursement course for Neurological Surgery, Cancun, Mexico, November 13–15, 1998 sponsored by Association of Neurological Surgeons.
- Emerging Algorithms in Approaching Back & Neck Pain; B. Saini, M.D. Advanced Pain Management Wisconsin, June 12, 1998.
- Quality Indicators In The Management Of Low Back Pain And Online Neurosurgical Outcome Studies and Developing Outcome Initiative And A Conceptual Framework For Outcome Measurement, Dr. Poselli, Dr. Harbough, Dr. Morgan and Dr. Walters. Seattle, Washington, Congress of Neurological Surgeons Course, October 2, 1998.
- Practical Issues And Outcomes Management In Spinal Disease And Integration Of Outcome Measures In Clinical Practice, Dr. Walters and Dr. Poselli. Seattle, Washington, Congress of Neurological Surgeons Course, October 3, 1998.
- Hands On Spine Teaching Course. Depymotech Utilizing The Peak Titanium Cervical Instrumentation System, Polyaxial Cervical Titanium Plating System,

Doc Ventral Cervical Stabilization System, Songercable System, Thoracic Lumbar Steffee Titanium Plate System, Review Of First Generation Isola Thoracic Lumbar Pedicle Screw Titanium Instrumentation System, Review of second generation Isola Titanium Pedicle Screw Rod Thoracic Lumbar Instrumentation System, Review And Utilization Of Titanium Mesh Cages And Associated Instrumentation With Above Systems. January 6, 1999.

- Specialty Review in Neurological Surgery. The National Center for Advanced Medical Education 75 hours Category 1 CME credits, 1999.
- Current Considerations in Chronic Pain Management. New Boston General Hospital 10 hours Category 1 CME credits, 1999.
- Neurosurgical Coding, Billing, Compliance Course & Update in Lexington, KY Office by Debbie Mills, R.N., C.P.C. 1999.
- Neurosurgical Coding, Billing, Compliance Course; Debbie Mills R.N., CPC.
 Executive Director Clinical Coding and Reimbursement Rheinisch Medical Management, Lexington, Kentucky, December, KY 2000.
- "Revolutionary New Approach for Treating Patients with Discogenic Back Pain."
 Keeneland Health Education Center, Lexington, Kentucky, Category 1 CME credit 2000.
- American Association of Neurological Surgeons Coding & Reimbursement Update, Las Vegas, Nevada, September 2000.
- NASS, North American Spine Society 2000 Meeting, New Orleans, Louisiana.
- Pain Management A Practical Guide for Clinicians, Richard S. Weiner, Study Course, 2000.
- Board Certification Exam American Academy of Pain Management, Orlando, Florida 2000.
- Pain Seminar Purdue Pharmacy, Dr. Karmer, Lexington, Kentucky, February 28, 2000.
- Comparisons of the AMA Guides 4th & 5th Editions Evaluations of Permanent Impairments, March 29, 2000, Greg Gleis, M.D., Orthopedics, University of Louisville Seminar, Lexington, Kentucky.
- Pain Seminar May 17, 2000 DEA, Compliance Profile, Drug Abuse, Lexington, Kentucky.
- OSHA and HIPAA Compliance Course, October 2000 in Lexington, Kentucky Office.
- "Pain Management and Opioids: Balancing Legal Requirements and Patient Needs" and "Prescription Drug Abuse", June 26, 2001, Lexington, Kentucky, Walter L. Fitzgerald and John T. Burke.
- Congress of Neurological Surgeons 51st Annual Meeting, September 29, 2001 thru October 4, 2001, San Diego Convention Center, San Diego, CA.

- Practical Course, September 29, 2001, Lumbosacral Fusion, Cages, Dowels, and Pedicle Screws, Dr. Haid and Dr. Schaffrey, San Diego Convention Center, San Diego, CA.
- Operative Colloquium Masters of Neurological Surgery, Dr. Apuzzo and Dr. Levy, Sunday, September 30, 2001, San Diego Convention Center, San Diego, CA.
- "Pain, Opioids and the Law of Kentucky", October 25, 2001, Lexington, KY, Sandra Durham, M.D.
- OSHA and HIPAA Compliance Course, November 6, 2001 in Lexington, KY Office.
- Reflex Sympathetic Dystrophy Seminar (RSA and Accidents), November 17, 2001, Central Baptist Hospital, Lexington, KY.
- Inflatable Bone Tamp Technology Course, November 29th & 30th, Cleveland Clinic 2001 (Kyphon Kyphoplasty)
- All day on site Survey by Dr. Perry of the American Academy of Pain Management. Review of Charts, Office Policies & Procedures, Staff, Pain Management Protocol, Licenses, etc. for Pain Program Accreditation. Accreditation by the American Academy of Pain Management Signifies Quality, Accountability, Promotion of Standards of care, Satisfaction of Rigorous Standards of PPA, Adherence to National Standards, Participation in National Pain Databank. December 7th 2001. (Preliminary notice that Spine and Brain Neurosurgical Center Pain Program is first and only Pain Program in Lexington to be Accredited by American Academy of Pain Management).
- Neurosurgical Coding, Billing, Complaince Course; Debbie Mills, R.N., C.P.C. Executive Director Clinical Coding and Reimbursement Rheinisch Medical Management, Lexington, KY December 21, 2001.
- Inflatable Bone Tamp Technology Course, December 22, 2001, Lexington, KY.
- Amecican Academy Of Pain Medicine; 18TH Annual Meeting with Review/Refresher Course, Hyatt Regency San Francisco in Embarcadero Center, February 26 March 3, 2002.
- American Association Of Neurological Surgeons Meeting; Lumbar Interbody Fusion Practical, "Modern Techniques and Future Trends in Lumbar Interbody Fusion" by Peter M. Klara, MD., Ph.D., April 6, 2002, Chicago, IL.
- Southern Pain Society Symposium, "Treating Pain in your Practice, Office of Continuing Medical Education, Duke School of Medicine, April 13, 2002, Lexington, KY.
- Complex Regional Pain Syndromes, (Reflex Sympathetic Dystrophy (RSD) and Causalgia) by Scrinivasa N. Raja, M.D., and Theodore Grabow, M.D., Division of Pain Medicine, Johns Hopkins Medical Institutions, Baltimore, MD., April 13, 2002.

- Challenges to Spine Surgery, April 26 & 27, 2002, Venetian, Las Vegas, NV.
- Practical Neurosurgical Practice Paradiagram, AANS Meeting, Chicago, IL, February 2, 2002.
- AANS/CNS (2002), Section on Pain Satellite Symposium Interventional Therapies in Neurosurgical Pain Management, McCormick Center, (Chicago, IL); February 2002.
- Annual American Association of Neurological Surgeons Meeting (2002);
 Lakeside Center, (Chicago, IL).
- Psychological considerations and Screening in Chronic Pain Therapy, Joel L. Seres, MD (Portland, OR); Northwestern Occupational Medical Center, Chicago, IL; April 5, 2002.
- Training a Pain Neurosurgeon, Kim J. Burchiel, MD (Portland, OR).
- IDET, Kenneth S. Yonemura, MD (Syracuse, NY) SUNNY; Upstate Medical University, Chicago, IL., April 5, 2002.
- Trigeminal Neuralgia-Principles and results of Percutaneous Ablative Techniques, Jeffrey A. Brown, MD (Detroit, MI); Wayne State University, Chicago, IL., April 5, 2002.
- Intrathecal Pumps: indications, Techniques and Outcome for Pain, Richard Deren Penn, MD (Chicago, IL); Rush Medical College, Chicago, IL., April 5, 2002.
- Gamma Knife Radiosurgery, Department Neurosurgery Mayo Clinic, Bruce E. Pollock, MD (Rhochester, MN); Chicago, IL., April 5, 2002.
- Vertebroplasty, Wayne State University, Richard d. Fessler, MD (Detroit, MI); Chicago, IL., April 5, 2002.
- Coding and Reimbursement issues in Pain Procedures, Director AANS Coding, Samuel J. Hassenbusch, MD, PhD (Houston, TX); Chicago, IL., April 5, 2002.
- Trigeminal Neuralgia, Hands on Workshop, Bruce E. Pollock, MD (Rochester, MN); Chigago, IL., April 5, 2002.
- Intraspinal Drug Infusion, Hands on Workshop, Jaimie M. Henderson, MD (Cleveland, OH); Chicago, IL., April 5, 2002.
- Transpedicular Injection Techniques, Hands on workshop, Richard D. Fessler, MD (Detroit, MI); Chicago, IL., April 5, 2002.
- Neuroimaging MRI Fellowship, Orlando, FL., June 29-30, 2002. Sponsored by the American Society of Neuroimaging.
- Pulse Sequences for Routine Practice, Elias A. Melhem, MD (Baltimore, MD)
 October 5–7, 2000. The Johns Hopkins Neuroradiology Review sponsored by
 The Johns Hopkins University School of Medicine. Category 1 credit AMA/PRA
 completed 7-15-02.
- Diffusion/Perfusion, Norman J. Beauchamp, MD (Baltimore, MD) October 5–7, 2000. The Johns Hopkins Neuroradiology Review sponsored by the Johns

- Hopkins University School of Medicine. Category 1 credit AMA/PRA completed 7-15-02.
- MR Spectroscopy, Peter B. Barker, PhD (Baltimore, MD) October 5–7, 2000. The Johns Hopkins Neuroradiology Review sponsored by The Johns Hopkins University School of Medicine. Category I credit AMA/PRA completed 7-15-02.
- Functional MRI Uses, Michael A. Kraut, MD, PhD (Baltimore, MD) October 5–
 7, 2000. The Johns Hopkins Neuroradiology Review sponsored by the Johns Hopkins University School of Medicine. Category I credit AMA/PRA completed 7-15-02.
- PET/SPECT for Neuroradiologists, Martin G. Pomper, MD, PhD (Baltimore, MD) October 5–7, 2000.
- The Johns Hopkins Neuroradiology Review sponsored by The Johns Hopkins University School of Medicine. Category I credit AMA/PRA completed 7-15-02.
- CT Angiography vs. MRA, Norman J. Beauchamp, MD (Baltimore, MD) October 5–7, 2000. The Johns Hopkins Neuroradiology Review sponsored by the Johns Hopkins University School of Medicine. Category I credit AMA/PRA completed 7-15-02.
- Head and Neck Anatomy, David M. Yousem, MD (Baltimore, MD) October 5–7, 2000. The Johns Hopkins Neuroradiology Review sponsored by The Johns Hopkins University School of Medicine. Category I credit AMA/PRA completed 7-15-02.
- Oral Cavity and Oropharynx, David M. Yousem, MD (Baltimore, MD) October 5–7, 2000. The Johns Hopkins Neuroradiology Review sponsored by The Johns Hopkins University School of Medicine. Category I credit AMA/PRA completed 7-15-02.
- Sinonasal Imaging, Vijay Rao, MD (Baltimore, MD) October 5–7, 2000. The Johns Hopkins Neuro-radiology Review sponsored by The Johns Hopkins University School of Medicine. Category I credit AMA/PRA completed 7-15-02.
- Orbit, Martin G. Pomper, MD, PhD (Baltimore, MD) October 5–7, 2000. The Johns Hopkins Neuro-radiology Review sponsored by The Johns Hopkins University School of Medicine. Category I credit AMA/PRA completed 7-15-02.
- Head and Neck Case Review, David M. Yousem, MD (Baltimore, MD) October 5–7, 2000. The Johns Hopkins Neuroradiology Review sponsored by The Johns Hopkins University School of Medicine. Category I credit AMA/PRA completed 7-15-02.
- Larynx, Thyroid, Parathyroid Neck, David M. Yousem, MD (Baltimore, MD)
 October 5–7, 2000. The Johns Hopkins Neuroradiology Review sponsored by The
 Johns Hopkins University School of Medicine. Category I credit AMA/PRA
 completed 7-15-02.

