

CURRICULUM VITAE

The Johns Hopkins University School of Medicine

Robert David Stevens, M.D.

DEMOGRAPHIC AND PERSONAL INFORMATION

Current Appointments

University Appointments

Associate Professor, Department of Anesthesiology and Critical Care Medicine,
Johns Hopkins University School of Medicine

Associate Professor, Department of Neurological Surgery, Johns Hopkins
University School of Medicine

Associate Professor, Department of Neurology, Johns Hopkins University School
of Medicine

Associate Professor, Department of Radiology, Johns Hopkins University School
of Medicine

Hospital Appointments

Attending Physician, Neurosciences Critical Care Unit, Johns Hopkins Hospital

Attending Physician, Neurosciences Critical Care Unit, Johns Hopkins Bayview
Medical Center

Attending Physician, Surgical Intensive Care Units, Johns Hopkins Hospital

Attending Physician, Anesthesiology, Johns Hopkins Hospital

Attending Physician, F.M. Kirby Research Center, Kennedy Krieger Institute

Personal Data

Division of Neurosciences Critical Care
Johns Hopkins Hospital
Meyer 8-140
600 North Wolfe Street
Baltimore, MD 21287
Business phone: (410) 955 7481

Business fax: (410) 614 7903

E-mail: rstevens@jhmi.edu

EDUCATION AND TRAINING

Doctoral/graduate

1992, Federal Diploma of Medicine, The Geneva University Faculty of Medicine, Geneva, Switzerland; discipline: Medicine

2000, Doctoral dissertation, The Geneva University Faculty of Medicine, Geneva, Switzerland; discipline: Medicine

Post-doctoral

1994-1995, Internship, Centre Hospitalier Universitaire Vaudois, Lausanne, Switzerland; discipline: Surgery

1995-1999, Residency, Hôpitaux Universitaires de Genève, Department of Anesthesiology, Pharmacology, Surgical Intensive Care; discipline: Anesthesiology

1999-2000, Fellowship, Hôpitaux Universitaires de Genève, Department of Anesthesiology, Pharmacology, Surgical Intensive Care; discipline: Critical Care Medicine

2001-2002, Fellowship, Johns Hopkins University School of Medicine, Department of Anesthesiology and Critical Care Medicine, Neurology and Neurosurgery; discipline: Neurological Critical Care Medicine

2001-2002, Fellowship, Johns Hopkins University School of Medicine, Department of Anesthesiology and Critical Care Medicine and Surgery; discipline: Adult Critical Care Medicine

PROFESSIONAL EXPERIENCE

January 2000 – December 2000, Attending Physician, Department of Anesthesiology, Pharmacology, Surgical Intensive Care, Geneva University Hospitals, Geneva, Switzerland,

January 2003 – present, Assistant Professor, Department of Anesthesiology and Critical Care Medicine, Johns Hopkins University School of Medicine

July 2004 – present, Assistant Professor, Department of Neurological Surgery, Johns Hopkins University School of Medicine

July 2004 – present, Assistant Professor, Department of Neurology, Johns Hopkins University School of Medicine,

January 2003 – present, Attending Physician, Neurosciences Critical Care Unit, Johns Hopkins Hospital

January 2003 – present, Attending Physician, Neurosciences Critical Care Unit, Johns Hopkins Bayview Medical Center

January 2003 – present, Attending Physician, Anesthesiology, Johns Hopkins Hospital

January 2006 – present, Attending Physician, Surgical Intensive Care Units, Johns Hopkins Hospital

July 2006 – present, Attending Physician, F.M. Kirby Research Center, Kennedy Krieger Institute, Baltimore