- Posterior and Central Skull Base, Vijay Rao, MD (Baltimore, MD) October 5–7, 2000. The Johns Hopkins Neuroradiology Review sponsored by The Johns Hopkins University School of Medicine. Category I credit AMA/PRA completed 7-15-02.
- Congenital Head and Neck, David M. Yousem, MD (Baltimore, MD) October 5–
 7, 2000. The Johns Hopkins Neuroradiology Review sponsored by The Johns Hopkins University School of Medicine. Category I credit AMA/PRA completed 7-15-02.
- Lymph Nodes, Vijay Rao, MD (Baltimore, MD) October 5–7, 2000. The Johns Hopkins Neuroradiology Review sponsored by The Johns Hopkins University School of Medicine. Category I credit AMA/PRA completed 7-15-02.
- Temporal Bone, David M. Yousem, MD (Baltimore, MD) October 5–7, 2000. The Johns Hopkins Neuroradiology Review sponsored by The Johns Hopkins University School of Medicine. Category I credit AMA/PRA completed 7-15-02.
- Head and Neck Case Review, David M. Yousem, MD (Baltimore, MD) October 5–7, 2000. The Johns Hopkins Neuroradiology Review sponsored by The Johns Hopkins University School of Medicine. Category I credit AMA/PRA completed 7-15-02.
- Brain Case Review (I), David M. Yousem, MD (Baltimore, MD) October 5–7,
 2000. The Johns Hopkins Neuroradiology Review sponsored by The Johns Hopkins University School of Medicine. Category I credit AMA/PRA completed 7-15-02.
- Brain Anatomy (MRI), Michael A. Kraut, MD, PhD (Baltimore, MD) October 5–7, 2000. The Johns Hopkins Neuroradiology Review sponsored by The Johns Hopkins University School of Medicine. Category I credit AMA/PRA completed 7-15-02.
- Cerebrovascular Anatomy, Keirnan P.J. Murphy, MD, FRCO© (Baltimore, MD)
 October 5–7, 2000. The Johns Hopkins Neuroradiology Review sponsored by The
 Johns Hopkins University School of Medicine. Category I credit AMA/PRA
 completed 7-15-02.
- Infratentorial Neoplasms, James G. Smirniotopoulos, MD (Baltimore, MD) October 5–7, 2000. The Johns Hopkins Neuroradiology Review sponsored by The Johns Hopkins University School of Medicine. Category I credit AMA/PRA completed 7-15-02.
- Congenital Brain Disorders, Elias A. Melhem, MD (Baltimore, MD) October 5–7, 2000. The Johns Hopkins Neuroradiology Review sponsored by The Johns Hopkins University School of Medicine. Category I credit AMA/PRA completed 7-15-02.
- Supratentorial Neoplasms, James G. Smirniotopoulos, MD (Baltimore, MD) October 5–7, 2000. The Johns Hopkins Neuroradiology Review sponsored by The

- Johns Hopkins University School of Medicine. Category I credit AMA/PRA completed 7-15-02.
- Brain Case Review (II), David M. Yousem, MD (Baltimore, MD) October 5–7, 2000. The Johns Hopkins Neuroradiology Review sponsored by The Johns Hopkins University School of Medicine. Category I credit AMA/PRA completed 7-15-02.
- Head Trauma, David M. Yousem, MD (Baltimore, MD) October 5–7, 2000. The Johns Hopkins Neuro-radiology Review sponsored by The Johns Hopkins University School of Medicine. Category I credit AMA/PRA completed 7-15-02.
- Aneurysms and Aneurysm Interventions, Kieran P.J. Murphy, MD, FRCP© (Baltimore, MD) October 5–7, 2000. The Johns Hopkins Neuroradiology Review sponsored by The Johns Hopkins University School of Medicine. Category I credit AMA/PRA completed 7-15-02.
- Stroke and Hemorrhage, Norman J. Beauchamp, MD (Baltimore, MD) October 5–7, 2000. The Johns Hopkins Neuroradiology Review sponsored by The Johns Hopkins University School of Medicine. Category I credit AMA/PRA completed 7-15-02.
- AVMs and AVM Interventions, Phillipe Gailloud, MD (Baltimore, MD) October 5–7, 2000. The Johns Hopkins Neuroradiology Review sponsored by The Johns Hopkins University School of Medicine. Category I credit AMA/PRA completed 7-15-02.
- Infectious/Inflammatory Diseases of the Brain, Edward H. Herskovits, MD, PhD (Baltimore, MD) October 5–7, 2000. The Johns Hopkins Neuroradiology Review sponsored by The Johns Hopkins University School of Medicine. Category I credit AMA/PRA completed 7-15-02.
- Demyelinating Disorders, Michael A. Kraut, MD, PhD (Baltimore, MD) October 5–7, 2000. The Johns Hopkins Neuroradiology Review sponsored by The Johns Hopkins University School of Medicine. Category I credit AMA/PRA completed 7-15-02.
- Neurodegenerative Disorders, and Epilepsy, Edward H. Herskovits, MD, PhD (Baltimore, MD) October 5–7, 2000. The Johns Hopkins Neuroradiology Review sponsored by The Johns Hopkins University School of Medicine. Category I credit AMA/PRA completed 7-15-02.
- Brain Case Review, David M. Yousem, MD (Baltimore, MD) October 5–7, 2000. The Johns Hopkins Neuroradiology Review sponsored by The Johns Hopkins University School of Medicine. Category I credit AMA/PRA completed 7-15-02.
- Spine Case Review (I), David M. Yousem, MD (Baltimore, MD) October 5–7, 2000. The Johns Hopkins Neuroradiology Review sponsored by The Johns Hopkins University School of Medicine. Category I credit AMA/PRA completed 7-15-02.

- Spine DJD, Martin G. Pomper, MD, PhD (Baltimore, MD) October 5–7, 2000. The Johns Hopkins Neuroradiology Review sponsored by The Johns Hopkins University School of Medicine. Category I credit AMA/PRA completed 7-15-02.
- Extradural (Non-DJD) Spine, Bruce Wasserman, MD (Baltimore, MD) October 5–7, 2000. The Johns Hopkins Neuroradiology Review sponsored by The Johns Hopkins University School of Medicine. Category I credit AMA/PRA completed 7-15-02.
- Intradural Intramedullary Spine, David M. Yousem, MD (Baltimore, MD) October 5–7, 2000. The Johns Hopkins Neuroradiology Review sponsored by The Johns Hopkins University School of Medicine. Category I credit AMA/PRA completed 7-15-02.
- Intradural Intramedullary Spine, Bruce Wasserman, MD (Baltimore, MD)
 October 5–7, 2000. The Johns Hopkins Neuroradiology Review sponsored by The Johns Hopkins University School of Medicine. Category I credit AMA/PRA completed 7-15-02.
- Congenital Spine, Elias A. Melhem, MD (Baltimore, MD) October 5–7, 2000. The Johns Hopkins Neuroradiology Review sponsored by The Johns Hopkins University School of Medicine. Category I credit AMA/PRA completed 7-15-02.
- Spine Case Review (II), David M. Yousem, MD (Baltimore, MD) October 5–7, 2000. The Johns Hopkins Neuroradiology Review sponsored by The Johns Hopkins University School of Medicine. Category I credit AMA/PRA completed 7-15-02.
- Spine Trauma, Elias A. Melhem, MD (Baltimore, MD) October 5–7, 2000. The Johns Hopkins Neuroradiology Review sponsored by The Johns Hopkins University School of Medicine. Category I credit AMA/PRA completed 7-15-02.
- Spinal Vascular Lesions and Spine Interventions, Kieran P.J. Murphy, MD, FRCP© (Baltimore, MD) October 5–7, 2000. The Johns Hopkins Neuroradiology Review sponsored by The Johns Hopkins University School of Medicine. Category I credit AMA/PRA completed 7-15-02.
- Spine Case Review (III), David M. Yousem, MD (Baltimore, MD) October 5–7, 2000. The Johns Hopkins Neuroradiology Review sponsored by The Johns Hopkins University School of Medicine. Category I credit AMA/PRA completed 7-15-02.
- Final Case Review (Brain, Spine, Head & Neck), David M. Yousem, MD (Baltimore, MD) October 5–7, 2000. The Johns Hopkins Neuroradiology Review sponsored by The Johns Hopkins University School of Medicine. Category I credit AMA/PRA completed 7-15-02.
- American Association of Addictionologist Perspective on Pain Management, Dr. Heist, Lexington, KY. August 16, 2002.

- "HIV/AIDS: Facts for the Healthcare Professional" St. Joseph Hospital, Lexington, KY; October 10, 2002.
- 2003 Annual CPT Coding Update for Spine and Brain Neurosurgical Center, Vickie Home, C.P.C., Department of Clinical Coding and Reimbursement, Lexington, KY, December 20, 2002.
- The Basics of the HIPAA Privacy Regulations, Patrick T. Padgett, Staff Counsel, Kentucky Medical Association, Cardinal Hill Hospital; Lexington, KY., January 7, 2003.
- "Differentiating Traditional NSAIDS from COX-2 Inhibitors" by Michelle Petri, MD., Associate Professor, Division of Rheumatology/Department of Medicine, Johns Hopkins University School of Medicine, Johns Hopkins Hospital, Lexington, KY., February 11, 2003.
- MRI of Intracranial Hemorrhage: A Review by Rohit Bahshi, MD, Associate Professor, Neurology University at Buffalo, State University of New York, Buffalo, NY 1.7 CME American Society Neuroimaging, March 7, 2003, New Orleans, LA.
- MRI Spectroscopy Clinical Applications by Fracis Hussey, MD, President, Imaging Solutions Inc., Naples, FL. 1.7 CME American Society Neuroimaging, March 7, 2003, New Orleans, LA.
- Diffusion-Weighted Imaging by Roman Klufas, MD, Bringham & Women's Hospital, Boston, MA. 1.7 CME American Society Neuroimaging, March 7, 2003, New Orleans, LA.
- Orbital Imaging, by Leo Wolansky, MD, New Jersey University of Health Sciences, Newark, NJ. 1.7 CME American Society Neuroimaging, March 7, 2003. New Orleans, LA.
- The WHO 2000 Brain Tumor Classification by James G. Smirniotopoulos, MD, Uniformed Services University of the Health Sciences, Bethesda, MD. 1.7 CME American Society Neuroimaging, March 7, 2003, New Orleans, LA.
- MRI Physics by Leo Wolansky, MD, New Jersey University of Health Sciences, Newark, NJ. 1.5 CME American Society Neuroimaging, March 7, 2003, New Orleans, LA.
- MRI Hands on Workshop, Director John Chawlnk, D. Medical College of Pennsylvania, Pottsville, PA. 3 CME American Society Neuroimaging, March 7, 2003, New Orleans, LA.
- SPINE: Degenerative by Richard B. Kasdan, MD. Assoc. in Neurology, Pittsburgh, PA. 1.7 CME American Society Neuroimaging, March 8, 2003, New Orleans, LA.
- SPINE: Neoplastic by Richard B. Kasdan, MD. Assoc. in Neurology, Pittsburgh, PA. 1.7 CME American Society Neuroimaging, March 8, 2003, New Orleans, LA.

- SPINE: Non-Degenerative and Non Neoplastic by Roman Klufas, MD, Bringham and Woman Hospital, Boston MA. 1.7 CME American Society Neuroimaging, March 8, 2003, New Orleans, LA.
- Imaging of Head Trauma by Roman Klufas, MD, Bringham and Woman Hospital, Boston MA. 1.7 CME American Society Neuroimaging, March 8, 2003, New Orleans, LA.
- CNS Infections by Roman Klufas, MD, Bringham and Woman Hospital, Boston MA. 1.7 CME American Society Neuroimaging, March 8, 2003, New Orleans, LA.
- Neurocutaneous Syndromes by Laszlo Mechtler, MD. Chief of Neuro-Oncology, Dent. Imaging Center Buffalo, NY. 1.7 CME American Society Neuroimaging, March 8, 2003, New Orleans, LA.
- Cerebrovascular Disease by James Smirniotoproulos, MD, Professor of Radiology, Uniformed Services University of the Health Sciences, Bethesda, MD.
 1.7 CME American Society Neuroimaging, March 8, 2003, New Orleans, LA.
- Neuroimaging of AIDS by James Smirniotoproulos, MD, Professor of Radiology, Uniformed Services University of the Health Sciences, Bethesda, MD. 1.7 CME American Society Neuroimaging, March 8, 2003, New Orleans, LA.
- Magnetic Ressonance Imaging in MS by Robert Zivadinov, M.D., PhD, Neurologist and MS Specialist, Cahinara Hospital, Trieste, Italy. 1.7 CME American Society Neuroimaging, March 8, 2003, New Orleans, LA.
- Practice Issues in MRI and CT: Myfractic by Mircea A. Morarin, MD, Florida Neurologic Center, Delray Beach, FL. .4 CME American Society Neuroimaging, March 8, 2003, New Orleans, LA.
- Practice Issues in MRI and CT: MRI Credentialing Issues by Rohit Bakshi, MD, Baffalo General Hospital, Buffalo, NY. .4 CME American Society Neuroimaging, March 8, 2003, New Orleans, LA.
- Practice Issues in MRI and CT: Perspective from a National Imaging Company by Jeff Clark Regional Director, Medical Resources, Inc., Palmetto, FL. .4 CME American Society Neuroimaging, March 8, 2003, New Orleans, LA.
- Practice Issues in MRI and CT: Perspectives by Garth James, CEO, MRI Management, Inc., Dallas, TX. .4 CME American Society Neuroimaging, March 8, 2003, New Orleans, LA.
- Practice Issues in MRI and CT: Imaging Facilities by Francis Hussey Jr., MD. Imaging Solutions, Inc., Naples, FL. .4 CME American Society Neuroimaging, March 8, 2003, New Orleans, LA.
- Multi-modality Imaging in Acute Stroke: Cerebral Angiography by Adnan Qureshi, MD, Department of Neurosciences, University of Medicine, Newark, NJ. .8 CME American Society Neuroimaging, March 9, 2003, New Orleans, LA.

- Multi-modality Imaging in Acute Stroke: Ultrasound Enhanced Thrombolysis for Ischemic Stroke by Andrei Alexandron, MD, Assistant Professor, University of Texas, Houston, TX. .8 CME American Society Neuroimaging, March 9, 2003, New Orleans, LA.
- Role of Interventional Neuroimaging in the Management of Carotid Artery Stenosis by Adnam Qureshi, MD, University of Medicine, Newark, NJ, .65 CME American Society Neuroimaging, March 9, 2003, New Orleans, LA.
- Elective Intracranial Arterial Stenting by Camilo Gomez, M.D, Professor of Neurology, University of Alabama, School of Medicine, Birmingham, AL. .65 CME American Society Neuroimaging, March 9, 2003, New Orleans, LA.
- Intra-arterial Thrombolysis for Acute Stroke by Lawrence Wechsler, MD, Professor of Neurology and Neurosurgery, University of Pittsburgh Medical Center, Stroke Institute, Pittsburgh, PA. .65 CME American Society Neuroimaging, March 9, 2003, New Orleans, LA.
- Training and Credentialing in Interventional Neuroimaging by Morgan Campbell,
 MD, University of Texas, Houston, TX. .65 CME American Society
 Neuroimaging, March 9, 2003, New Orleans, LA.
- Frontiers in Interventional Neuroimaging: The Future of Intervention, Director Camilo Gomez, Professor of Neurology, University of Alabama, School of Medicine, Birmingham, AL. .65 CME American Society Neuroimaging, March 9, 2003, New Orleans, LA.
- American Society of Neuroimaging 26th Annual Meeting, March 6–9, 2003, Hotel Inter-Continental, New Orleans, LA, Program Chairman, Todd Troust, MD. Wake Forest University, Winston-Salem, NC.
- Comprehensive MRI/CT Certification Examination administered by the American Society of Neuroimaging on March 9, 2003 at the 26th Annual American Society of Neuroimaging Meeting, Hotel Intercontinental, New Orleans, LA.
- Advanced Cardiac Life Support (ACLS) Certification and Course. Advanced Cardiac Life Support Provider Certification, Lexington, Kentucky June 20–21, 2003 by Frankfort Fire & Emergency Medical Services, Barbara Santer, RN, BSN, CEU.
- Practice Management Seminar and Certified Administrator in Physician Practice Management (CAPPM) Review Sponsored by Spine and Brain Neurosurgical Center, Lexington, Kentucky, November 1–2, 2003 at Central Baptist Hospital, by The American Academy of Medical Management.
- Personnel Management and Employee Incentive Plans J. Max Reiholdt, CPA, EFPM, November 1-2003, The Coker Group. 1.00 CEU.
- Overview of Managed Care Contracting. J. Max Reiholdt, CPA, EFPM. The Coker Group, November 1, 2003. 1.50 CEU.

- Understanding and Interpreting Financial Statements & Controlling Expenses. J. Max Reinholdt, CPA, EFPM, The Coker Group, November 1, 2003. 1.50 CEU.
- Improving Billing and Collections Functions. J. Max Reiholdt, CPA, EFPM, The Coker Group, November 1, 2003. 1.00 CEU.
- Policies and Procedures: Compliance for the Well-Managed Practice. J. Max Reiholdt, CPA, EFPM, The Coker Group, November 1, 2003. 1.00 CEU.
- Expanding the Medical Practice: New Business Development, Craig W. Hunter, EFPM, CAPPM, The Coker Group, November 2, 2003, Lexington, Kentucky. 1.50 CEU.
- Developing A Practice Business Plan, Craig W. Hunter, EFPM, CAPPM, The Coker Group, November 2, 2003, Lexington, Kentucky. 1.50 CEU.
- Certified Administrator in Physician Practice Management (CAPPM) Review, November 2, 2003. Roger G. Bonds, MBA, FMSD, CNSR. The American Academy of Medical Management; Craig W Hunter, EFPM, CAPPM, The Coker Group, November 2, 2003, Lexington, Kentucky. 1.50 CEU.
- Examination Forms Preparation and CAPPM Examination, The American Academy of Medical Management Certified Administrator in Physician Practice Management Examination, November 2, 2003, Lexington, Kentucky. 0.50 CEU.
- Neurosurgical Coding, Billing, Compliance Course Update 2004; Debbie Mills R.N., CPC. Executive Director Clinical Coding and Reimbursement Rheinisch Medical Management, Lexington, Kentucky, December, 19, 2003. 4.0 CEU.
- President National Anxiety Foundation Seminar by Stephan Cox, M.D.. Paxil/CR for General Anxiety Disorder & Panic Disorder. Lexington, KY., March 15, 2004.
- American Society of Addiction Medicine 35th Annual Medical Scientific Conference April 2004 Washington, D.C. Marriott Wardman Park Hotel.
- Pain and Addiction: Common Threads 5, Emerging Issues in the Use, Misuse, and Diversion of the Opioid Analgesics, Howard A. Heit, M.D., FACP, FASAM, Seddon R. Savage, M.D., FASAM, Course Co-Directors American Society of Addiction Medicine Washington, D.C. April 22, 2004.
- Changing Policies on the Medical Use of Opioids: Their Potential Impact on Treatment, Misuse and Diversion. Seddon R. Savage, M.D., FASAM, Washington, D.C. April 22, 2004.
- Trends in Medical Use and Abuse of Prescription Opioids: A Critical Look at the Data. James Zachy, Ph.D. Washington, D.C. April 2004.
- Clinical Presentations of Prescription Drug Misuse, Addiction, Self-Medication, and Diversion. Theodore V. Parron, Jr., M.D., FACP. April 2004 Washington, D.C.
- The Concept of Hedonic Tone: Implications for Pain, Addiction, and Opioid Use and Misuse. Edwin A Salsitz, M.D., FASAM. April 2004 Washington, D.C.