RESEARCH ACTIVITIES

Peer-reviewed original research

1. **Stevens R**, Gersbach P, Ruchat P, Hurni M, Stumpe F, Fischer A, Sadeghi H. Cardiac Surgery in Octogenarians. *Schweiz Med Wochenschr* 1995;125:2084-91
2. Gersbach P, Hasdemir MG, **Stevens RD**, Nachbur B, Mahler F. Discriminative microcirculatory screening of patients with refractory limb ischemia for dorsal column stimulation. *Eur J Vasc Endovasc Surg* 1997; 13:464-71
3. **Stevens RD**, Van Gessel E, Flory N, Fournier R, Gamulin Z. Lumbar plexus block reduces pain and blood loss associated with total hip arthroplasty. *Anesthesiology* 2000; 93:115-21
4. **Stevens RD**, Burri H, Tramer M. Pharmacologic strategies for perioperative myocardial protection. A quantitative systematic review. *Anesth Analg* 2003;97:623-633
5. Koenig MA, Puttgen HA, Prabhakaran V, Reich D, **Stevens RD**. B-type natriuretic peptide as a marker for heart failure in patients with acute cerebrovascular disease. *Intensive Care Med* 2007;33:1587-93
6. Gottschalk A, Berkow LC, **Stevens RD**, Mirski MA, Erdek M, Thompson RE, White ED, Weingart JD, Long DM, Yaster M. Prospective evaluation of pain and analgesic use following major elective intracranial surgery. *J Neurosurg* 2007; 106:210–216

7. **Stevens RD**, Dowdy DW, Michaels RK, Mendez-Tellez PA, Pronovost PJ, Needham DM. Neuromuscular Dysfunction Acquired in Critical Illness. A Systematic Review. *Intensive Care Med* 2007;33:1876-91
8. Koenig MA, Bryan M, Mirski MA, Geocadin RG, **Stevens RD**. Reversal of brain herniation with 23.4% saline. *Neurology* 2008; 70:1023-9.
9. Donahue MJ, **Stevens RD**, de Boorder M, van Zijl PC. Hemodynamic changes after visual stimulation and breath holding provide evidence for an uncoupling of cerebral blood flow and volume from oxygen metabolism. *J Cereb Blood Flow Metab* 2009;29:176-85
10. Donahue MJ, Jan van Laar P, van Zijl PC, **Stevens RD**, Hendrikse J. Vascular space occupancy (VASO) cerebral blood volume-weighted MRI identifies hemodynamic impairment in patients with carotid artery disease. *J Magn Reson Imaging*. 2009;29:718-724.
11. Morad AH, Winters BD, Yaster M, **Stevens RD**, White ED, Thompson RE, Weingart JD, Gottschalk A, Intravenous Patient Controlled Analgesia Safely and Effectively Treats Pain After Supratentorial Intracranial Surgery: A Prospective Randomized Controlled Trial. *J Neurosurg*. 2009;111:343-50
12. **Stevens RD**, Naval NS, Mirski MA, Citerio G, Andrews PA. Critical care in aneurysmal subarachnoid hemorrhage: an international survey. *Intensive Care Med* 2009;35:1556-66
13. Sharshar T, Bastuji-Garin S, **Stevens RD**, Durand M, Malissin I, Rodriguez P, Cerf C, Outin H, De Jonghe B. Presence and severity of ICU-acquired paresis at the time of awakening are associated with increased ICU and hospital mortality. *Critical Care Med* 2009; 37:3047-3053.
14. Sharshar T, Bastuji-Garin S, De Jonghe B, **Stevens RD**, Polito A, Maxime V, Rodriguez P, Cerf, C, Outin H, MD3, Touraine P, MD, Laborde K, Hormonal status and ICU-acquired paresis in critically ill patients. *Intensive Care Med* 2009
15. **Stevens RD**, Damluji A, Prassl S, Sharshar T, Mohammed Z, Foroughi A, Pronovost PJ, Johnson E, Needham DM. Brain dysfunction and mortality of critically ill patients: A systematic review and meta-analysis (in preparation)
16. **Stevens RD**, Abdelhak T, Sharshar T, Chalela JA. MRI Defines structural injury acquired during critical illness (in preparation).
17. **Stevens RD**, Pustavoitau V, Latif A, Sharshar T, Garnelo V, Zaky A, Johnson M, Crain B. Neuropathological evidence of brain injury in critically ill patients (in preparation).