- HIV and Substance Abuse: Remaining Frontiers. Lawrence S. Brown, Jr., M.D., MPH, FASAM. April 2004 Washington, D.C.
- A RE-Examination of the Indications for the Opioid Analgesia: Does Prescribing for Chronic Pain Contribute to Abuse and Diversion. A. Kenison Roy III, M.D., FASAM. April 2004 Washington, D.C.
- Prescription Monitoring Plans (PMPs). Linda Simoni-Wastila, B.S. Pharm., Ph.D. April 2004 Washington, D.C.
- Confirmed "Universal Precautions": A New Concept in the Use of Opioids to Treat Chronic Pain. Doug L. Gourlay, M.D., M.Sc, FRCPC, FASAM. April 2004 Washington, D.C.
- Urine Drug Testing (UDT): A Patient-Centered Model. Howard A. Heit, M.D., FACP, FASAM. April 2004 Washington, D.C.
- Managing Coding And New Reimbursement Challenges In Neurosurgery: American Association of Neurological Surgeons, AMA Physician Recognition Award. 12.75 CME., August 28, 2004, Chicago, IL.
- Buprenorphine in Office-Based Treatment for Opiate Addiction. American Society of Addiction Medicine (ASAM). Rush Medical Center, October, 2004, Chicago, IL
- Goals of Prescribing Opiates in Treatment of Opioid Dependence, A Closer Look at the Toolbox, Legislation and Regulations for Office-Based Treatment of Opiate Dependence. Rush Medical Center, October 2004, Chicago, IL.
- Pharmacology of Opioids, Buprenorphine, and Buprenorphine/naloxone. Rush Medical Center, October 2004, Chicago, IL.
- Clinical Management: Treating Opioid-Dependent Patients in Office-based Practice. Rush Medical Center, October 2004, IL.
- Psychiatric Comorbidity and Opioid Dependence. Rush Medical Center, October 2004, Chicago, IL.
- Medical Comorbidity and Opioid Dependence. Rush Medical Center, October 2004, Chicago, IL.
- Managing Acute and Chronic Pain in Patients Treated with Subutex/Suboxone.
 Rush Medical Center, October 2004, Chicago, IL.
- Epidemiology. Rosa M. Crum, M.D., M.H.S. ASAM Review Course in Addiction Medicine. 21 CME Credits. Sheraton Centre Toronto, November 4-6 2004, Ontario, Canada.
- Neurobiology 101. Eliot L. Gardner, Ph.D. ASAM Review Course in Addiction Medicine. 21 CME Credits. Sheraton Centre Toronto, November 4-6 2004, Ontario, Canada.
- Marijuana. John T. Pichot, M.D. ASAM Review Course in Addiction Medicine.
 21 CME Credits. Sheraton Centre Toronto, November 4–6 2004, Ontario, Canada.

- Tobacco. Richard D. Hurt, M.D. ASAM Review Course in Addiction Medicine. 21 CME Credits. Sheraton Centre Toronto, November 4-6 2004, Ontario, Canada.
- Pregnancy and Addiction. Martha J. Wunsch, M.D., FAAP. ASAM Review Course in Addiction Medicine. 21 CME Credits. Sheraton Centre Toronto, November 4–6 2004, Ontario, Canada.
- Evening Session: Clinical Issues in Addiction Medicine I. Louis E. Baxter, Sr., M.D. ASAM Review Course in Addiction Medicine. 21 CME Credits. Sheraton Centre Toronto, November 4–6 2004, Ontario, Canada.
- Dissociative Anesthetics and Hallucinogens. John T. Pichot, M.D. ASAM Review Course in Addiction Medicine. 21 CME Credits. Sheraton Centre Toronto, November 4–6 2004, Ontario, Canada.
- Alcohol. Peter Banys, M.D. ASAM Review Course in Addiction Medicine. 21 CME Credits. Sheraton Centre Toronto, November 4–6 2004, Ontario, Canada.
- Sedative Hypnotics. Donald R. Wesson, M.D., FASAM. ASAM Review Course in Addiction Medicine. 21 CME Credits. Sheraton Centre Toronto, November 4–6 2004, Ontario, Canada.
- Opioids. David A. Fiellin, M.D. ASAM Review Course in Addiction Medicine.
 21 CME Credits. Sheraton Centre Toronto, November 4–6 2004, Ontario, Canada.
- MRO Practice. Donald Ian Macdonald, M.D., FASAM. ASAM Review Course in Addiction Medicine. 21 CME Credits. Sheraton Centre Toronto, November 4–6 2004, Ontario, Canada.
- Psychiatric Comorbidities. Richard K. Ries, M.D., FASAM. ASAM Review Course in Addiction Medicine. 21 CME Credits. Sheraton Centre Toronto, November 4–6 2004, Ontario, Canada.
- Inhalants and Steroids. Scott E. Lukas, Ph.D. ASAM Review Course in Addiction Medicine. 21 CME Credits. Sheraton Centre Toronto, November 4–6 2004, Ontario, Canada.
- Stimulants: Amphetamines, Methamphetamine, MDMA and Cocaine. Thomas R. Kosten, M.D. ASAM Review Course in Addiction Medicine. 21 CME Credits. Sheraton Centre Toronto, November 4–6 2004, Ontario, Canada.
- Twelve Step Programs. John N. Chappel, M.D., FASAM. ASAM Review Course in Addiction Medicine. 21 CME Credits. Sheraton Centre Toronto, November 4–6 2004, Ontario, Canada.
- Prevention, Screening, and Brief Intervention. Elizabeth F. Howell, M.D., FASAM. ASAM Review Course in Addiction Medicine. 21 CME Credits. Sheraton Centre Toronto, November 4–6 2004, Ontario, Canada.
- Clinical Uses of Drug Testing. Howard A. Heit, M.D., FACP, FASAM. ASAM Review Course in Addiction Medicine. 21 CME Credits. Sheraton Centre Toronto, November 4–6 2004, Ontario, Canada.

- The Impact of Research on the Care of Addicted Patients. Nora Volkow, M.D., Director, National Institute of Drug Abuse. ASAM Online Courses: The State of the Art in Addiction Medicine. 15 CME Credits. November 2004.
- Pharmacogenomics: Future Challenges for Alcoholism Treatment. Ting-Kai Li, M.D., Director, National Institute on Alcohol Abuse and Alcoholism. ASAM Online Courses: The State of the Art in Addiction Medicine. 15 CME Credits. November 2004.
- Developmental Issues in Adolescent Alcohol and Drug Use. Beverly Watts Davis, Director, Center for Substance Abuse Prevention. ASAM Online Courses: The State of the Art in Addiction Medicine. 15 CME Credits. November 2004.
- The State of the Art and Its Implications for the Future of Addiction Research and Practice. Lawrence S. Brown, Jr., M.D., M.P.H., FASAM, ASAM President. ASAM Online Courses: The State of the Art in Addiction Medicine. 15 CME Credits. November 2004.
- Reframing Addiction with Behavioral Economics: Delay Discounting. Warren K. Bickel, Ph.D. ASAM Online Courses: The State of the Art in Addiction Medicine. 15 CME Credits. November 2004.
- Opiate and Nicotine Pharmacotherapy Update. Thomas R. Kosten, M.D. ASAM
 Online Courses: The State of the Art in Addiction Medicine. 15 CME Credits.
 November 2004.
- Contingency Management Interventions. Nancy Petry, Ph.D. ASAM Online Courses: The State of the Art in Addiction Medicine. 15 CME Credits. November 2004.
- Allostasis and Addiction. John Littleton, M.D., Ph.D. ASAM Online Courses: The State of the Art in Addiction Medicine. 15 CME Credits. November 2004.
- Imaging Negative Reinforcement. Steven Grant, Ph.D. ASAM Online Courses: The State of the Art in Addiction Medicine. 15 CME Credits. November 2004.
- Substance Use Detoxification and Treatment: Recent Trends. Mady CHalk, Ph.D., ACSW. ASAM Online Courses: The State of the Art in Addiction Medicine. 15 CME Credits. November 2004.
- The Neurobiology of Addiction. Eliot L. Gardner, Ph.D.ASAM Online Courses: The State of the Art in Addiction Medicine. 15 CME Credits. November 2004.
- Plastic Changes in Synaptic Communication in the Transition to Addiction. David Lovinger, Ph.D. ASAM Online Courses: The State of the Art in Addiction Medicine. 15 CME Credits. November 2004.
- Translating Science to Service -- Perspective of the Clinician. Michel A. Sucher, M.D. ASAM Online Courses: The State of the Art in Addiction Medicine. 15 CME Credits. November 2004.

- Adolescent Substance Abuse: New Strategies for Screening and Brief Intervention. John R. Knight, M.D. ASAM Online Courses: The State of the Art in Addiction Medicine. 15 CME Credits. November 2004.
- Genetics of Addiction: Genes, Environment and Alcoholism. David Goldman, M.D. ASAM Online Courses: The State of the Art in Addiction Medicine. 15 CME Credits. November 2004.
- Externalizing Disorder and Risk for Substance Abuse Disorder. Ralph E. Tarter, Ph.D. ASAM Online Courses: The State of the Art in Addiction Medicine. 15 CME Credits. November 2004.
- Dying for a Drink or Drug: Suicide and Addiction. Richard K. Ries, M.D. ASAM Online Courses: The State of the Art in Addiction Medicine. 15 CME Credits. November 2004.
- Ethnic/Racial Differences in Nicotine Metabolism and Smoking Behavior. Neal Benowitz, M.D. ASAM Online Courses: The State of the Art in Addiction Medicine. 15 CME Credits. November 2004.
- Native American Healing Practices. Colleen L. Good Bear, Ph.D. ASAM Online Courses: The State of the Art in Addiction Medicine. 15 CME Credits. November 2004.
- Effectiveness and Mediators of 12-Step Mutual Help Groups. Keith Humphreys, Ph.D.. ASAM Online Courses: The State of the Art in Addiction Medicine. 15 CME Credits. November 2004.
- Spirituality as a Component of Prevention (Case Vignette). John N. Chappel, M.D., M.A., FASAM. ASAM Online Courses: The State of the Art in Addiction Medicine. 15 CME Credits. November 2004.
- Research Advances in the Study of "Spirituality and Alcoholism." R. Thomas Gentry, Ph.D. ASAM Online Courses: The State of the Art in Addiction Medicine. 15 CME Credits. November 2004.
- Terror, Psychopathology and Substance Abuse. Jorge Gleser, M.D. ASAM Online Courses: The State of the Art in Addiction Medicine. 15 CME Credits. November 2004.
- Psychosocial Outcomes Following Exposure to Large Scale Traumatic Events.
 William E. Schlenger, Ph.D. ASAM Online Courses: The State of the Art in Addiction Medicine. 15 CME Credits. November 2004.
- Trauma and Addictions: Empirically Supported Treatment Strategies. Sarah Gundle, Ph.D. ASAM Online Courses: The State of the Art in Addiction Medicine. 15 CME Credits. November 2004.
- Translating Science to Service: Why aren't more physicians prescribing buprenorphine. David Fiellin, M.D.. ASAM Online Courses: The State of the Art in Addiction Medicine. 15 CME Credits. November 2004.

- Drug Abuse Genetics. George R. Uhl, M.D., Ph.D. ASAM Online Courses: The State of the Art in Addiction Medicine. 15 CME Credits. November 2004.
- Neurophysiology of Cocaine Addiction. Regina M. Carelli, Ph.D. ASAM Online Courses: The State of the Art in Addiction Medicine. 15 CME Credits. November 2004.
- Modeling the Addiction Process. David C.S. Roberts, Ph.D. ASAM Online Courses: The State of the Art in Addiction Medicine. 15 CME Credits. November 2004.
- The Forensic Context of Drug Tests. Robert E. Willette, Ph.D. ASAM Review Course: Forensic Issues in Addiction Medicine. November 18 2004, Washington, D.C.
- Introduction to Legal Processes. Barbara Johnson, Esq. ASAM Review Course: Forensic Issues in Addiction Medicine. November 18 2004, Washington, D.C.
- Physicians Health Programs The Forensic Issues. Louis E. Baxter, Sr., M.D., FASAM. ASAM Review Course: Forensic Issues in Addiction Medicine. November 18 2004, Washington, D.C.
- History of Modern Drug Testing Outside of Clinical Settings Role of Forensics in the Evolution of Policies and Programs. Robert L. DuPont, M.D. and Robert E. Willette, Ph.D. ASAM Review Course: Forensic Issues in Addiction Medicine. November 18 2004, Washington, D.C.
- ASAM Pre-Conference Workshop: Principles of Detoxification (sponsored by the Illinois Society of Addiction Medicine) Dora Dixie, M.D. and Gloria Mouzon, M.D. 3.5 Credits. Sheraton Centre Toronto, November 4 2004, Ontario, Canada.
- A Drug Free Workplace: The Federal Model. Joseph H. Autry III, M.D. Three Training Courses For Medical Review Officers. 18 CME Credits. November 19– 21 2004, Washington D.C.
- The Forensic Urine Collection. James L. Ferguson, D.O. Three Training Courses For Medical Review Officers. 18 CME Credits. November 19–21 2004, Washington D.C.
- The HHS Certified Laboratory. M.P. George, M.S. Three Training Courses For Medical Review Officers. 18 CME Credits. November 19–21 2004, Washington D.C.
- The MRO Process I and II. Donald Ian Macdonald, M.D., FASAM. Three Training Courses For Medical Review Officers. 18 CME Credits. November 19–21 2004, Washington D.C.
- Toxicology I and II. Robert E. Willette, Ph.D. Three Training Courses For Medical Review Officers. 18 CME Credits. November 19–21 2004, Washington D.C.

- The Rationale and History of Medical Review of Drug Tests. Donna R. Smith, Ph.D. Three Training Courses For Medical Review Officers. 18 CME Credits. November 19–21 2004, Washington D.C.
- The Legal Line Between Acting as a Physician and an MRO. Barbara L. Johnson, Esq. Three Training Courses For Medical Review Officers. 18 CME Credits. November 19–21 2004, Washington D.C.
- The Clinical Side of Drugs in the Workplace. David E. Smith, M.D., FASAM. Three Training Courses For Medical Review Officers. 18 CME Credits. November 19–21 2004, Washington D.C.
- Alcohol Testing The Science. Robert E. Willette, Ph.D. Three Training Courses For Medical Review Officers. 18 CME Credits. November 19–21 2004, Washington D.C.
- Alcohol Testing The Rules and Process. Donna R. Smith, Ph.D. Three Training Courses For Medical Review Officers. 18 CME Credits. November 19— 21 2004, Washington D.C.
- Beating the Test by Dilution, Substitution, and Adulteration The Science. Donna Bush, Ph.D. Three Training Courses For Medical Review Officers. 18 CME Credits. November 19–21 2004, Washington D.C.
- The Addictive Drugs. H. Westley Clark, M.D., M.P.H., FASAM. Three Training Courses For Medical Review Officers. 18 CME Credits. November 19–21 2004, Washington D.C.
- What's Happening at DOT II. Kenneth Edgell. Three Training Courses For Medical Review Officers. 18 CME Credits. November 19–21 2004, Washington D.C.
- Alternative Specimens and Technology I and II. Donna Bush, Ph.D. Three Training Courses For Medical Review Officers. 18 CME Credits. November 19–21 2004, Washington D.C.
- The SAP Assessment. H. Westley Clark, M.D., M.P.H., FASAM. Three Training Courses For Medical Review Officers. 18 CME Credits. November 19–21 2004, Washington D.C.
- Return to Work Liability Issues and the ADA. Barbara L. Johnson, Esq. Three Training Courses For Medical Review Officers. 18 CME Credits. November 19– 21 2004, Washington D.C.
- DOT Rules. Donna R. Smith, Ph.D. Three Training Courses For Medical Review Officers. 18 CME Credits. November 19–21 2004, Washington D.C.
- Clinical Tools Online Health Education: Scope of the Problem: Opioid Addiction. 0.75 credits toward AMA Physician's Recognition Award. November 2004.
- Clinical Tools Online Health Education: Psychosocial Factors in Adolescent Substance Abuse. 1.0 credits toward AMA Physician's Recognition Award. November 2004.

- Clinical Tools Online Health Education: Treating Delirium Tremens: Detoxification From Alcohol. 1.0 credits toward AMA Physician's Recognition Award. November 2004.
- Clinical Tools Online Health Education: The Primary Care Physician's Role in Addiction Treatment. 0.50 credits toward AMA Physician's Recognition Award. November 2004.
- Clinical Tools Online Health Education: Health Impact of Opioid Addiction. 0.75 credits toward AMA Physician's Recognition Award. November 2004.
- Clinical Tools Online Health Education: Pharmacology of Opioids. 0.50 credits toward AMA Physician's Recognition Award. November 2004.
- Clinical Tools Online Health Education: Assessment for Office-Based Treatment. 0.50 credits toward AMA Physician's Recognition Award. November 2004.
- Clinical Tools Online Health Education: Detection and Diagnosis of Opioid Dependence. 0.75 credits toward AMA Physician's Recognition Award. November 2004.
- Clinical Tools Online Health Education: Clinical Use of Buprenorphine. 1.0 credits toward AMA Physician's Recognition Award. November 2004.
- Clinical Tools Online Health Education: Opioid Addiction in Special Populations. 0.75 credits toward AMA Physician's Recognition Award. November 2004.
- Clinical Tools Online Health Education: Opioid Use Disorders and Psychiatric Comorbidities. 0.75 credits toward AMA Physician's Recognition Award. November 2004.
- Clinical Tools Online Health Education: Managing Substance Abuse Patients in Clinical Practice. 0.50 credits toward AMA Physician's Recognition Award. November 2004.
- Clinical Tools Online Health Education: Other Treatments for Opioid Addiction. 0.75 credits toward AMA Physician's Recognition Award. November 2004.
- Clinical Tools Online Health Education: Office Policy and Legal Issues. 0.50 credits toward AMA Physician's Recognition Award. November 2004.
- Clinical Tools Online Health Education: Alcohol Use Problems in Primary Care: An Introduction. 1.0 credits toward AMA Physician's Recognition Award. November 2004.
- Clinical Tools Online Health Education: Screening for Alcohol Use Problems in Primary Care. 1.0 credits toward AMA Physician's Recognition Award. November 2004.
- Clinical Tools Online Health Education: Brief Interventions for Alcohol Use Problems in Primary Care. 1.0 credits toward AMA Physician's Recognition Award, November 2004.
- Clinical Tools Online Health Education: Kelly: A Brief Intervention. 1.0 credits toward AMA Physician's Recognition Award. November 2004.

- Clinical Tools Online Health Education: Genetic Studies of Alcoholism. 1.0 credits toward AMA Physician's Recognition Award. November 2004.
- Clinical Tools Online Health Education: Alcohol use and population health: Harm for the few and/or benefit for the many?. 1.0 credits toward AMA Physician's Recognition Award. November 2004.
- Clinical Tools Online Health Education: Brief Office Interventions for Risky Drinkers. 1.0 credits toward AMA Physician's Recognition Award. November 2004.
- Clinical Tools Online Health Education: Alcohol and Depression. 1.0 credits toward AMA Physician's Recognition Award. November 2004.
- Clinical Tools Online Health Education: Alcohol and Disease: It's not just your liver. 1.0 credits toward AMA Physician's Recognition Award. November 2004.
- Clinical Tools Online Health Education: Treating Delirium Tremens: Detoxification From Alcohol. 1.0 credits toward AMA Physician's Recognition Award. November 2004.
- Clinical Tools Online Health Education: Medications Used to Treat Alcohol Dependence. 1.0 credits toward AMA Physician's Recognition Award. November 2004.
- Clinical Tools Online Health Education: Pharmacotherapy of Tobacco Cessation. 1.0 credits toward AMA Physician's Recognition Award. November 2004.
- Clinical Tools Online Health Education: Overview of Tobacco Cessation. 1.0 credits toward AMA Physician's Recognition Award. November 2004.
- Clinical Tools Online Health Education: Five Cases: Basic Tobacco Cessation Interviews. 1.0 credits toward AMA Physician's Recognition Award. November 2004.
- Clinical Tools Online Health Education: Teens and Tobacco: A Case. 1.0 credits toward AMA Physician's Recognition Award. November 2004.
- Clinical Tools Online Health Education: Women and Tobacco: Counseling. 1.0 credits toward AMA Physician's Recognition Award. November 2004.
- Clinical Tools Online Health Education: Women and Tobacco: Background. 1.0 credits toward AMA Physician's Recognition Award. November 2004.
- Clinical Tools Online Health Education: Julie: Pregnancy and Smoking. 1.0 credits toward AMA Physician's Recognition Award. November 2004.
- Clinical Tools Online Health Education: Monique: General Health Effects. 1.0 credits toward AMA Physician's Recognition Award. November 2004.
- Clinical Tools Online Health Education: Community Advocacy Against Tobacco Use. 1.0 credits toward AMA Physician's Recognition Award. November 2004.
- Clinical Tools Online Health Education: Tobacco and Youth: Treatment Issues. 1.0 credits toward AMA Physician's Recognition Award. November 2004.