Review articles

1. **Stevens RD**. Neuromuscular disorders and anaesthesia. *Curr Opin Anaesthesiology* 2001;14:693-8
2. **Stevens RD**, Bhardwaj A, Kirsch JR, Mirski MA. Critical care and perioperative management in traumatic spinal cord injury. *J Neurosurg Anesthesiol* 2003;15:215-29
3. **Stevens RD**, Fleisher LA. Strategies in the high risk cardiac patient undergoing noncardiac surgery. *Best Pract Res Clin Anaesthesiol* 2004; 18 549–563
4. **Stevens RD**, Bhardwaj A, Mirski MA. Critical care of traumatic spinal cord injury. *Current Critical Care* 2004;2:1-12
5. Gomes J, **Stevens RD**, Mirski MA, Bhardwaj A. Glucocorticoid therapy in neurologic critical care. *Crit Care Med* 2005;33:1214-1224
6. **Stevens RD**, Bhardwaj A. Approach to the comatose patient. *Crit Care Med* 2006; 34:31-41.
7. Naval N, **Stevens RD**, Mirski MA, Bhardwaj A. Controversies in the management of aneurysmal subarachnoid hemorrhage. *Crit Care Med* 2006; 34:511–524
8. Nguyen TT, **Stevens RD**, Mirski MA. Neuromuscular Blockade in Critically Ill Patients. *Contemp Crit Care* 2006;3:1-10
9. **Stevens RD**, Pronovost PJ. The spectrum of encephalopathy in critical illness. *Semin Neurol* 2006;26:440–451
10. **Stevens RD**, Nyquist PA. Coma, delirium and cognitive dysfunction in critical illness. *Crit Care Clin* 2006;22:787–804
11. Geocadin RG, MD, Koenig MA, **Stevens RD**, Peberdy MA. Intensive care for brain injury after cardiac arrest: therapeutic hypothermia and related neuroprotective strategies. *Crit Care Clin* 2006;22:619-36
12. **Stevens RD**, Nyquist PA. The systemic implications of aneurysmal subarachnoid hemorrhage. *J Neurol Sci* 2007;261:143-156.
13. Pustavoitau A, **Stevens RD**. Mechanisms of neurological failure in critical illness. *Crit Care Clin* 2008;24:1-24
14. **Stevens RD**, Lazaridis C, Chalela J, The role of mechanical ventilation in acute brain injury. *Neurol Clin* 2008;26:543–563
15. Geocadin RG, Koenig MA, **Stevens RD**, Peberdy MA. Management of brain injury after resuscitation from cardiac arrest. *Neurol Clin* 2008;26:487-506
16. **Stevens RD**, Nyquist PA. Types of brain dysfunction in critical illness. *Neurol Clin* 2008; 26:469–486
17. Nyquist PA, **Stevens RD**, Mirski MA. Neurologic injury and mechanical ventilation. *Neurocritical Care* 2008;9:400-8.

18. **Stevens RD**, Pustavoitau A, Chalela JA. Brain imaging in intensive care medicine. *Seminars in Neurology* 2008;28:631-44.
19. Papangelou A, Mirski MA, **Stevens RD**. Pharmacologic management of brain edema. *Curr Treat Options Neurol* 2009;11:64-73
20. **Stevens RD**, Marshall S, Cornblath DC, De Johghe B, Ali N, Needham DM, Sharshar T. A Framework for Diagnosing and Classifying Intensive Care Unit Acquired Weakness. *Critical Care Med* 2009;37[Suppl.]:S299 –S308
21. Iacobone E, Bailly-Salin J, Polito, A, Friedman, D, **Stevens, RD**, Sharshar T. Sepsis-associated encephalopathy and its differential diagnosis. *Critical Care Med* 2009;37[Suppl.]: S331-S336
22. Duckworth J, **Stevens RD**. Imaging brain trauma. *Current Opinion in Critical Care* 2010'16:92–97
23. Pustavoitau A, Bhardwaj A, **Stevens RD**. Neurological complications in the transplant recipient. *J Intens Care Med* 2009 (in press)
24. **Stevens RD**, Kowalski R, Geocadin RG. Prognostic models in acute brain injury. *Crit Care Med* 2009 (in press)