- Clinical Tools Online Health Education: Tobacco and Youth: Health Effects. 1.0 credits toward AMA Physician's Recognition Award. November 2004.
- Clinical Tools Online Health Education: Youth and Tobacco: Epidemiology and Marketing. 1.0 credits toward AMA Physician's Recognition Award. November 2004.
- Clinical Tools Online Health Education: Women and Tobacco: Reproductive Effects. 1.0 credits toward AMA Physician's Recognition Award. November 2004.
- Clinical Tools Online Health Education: Understanding Therapeutic Interventions for Patients With Suicidality. 1.0 credits toward AMA Physician's Recognition Award. November 2004.
- ASAM Board Exam, Washington, D.C, 18 CME Credits. November 19–21 2004.
- ASAM Board Exam, Atlanta, GA: Certification / Recertification Exam. 5 CME Credits. December 4 2004.
- Spine Arthroplasty, Bradford B. Mullins, M.D., Columbus, Ohio. The Center for Spine Athroplasty. January 13, 2005, Cincinnati, Ohio.
- Design CHARITE' TDR, John Miles, M.D., Columbus, Missouri. The Center for Spine Athroplasty. January 13, 2005, Cincinnati, Ohio.
- CHARITE' Biomechanical Studies, Matt Parsons, R&D Group. The Center for Spine Athroplasty. January 13, 2005, Cincinnati, Ohio.
- CHARITE' Coding, John Argiro. The Center for Spine Athroplasty. January 13, 2005, Cincinnati, Ohio.
- CHARITE' Indications & Contraindications, John Miles, M.D., Columbus, Missouri. The Center for Spine Athroplasty. January 13, 2005, Cincinnati, Ohio.
- Anterior Approach Access for CHARITE' TDR, Leon Josephs, M.D., General/Vascular Surgeon. The Center for Spine Athroplasty. January 13, 2005, Cincinnati, Ohio.
- CHARITE' USA IDE Study, Bradford B. Mullin, M.D. The Center for Spine Athroplasty. January 13, 2005, Cincinnati, Ohio.
- Complications: Avoidance and Treatment, John Miles, M.D., Doubletree Hotel. January 13, 2005, Cincinnati, Ohio.
- Case Review for Artificial Disc, Doubletree Hotel. Bradford B. Mullin, M.D. January 13, 2005, Cincinnati, Ohio.
- Hands-On Spine Artificial Disc Lab, Greg Rhinehart. The Center for Spine Athroplasty. January 14, 2005, Cincinnati, Ohio.
- Post-Operative Artificial Disc Care, Bradford B. Mullin, M.D. The Center for Spine Athroplasty. January 14, 2005, Cincinnati, Ohio.
- Resource Review, Greg Rhinehart. The Center for Spine Athroplasty. January 14, 2005, Cincinnati, Ohio.

- Current Issues and Complexities in Spine Coding: Kimberly Pollack, RN, MBA;
 Sam Hassenbush, MD, PhD, Houston, Texas; Robert Johnson, MD, FACS,
 Southfield, Missouri; and Greg Prezybylski, MD, Edison, New Jersey. April 16,
 2005, 8 a.m. thru 12 p.m., New Orleans.
- Artificial Cervical Disc Technology: Robert J. Hacker, MD; Eugene Morgan; Rick Dellamarter, MD, Santa Monica, California; Regis Hayd, MD, Atlanta, Georgia; Steven Papadopoulous, Phoenix, Arizona; and Vincent Tray Melis, MD, Iowa City, Iowa. April 16, 2005, 1 p.m. thru 5 p.m., New Orleans.
- Modern Techniques and Future Trends in Lumbar Inner Body Fusion: Robert Heare, MD, Newark, New Jersey; Eric Woodard, MD, Boston, Massachusetts; Joe Alexander, MD, Winston-Salem, North Carolina; Michael Groff, MD, Indianapolis, Indiana; James Harrop, MD, Philadelphia, Pennsylvania; Key Kim, MD, Sacramento, California; Charles Kuntz, MD, Cincinnati, Ohio; and Richard Schlenk, MD, Cleveland, Ohio. April 17, 2005 8 a.m. thru 12 p.m., New Orleans.
- Moving Our Practice Into the Digital Age, How Fast, How Much, How Expensive: Paul Camarata, MD, Kansas City, Missouri; Paul Houle, MD, Inis, Massachusetts; Mike Cowan, MD, Rock Hill, South Carolina; and Harold Pikus, MD, Asheville, North Carolina. April 17, 2005 1 p.m. thru 5 p.m., New Orleans.
- Update on Psychosurgery: Alim Benabid, MD, PhD, Grenoble, France; Aviva Abosch, MD, PhD, Atlanta, Georgia; Ally Rezai, MD, Cleveland, Ohio; and Ron Young, MD, Semi Valley, California. April 18, 2005. New Orleans.
- 2005 American Association of Neurological Surgeons Annual Meeting and Scientific Sessions: April 16 thru April 21, 2005. New Orleans Conference Center.
- Advanced Cardiac Life Support (ACLS) Certification and Course. Advanced Cardiac Life Support Provider Certification, Lexington, Kentucky May 21, 2005 by Frankfort Fire & Emergency Medical Services, Barbara Santer, RN, BSN, CEU. Course and Certification held at Spine and Brain Neurosurgical Center.
- Treatment of Insomnia by Charles I. Shelton, D.O. with Lexington Psychiatric Group, PSC. June 3, 2005. Lexington, KY
- Congress of Neurological Surgeons, Boston, Massachusetts, October 8, 2005 through October 13, 2005, General and Scientific Program for the Congress of Neurological Surgeons.
- John Hopkins School of Medicine, Neuroradiology review course, 24 hours of ACCME accredited hours. September 2005
- New York University post-graduate school of medicine, Neuroradiology and Radiology review course, CT, MRI, head-to-toe, 48 hours of ACCME accredited hours.
- Southern Pain Society and Kentucky Pain Society Annual Scientific Meeting, Lexington, KY, October 14, 15, and 16, 2005 at the Hyatt in Lexington, KY.

- Medicare Part B "Documentation of Evaluation and Management Services Seminars", Lexington, KY, December 7, 2005 at the St. Joseph Healthcare Keeneland Health Education Center Auditorium.
- X-Stop Course, Chicago, IL, February 8, 2006. Spine Orthopedic Center, A New FDA Approved Procedure for Spinal Stenosis.
- Clinical review of Nerve Conduction Studies, Clinical Applications, Analyzing results and case study review presented by: Tom Megerian, MD,PHD,FAAP, Board Certified Neurologist, Clinical Instructor Harvard Medical School, Lexington, Kentucky, January 20, 2006
- Certificate of Training NeuroMetrix, NeuroMetrix, Inc. 62 Fourth Avenue, Walthan, MA 02451, 2006
- PHYSICIANS RECOGNITION AWARD WITH COMMENDATION, in continuing Medical Education. Valid 11-01-2006 thru 11-01-2009. American Medical Association.
- Multi-modality neural integrity monitor (NIM-SPINETM), hands on training of Spine and Brain Neurosurgical Center, Neurosurgeons and staff, October, November, December 2006 by Medtronic's and Derrick E. Bates/ Marty Moore. Free running and triggered EMG & MEP with application, set up, interpretation & coding.
- Patient Care Documentation Seminar, November 13, 2006, Lexington, KY, The Center for Personalized Education for Physicians (CPEP)
- Muscle Spasms, Spasticity, Diagnosis and Treatment, December 1, 2006, Lexington, KY, Cary Twyman, MD
- Spine and Brain Neurosurgical Center, Physician Medical Staff Meeting. (8 full time doctors and 5 part time) Lexington, KY, 12/01/2006
- Spine and Brain Neurosurgical Center Compliance Meeting, OSHA, Coding, Compliance, Policy's and Procedures Protocols, HIPPA, 2007 CPT/ICD9 changes, 12/22/06, Lexington, KY
- Spine and Brain Neurosurgical Center Compliance Meeting, OSHA, Coding, Compliance, Policy's and Procedures Protocols, HIPPA, 2008 CPT/ICD9 changes, 12/21/07, Lexington, KY
- Research and New Neuroscience drugs, Acordia Theraputics, Ron Cohen, M.D., CEO of Acorda Theraputics, 03/26/08 Lexington, KY
- 45.5 AMA/PRA category 1 Creditors 09/26/07. Johns Hopkins' Neuroradiology Review Course presented by John Hopkins Medicine Continuing Medical Education, 720 Rutland Avenue, Turner 20, Baltimore, Maryland 21205
- 40 CME category 1 hours 09/17/07, 09/18/07, 09/19/07, 09/20/07 General Scientific Section, Congress of Neurological Surgeons, special courses and sections sessions, Annual Congress of Neurological Surgeons Meeting, San Diego, California in 2007. 40 total CME hours.