Editorials

1. **Stevens RD**, Bhardwaj A. Evolving paradigms in the management of traumatic brain injury. *Crit Care Med* 2005;33:2415-7
2. **Stevens RD**, Wu C. Strengths and limitations of meta-analysis. *J Cardiothorac Vasc Anesth.* 2007;21:1-2
3. **Stevens RD**, Faculty of 1000 Medicine, 26 Apr 2007
<http://www.f1000medicine.com/article/id/1080854/evaluation>
4. **Stevens RD**, Faculty of 1000 Medicine, 26 Apr 2007
<http://www.f1000medicine.com/article/id/1081871/evaluation>
5. **Stevens RD**, Faculty of 1000 Medicine, 19 Jul 2007
<http://www.f1000medicine.com/article/id/1087911/evaluation>
6. **Stevens RD**, Faculty of 1000 Medicine, 19 Jul 2007
<http://www.f1000medicine.com/article/id/1088502/evaluation>
7. **Stevens RD**, Merritt WT. Rescuing the brain in acute liver failure. *Crit Care Med* 2008;36:2212-3
8. **Stevens RD**, Faculty of 1000 Medicine, 22 May 2008
<http://www.f1000medicine.com/article/id/1108629/evaluation>
9. **Stevens RD**, Faculty of 1000 Medicine, 20 Oct 2008
<http://www.f1000medicine.com/article/id/1123392/evaluation>
10. **Stevens RD**, Bhardwaj A. Erythropoietin and the promise of ischemic multi-organ protection. *Crit Care Med* 2008;36:2446-2447

11. **Stevens RD**, Faculty of 1000 Medicine, 22 Oct 2008
<http://www.f1000medicine.com/article/id/1102104/evaluation>
12. **Stevens RD**, Bhardwaj A. Improving the assessment score in spontaneous intracerebral hemorrhage. *Crit Care Med* 2009;37:1152-3
13. **Stevens RD**, Faculty of 1000 Medicine, 17 Apr 2009
<http://www.f1000medicine.com/article/id/1158869/evaluation>
14. **Stevens RD**, Faculty of 1000 Medicine, 1 Sep 2009
<http://www.f1000medicine.com/article/id/1164366/evaluation>
15. **Stevens RD**, Hart N, Sharshar T, de Jonghe B. Weakness in the ICU – a call for action. *Critical Care* 2009;13:1002
16. Robert Stevens: Faculty of 1000 Medicine, 19 Jan 2010
<http://f1000medicine.com/article/id/1554956/evaluation>

Case Reports

1. Lele A, Mirski MA, **Stevens RD**. Spurious hypoxemia. *Crit Care Med* 2005;33:1854-6

Book chapters

1. **Stevens RD**, Postoperative care. In: Bhardwaj A, Mirski MA, Ulatowski JA (eds). *Handbook of Neurocritical Care*. Totowa, NJ: Humana Press; 2004:91-122
2. **Stevens RD**, Spinal cord injury. In: Bhardwaj A, Mirski MA, Ulatowski JA (eds). *Handbook of Neurocritical Care*. Totowa, NJ: Humana Press; 2004:165-181
3. **Stevens RD**, Mirski M. Should spinal anesthesia be performed in patients with multiple sclerosis? In: Fleischer L (ed). *Evidence-based practice of anesthesia*. Philadelphia, PA: WB Saunders; 2004:170-6
4. Chung D, **Stevens RD**, Timing of surgery after stroke. In: Fleischer L (ed). *Evidence-based practice of anesthesia*. Philadelphia, PA: WB Saunders; 2004:379-388
5. Mirski MA, **Stevens RD** et al. Coma and Intensive Care Neurology. In Rosenberg, RN (ed.). *Atlas of Clinical Neurology*. New York, NY :Springer ; 2009 :
6. **Stevens RD**, Pustavoitau A, Van Zijl PC. The role of imaging in acute brain injury. *Yearbook of Intensive Care and Emergency Medicine* 2009. New York, NY :Springer 2009
7. **Stevens RD**, Pustavoitau A, Sharshar T. Encephalopathy. In: Bhardwaj A, Mirski MA, Ulatowski JA (eds). *Handbook of Neurocritical Care*. Totowa, NJ: Humana Press; 2010 (in press)
- 8.