- Hands-on minimal spine training course by DePuy Spine, Johnson and Johnson, Rupp & Associates, 9/13/07, room #6 at Good Samaritan UK Healthcare Hospital and Jonathan's at Gratz Park Inn, Dr. Gilbert, Dr. Wheeler and Dr. Spitalieri, and surgical assistants, and meeting conducted by Kris Taleghani, M.D. from Nashville, Tennessee. Interactive presentation on minimally invasive spine surgery and minimally invasive spine surgery techniques and products, and hands-on laboratory utilizing VIPER trademark, and other minimally invasive access ports and other products. Rupp & Associates 361 Duke Road Suite B, Lexington, Kentucky 40502.
- Coding changes for 2008 Debra Mills and Shanon Fergus, CHM Inc. Coding changes for Neurosurgery, Pain Management, Pain Medicine, Addiction Medicine, Psychiatry, Neurology and Neuroscience specialties and review 12/21/07 compliance meeting.
- Compliance review John Clontz, J.D., Physician Services. Compliance meeting in 12/07, Lexington, Kentucky Spine & Brain Neurosurgical Center for physicians, medical staff, administrations, technologists, all employees & associates.
- Comprehensive Medical Review Officer Training Course, Friday 11/20/07 through Sunday 12/02/07, Chicago, Illinois 18 hours of category 1 CME credit. American Society of Addiction Medicine, MRO training course, Western O'Hare Hotel, Rosemont, Illinois 60018. Faculty James Ferguson, D.O., Chief Medical Review Officer, Verifications Inc. Chairman, ASAM Medical Review Officer Council, Joe Autry, M.D., senior medical advisor in interagency coordination office of the deputy for Health and Human Policy Coordination, Washington, DC, Donna Bush Ph.D., chief drug testing section, division of workplace programs, Substance Abuse and Mental Health Services (SAMHSA), H. Westley Clard, M.D. J.D. MPH. FASAM Director, Center for Substance Abuse Treatment (CSAT), Substance Abuse Mental Health Services (SAMHSA). George Ellis, senior policy advisor, Office of Drug and Alcohol Policy Compliance U.S. Department of Transportation, Washington, DC, and Barbara Johnson Esq., Paul Hasting, LLP, Washington DC, and other staff.
- April 2007 Certification and Identification as Algiatrist by the American Academy of Pain Medicine and American Board of Pain Medicine, Todd Sitzman, M.D. American Academy of Pain Medicine and Ken Follett, M.D. Ph.D., American Board of Pain Medicine, certification and notification.
- Medical Review Officer Certification Council Comprehensive Exam and verification of certification for John W. Gilbert, M.D., certification #0707469 as a certified medical review officer through the Medical Review Officer Certification Council valid for a six year period. MROCC certification exam is based upon the federal requirements developed by the Department of Health and Human Services

for Federal Drug Testing Programs and fulfills the requirement for certification of medical review officer as established by the Department of Transportation and procedures for transportation, workplace, drug and alcohol testing, Programs 49 CFP part 40 of the Federal Register. MROCC examination date 12/02/07, Chicago, Illinois.

- American Association of Neurological Surgeon, AANS, General Scientific Sessions and Weekend Practical Courses at American Association of Neurological Surgeons, Chicago, 111. April 26-May 1, 2008, Annual Meeting.
- Joyce Bruce and David Gazale, RN/JD, Darby and Gazale PSC, Seminar, May 8, 2008, Louisville, KY
- Axial Lumbar Interbody Fusion, Live Surgical Webcast, Piano Presbyterian Center for Diagnostics and Surgery, Dr. Bradley Live AxiaLIFTM 360° Case, Lexington, KY, May 14,2008
- 76th Annual Meeting of the American Association of Neurological Surgeons (AANS), Chicago, IL April 26, 2008 to May 01, 2008, awarded 38.25 category 1 credits toward the AMA Physician Recognition Award.
- Medical Resources Neuroimaging Fellowship, August 2–3, 2008, Orlando, Florida, Jack Greenburg, MD and Bret Lindsay, MD. Sponsorship of the American Society of Neuroimaging, classes included, Physics, Stroke, Venous Disease, Vascular Anomalies, Hemorrhage, Tumors, Interesting cases. Basal Ganglia, Infectious disease, Degenerative Spine Disease, Demyelinating Disease, Non-Degenerative Spine, Congenital Disease, 14 AMA PRA Category 1 credits
- AxiaLifTM 360-degree live surgical case Dr. Tobler, Christ Hospital, Auburn Avenue, Cincinnati, Ohio on August 18, 2008 to level at L4-S1 Anterior Interbody Arthrodesis with Intraoperative Fluoro and Discography and Posterior Arthrodesis utilizing AxiaLifTM Technology and other instrumentation and presentation of previous cases and CT Scans and MRI scans and discussion.
- AANS Prac Clinic: current and future trends in lumbar Interbody fusion Chicago IL. Catagoryl, 4 credits, 04/26/08.
- AANS Prac. Clinic: Minimal Access Management of Spinal Disease, Chicago, IL, Category 1, four credits, 04/26/2008.
- AANS Prac. Clinic: 3-D Anatomy and Approaches to Posterior Fossa and Posterior Skull Base, Chicago, IL, Category 1, four credits, 4/27/2008.
- AANS Prac. Clinic: Thoracic and Lumbar Stablization and Fusion, Chicago, IL, Category 1, four credits, 4/27/2008.
- AANS Breakfast Seminar: Cerebral Neuromonitoring, Chicago, IL, Category 1, two credits, 4/28/2008.
- AANS Annual Meeting: Plenary Session, Chicago, IL. Category 1, two and half credits, 4/28/2008.

- AANS Annual Meeting: Scientific Session I-Tumor, Chicago, IL, Category 1, one and one quarter credits, 4/28/2008.
- AANS Annual Meeting: Scientific Session II- Spine and Peripheral Nerves, Chicago, IL, Category 1, one and one quarter credits, 4/28/2008.
- AANS Annual Meeting: Plenary Session II, Chicago, IL, Category 1, three and one quarter credits, 4/28/2008.
- AANS Annual Meeting: CNS Section on Neurotrauma, Chicago, IL, Category 1, two and three quarter credits, 4/29/2008.
- AANS Annual Meeting: Plenary Session III, Chicago, IL, Category 1, three and one quarter credits, 4/28/2008.
- AANS Annual Meeting: CNS Section on Pain, Chicago, IL, Category 1, two and three quarter credits, 4/30/2008.
- AANS
- AANS Annual Meeting: Socioeconomic Session, Chicago, IL, Category 1, one and three quarter credits, 5/1/2008.
- AANS Annual Meeting: Special Scientific Meeting, Chicago, IL, Category 1, four and one half credits, 5/1/2008.
- ASN Neuroimaging Weekend Fellowship, Medical Resources, Inc, Orlando, FL, 14 AMA PRA Category 1 credits, 8/2/2008-8/3/2008.
- Vertebroplasty and Kyphoplasty Online, Category 1,15 credits, 9/29/2008.
- CI Lateral Mass Screw Placement Online, Category 1, one credit, 9/30/2008.
- Neurosurgical Operative Atlas-Neuro-Oncology Online, Category 1, 15 credits, 10/7/2008.
- AANS SNS Online Session: EMG/Nerve Conduction Studies: Use and Interpretation, Category 1, 10/7/2008.
- AANS Online Session: Minimally Invasive Microendoscopic Decompressive Laminotomy for Lumbar Stenosis, Category 1, one credit, 10/13/2008.
- AANS Online Session: Minimally Invasive Spine Surgery: Lumbar Decompressive Techniques, Category 1, one credit, 10/13/2008.
- AANS Online Session: Oserior Dynamic Stablization of the Thoracolumbar Spine, Category 1, one credit, 10/13/2008.
- AANS Online Session: Posterior Dynamic Stabilization of the Thoracolumbar Spine, Category 1, one credit, 1013/2008.
- AANS Online Session: Occipitocervical Fusion Techniques, Category I, one credit, 10/13/2008.
- AANS Online Session: Minimally Invasive Posterior Cervical Discectomy and Foraminotomy, Category 1, once credit, 10/14/2008.
- AANS Online Session: Selecting Patients for Endoscopic Third Ventriculostomy (ETV), Category 1, one credit, 10/14/2008.

- AANS SNS Online Learning Modules: Evaluation of the patient with Spinal Trauma, Category 1, one half credit, 10/16/2008.
- AANS SNS Online Learning Modules: Basics of MR and MR Angiography, Category 1, one half credit, 10/21/2008.
- AANS SNS Online Learning Modules: Modules: Evaluation of Shunt Malfunction, Category 1, one half credit, 10/21/2008.
- Pain Management in Kentucky, The University of Louisville, Category 1, six credits, 11/15/2008.
- American Board of Pain Medicine Recertification Exam, March 7, 2009.
- American Board of Pain Medicine Diplomate, March 7, 2009–March 7, 2022.
- American Board of Addiction Medicine Recertification, March 12, 2009.
- American Board of Addiction Medicine Diplomate, March 12, 2009– December 31, 2014.
- Neurosciences Compliance Conferences: Compliance: Neurosciences Compliance Conference Neurological History Exam, Diagnosis, Treatment Plans, Spine and Brain Neurosurgical Center, December 2009.
- Neurosciences Compliance Conference Neurological History Exam, Diagnosis, Treatment Plans, Spine and Brain Neurosurgical Center, December 2010.
- American Medical Association, Published Articles during dates of 2009 through 2011, AMA PRA Category 1, credits: 190, October 5, 2011. Continuing Medical Education (CMS) Award 190 credits.
- Neuro MRI Updates and Review Course, Mount Sinai Neuroradiology, 12 AMA PRA Category 1 credits, 11/16/2011.
- Consultant, Neurological Surgery, Select Specialty Hospital, 310 South Limestone Street, 3rd Floor, Lexington, KY reappointment from 6/30/12 through 6/30/14.
- North American Neuromodulation Society 16th Annual Meeting, conducted on December 6–9, 2012 in Las Vegas, Nevada and is awarded 4.5 AMA PRA Category 1 Credits
- North American Modulation Society, December 7–9, 2012, Las Vegas, NV High frequency spinal cord stimulation therapy and failed back surgery syndrome, wireless remote powered stimulator for expanded trial screening, efficacy, comparison pilot study, comparison with stimulated triggered EMG and SSEP collision testing for assessment of spinal cord stimulation, lateralization under general anesthesia, outcome comparison of three distinct paddle electrode configurations of thoracic spinal cord stimulators for chronic neuropathic pain, high frequency spinal cord stimulation of double-blind placebo-controlled trial, under utilization of spinal cord stimulation in patients with failed back syndrome, effects of spinal cord stimulation on the dorsal root ganglion in the treatment of

chronic intractable pain, long term research from two prospective clinic trials, efficacy of cervical spinal cord stimulation for chronic pain, spinal cord stimulation for treatment of chronic neuropathic pain, three systems compared during a two-year followup, spinal cord stimulation program algorithm incorporates lead separation for consistent neural activation when steering current along the spinal cord, a computational modeling study, position-adaptive stimulation improved pain relief results of the restored sensor study, spinal cord electrical stimulation per visceral hypersensitivity in rats in functional dyspepsia, compounding pharmacies beyond the meningitis quandary, spinal cord stimulation in 2020, how important is paresthesia mapping and lead positioning, high frequency stimulation European experience, dorsal root ganglion stimulation replace spinal cord stimulation, costs of neurostimulation can we afford the therapy in 2020.

American Board of Addiction Medicine Maintenance of Certification Exams passed all four Maintenance of Certification (MOC) Exams, December 2012.

Advanced Cardiac Life Support Course (ACLS) and Certification, December 20, 2012 through December 20, 2014 by William Clark, instructor; instructor ID # 2112285876.

- 1/21/2013–1/25/2013–Neuroradiology Update: Perm. Medicine, 19 AMA PRA credits.
- University of Pennsylvania Perelman School of Medicine CME— AMA PRA
 Category 1 credit certificate Winter Imaging Update: Neuro, Head and Neck at
 the Ritz-Carlton, Cancun Mexico, January 21, 2013-January 25, 2013 and is
 awarded 20 AMA PRA Category 1 Credit(s).
- American Society of Neuroimaging, 36th Annual Meeting of the American Society of Neuroimaging held January 17-20, 2013, at Caesars Palace in Las Vegas, NV The American Society of Neuroimaging is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

History of the ASN - 1 credit

Symposium: Large Scale Probablistic Human Brain Atlases: Basic Science & Clinical Applications – 1 credit

Breakfast Seminar: Perfusion Imaging – 1.5 credits

Breafast Seminar: Neurovascular Interventions for Cerebrovascular Emergencies: See it and Fix it -1.5 credits

Current Topics in MR and CT Imaging (Part I) – 7.5 credits

Keynote Speaker: MRI-guided Focused Ultrasound: a new Technology for clinical neurosciences – 1.25 credits

Symposium: Imaging Presymptomatic Alzheimer Disease and other Cognitive Disorders – 1.5 credits

Symposium: Intracranial Artherosclerosis: Advances in Diagnosis and Management – 1.5 credits

Neuroimaging Jeopardy – 1.5 credits

MR and CT Hands-On Workshop – 3 credits

Breakfast Seminar: MRI and Ultrasound Imaging of the Peripheral Nervous System – 1.5 credits

Breakfast Seminar: Pediatric Neuroimaging: Focus on Pediatric and Congenital Spinal Abnormalities -1.5 credits

Current Topics in MR and CT Imaging (Part II) – 3.75 credits

Current Topics in Neurosonology (Part II) – 3.75 credits

Neuroimaging Self-Assessment Examination – 1.5 credits

Breakfast Seminar: The Neonatal Brain in the 21st Century: MRI and Ultrasound – 1.5 credits

Breakfast Seminar: Applied Principles of Ultrasound Physics and Fluid Dynamics – 1.5 credits

MRI Physics and Artifacts – 1.5 credits

CME actual hours attended 27.25

- American Board of Addiction Medicine (ABAM)-Completed the 2012 Maintenance of Certification Program
- ABAM Diplomate, Active/Participating in Maintenance of Certification Program 4601 North Park Avenue, Upper Arccade, Suite 101, Chevy Chase, MD 20815-4520
- 1/17/2013–1/20/2013–Americal Society of Neuroimaging Annual Meeting, 24.25 AMA PRA Cat.1 credits
- 3/6/2013–Kentucky Pain Care Doctors Meeting and Continuing Medical Education (urine drug metabolites).
- Lexington Medical Society Elected to active membership 14 May 2013, Lexington, KY
- 9/16/2013–9/17/2013–Kentucky Pain Care Doctors Meeting and Continuing Medical Education (autonomic nervous system testing and pain, headaches, urine drug testing).
- 11/2/2013–Mobic–C the first cervical disc FDA approved for one and two level indications. Spinal Education Research Center (SERC) Training, 7075 Veterans Blvd. Burr Ridge, IL 60527.
- 11/16/2013–Medical Review Officer Maintenance of Certification MRO Manual Review completed (18 CME) and Completion of Certification exam (18 Category 1 CME) Certification number 13–10269, expiration date 11/17/2018. Serves as verification as a Certified Medical Review Officer (MRO) through the Medical Review Officer Certification Council (MROCC).

- 12/2/2013–Maintainence of Certification, American Board of Addiction Medicine, I.D. 610421.
- 12/4/2013–Vanderbilt Healthline Pain Management, Parts 1–3.
- Continuing Education Award in Neurosurgery Dec 31, 2013 (60 Neurosurgery Credit Hours)
- AMA Published Articles 192.25 AMA PRA category 1 credits 2014
- NYU School of Medicine Head to Toe Imaging (42.5 Credits) 2006
- Upenn Neuroimaging (20 AMA PRA Credits) 2013, ASN Neuroimaging (27.25 Credits) 2013, ASN Fellowship 14 credits 2008, Neuro MRI updates (12 credits) 2011, ASN (27 credits) 2003, ASN (26.5) 2008
- John S Hopkins University School of Medicine Certificate of Attendance Neuroradiology Review (24 credits) 2005, (24 credits) 2002, (45.5 credits) 2007
- Healthcare Compliance Solutions Inc, 2014 HIPAA (Security/Privacy/Yearly Retraining), H/R, Medicare & OSHA (Employee & Management Training/updates/yearly Retraining) & Compliance
- FREE & Online: ASAM Med-Sci 2014 Component Session 11 integration of Addiction Medicine into Primary Care: New Approaches and Opportunities; AMA PRA Category 1 CreditTM; 1.00; Credits
- FREE & Online: ASAM Med-Sci 2014 Component 03 Quality Improvement: Improving Patient Care with Standards, Performance Measures and Guidelines; *AMA PRA* Category 1 CreditTM; 1.00; Credits
- FREE & Online: ASAM Med-Sci 2014 Workshop 07 Lifelong Learning: Review of Articles for ABAM MOC Part 2; AMA PRA Category 1 CreditTM; 2.00; Credits
- FREE Online: Pain and Addiction: Common Threads XIV 2013; AMA PRA Category 1 CreditTM; 4.00; Credits
- FREE & Online: Naloxone for Opioid Safety: A Tool In California for Saving Lives; *AMA PRA* Category 1 CreditTM; 1.00; Credits
- FREE & Online: ASAM Med-Sci 2014 Component Session 4 Faculty Presenters – Creative Ways to Engage Learners, Cover Objectives and Expand Beyond a Didactic Slide Presentation; AMA PRA Category 1 CreditTM; 1.00; Credits
- FREE & Online: ASAM Med-Sci 2014 Workshop 05 A Multidisciplinary Approach for Opioid Dependent Mothers and Their Infants; *AMA PRA* Category 1 CreditTM; 2.00; Credits
- SAM12: Brief Screening for Adolescent Nonmedical Users of Prescription Opioids; American Society of Addiction Medicine; *AMA PRA* Category 1 CreditTM; 1.00; Credits
- SAM16: Effectiveness of Early Interventions for Substance Using Adolescents; American Society of Addiction Medicine; *AMA PRA* Category 1 CreditTM; 1.00; Credits
- SAM15: Use of N-Acetylcysteine in Cannabis-Dependent Adolescents; American Society of Addiction Medicine; *AMA PRA* Category 1 CreditTM; 1.00; Credits

- SAM03. Persistent Cannabis Users Show Neuropsychological Decline from Childhood to Midlife; American Board of Addiction Medicine; *AMA PRA* Category 1 CreditTM; 1.00; Credits
- FREE & Online: Alcohol, Other Drugs, and Health: Current Evidence: May–June 2013 edition; *AMA PRA* Category 1 CreditTM; 1.50; Credits
- FREE & Online: Alcohol, Other Drugs, and Health: Current Evidence: Sept—Oct 2013 edition; *AMA PRA* Category 1 CreditTM; 1.50; Credits
- FREE & Online: Alcohol, Other Drugs, and Health: Current Evidence: Nov–Dec 2013 edition; *AMA PRA* Category 1 CreditTM; 1.50; Credits
- FREE & Online: Alcohol, Other Drugs, and Health: Current Evidence: Jan–Feb 2014 edition; *AMA PRA* Category 1 CreditTM; 1.50; Credits
- FREE & Online: Alcohol, Other Drugs, and Health: Current Evidence: Mar–Apr 2014 edition; *AMA PRA* Category 1 CreditTM; 1.50; Credits
- FREE & Online: Alcohol, Other Drugs, and Health: Current Evidence: May–June 2014 edition; *AMA PRA* Category 1 CreditTM; 1.50; Credits
- FREE & Online: Alcohol, Other Drugs, and Health: Current Evidence: July–August 2014 edition; *AMA PRA* Category 1 CreditTM; 1.50; Credits
- SAM14: High-Dose Baclofen: A Retrospective Study Among High-Risk Drinkers; American Society of Addiction Medicine; *AMA PRA* Category 1 CreditTM; 1.00; Credits
- SAM19: Concurrent Naltrexone and Prolonged Exposure Therapy for Patients with Comorbid Alcohol Dependence and PTSD; American Society of Addiction Medicine; *AMA PRA* Category 1 CreditTM; 1.00; Credits
- SAM23: Immediate Antecedents of Marijuana Use: An Analysis from Ecological Momentary Assessment; American Society of Addiction Medicine; AMA PRA Category 1 CreditTM; 1.00; Credits
- SAM24: The Use and Perception of Electronic Cigarettes and Snus Among the U.S. Population; American Society of Addiction Medicine; *AMA PRA* Category 1 CreditTM; 1.00; Credits
- SAM09: Opioids Overdose Education and Nasal Naloxone Distribution (OEND);
 American Society of Addiction Medicine; AMA PRA Category 1 CreditTM; 1.00;
 Credits
- SAM07: Opiate Substitution Treatment and HIV Transmission in People Who Inject Drugs; American Society of Addiction Medicine; *AMA PRA* Category 1 CreditTM; 1.00; Credits
- SAM18: Chronic Care Management of Dependence (AHEAD Trial); American Society of Addiction Medicine; *AMA PRA* Category 1 CreditTM; 1.00; Credits
- SAM08: Association Between Opioid Prescribing Patterns And Opioid Overdose-Related Deaths; American Society of Addiction Medicine; *AMA PRA* Category 1 CreditTM; 1.00; Credits
- 2014 Kentucky Update for Physicians; INFORMED; AMA PRA Category 1 CreditsTM; 6.00;
- ABAM's MOC Part-II Program; ASAM American Society of Addiction Medicine; *AMA PRA* Category 1 CreditsTM; 4.00;
- Nov 17 2014 American Board of Addition Medicine MOC Board Exam

• AMA Award PRA Category 1, Certificate of CME 40 hours (March 2011 through October 2011) Certificate issued: April 4, 2016 for published articles