Books

Stevens RD and Geocadin RG, Guest Editors, Critical Care Clinics 2006: Neurological Critical Care

Stevens RD, Guest Editor, Critical Care Clinics 2008: Neurological Complications in Critical Illness: A focus on mechanisms

Stevens RD and Geocadin RG, Guest Editors, Neurologic Clinics 2008: Critical Care Neurology

Extramural funding

1. Mar 2010 – Feb 2012 “Understanding the biomechanical, biochemical, physiological and functional consequences of explosive blast injury to the human brain – PREVENT Phase II”
BAA 09-31
Defense Advanced Research Projects Agency (DARPA)
Total direct cost: \$1.7 million
Principal Investigator: Robert D Stevens, MD (20%)
Interdisciplinary project using multimodal, ultra-high magnetic field brain MRI to evaluate the structural, neurovascular, and neurometabolic consequences of blast traumatic brain injury in a miniswine model.
2. April 2006 – July 2009 “Quantitation of the BOLD effect in Functional MRI.”
5R01EB004130-08
National Institutes of Health
Total direct cost \$305,223
Principal Investigator: Peter van Zijl, Ph.D.
Role: co-investigator (10%)
Note: This project uses novel fMRI paradigms to assess changes in cerebral metabolism, blood flow, and cerebral blood volume, with the goal of elucidating the relationship between neuronal function and vascular changes in healthy volunteers.
3. July 2006 – July 2007, “The Safety and Efficacy of Intravenous Patient Controlled Analgesia After Intracranial Surgery: A Prospective, Randomized, Controlled Trial.”
Blaustein pain research committee grant, 2006.
Principal Investigator: Robert D Stevens, M.D.
Note: This project is based on our preliminary data indicating that pain is poorly recognized and treated in neurosurgical patients. It led to a randomized controlled trial to assess analgesic regimens in patients who have undergone major intracranial surgery.

Active IRB protocols

1. December 2004 – present, “The Neuropathology of Critical Illness”
JHH IRB protocol no:05-01-06-02RD
Principal investigator: Robert D Stevens
Notes: An evaluation of the prevalence, risk factors, and outcomes of histologically defined brain injury in a sample of patients with critical illness

EDUCATIONAL ACTIVITIES**Teaching****Classroom instruction**

October 2003, “Perioperative management of aneurysmal subarachnoid hemorrhage”. Lecturer. Anesthesiology resident lecture, Department of Anesthesiology and Critical Care Medicine, Johns Hopkins Hospital

December 2003, “Perioperative management of endocrine disorders”. Lecturer. Anesthesiology resident lecture, Department of Anesthesiology and Critical Care Medicine, Johns Hopkins Hospital

April 2004, “Anesthetic implications of respiratory dysfunction.” Lecturer. Anesthesiology resident lecture, Department of Anesthesiology and Critical Care Medicine, Johns Hopkins Hospital

September 2004, “Aneurysmal subarachnoid hemorrhage.” Lecturer. Anesthesiology resident lecture, Department of Anesthesiology and Critical Care Medicine, Johns Hopkins Hospital

January 2003 – present. Teaching sessions for residents and fellows. Lecturer. Neurosciences Critical Care Unit and Surgical Intensive Care Unit, Johns Hopkins Hospital and Johns Hopkins Bayview Medical Center

January 2003 – present. Teaching sessions for medical students. Lecturer. Department of Anesthesiology and Critical Care Medicine, Johns Hopkins Hospital

Clinical instruction

January 2003-present. Bedside teaching. Lecturer. Neurosciences Critical Care Unit, Department of Anesthesiology Critical Care Medicine, Johns Hopkins Hospital and Johns Hopkins Bayview Medical Center

January 2006-present. Bedside teaching, Lecturer. Surgical Intensive Care Units, Department of Anesthesiology Critical Care Medicine, Johns Hopkins Hospital

January 2003-present. Operating Room teaching. Lecturer. Department of Anesthesiology Critical Care Medicine, Johns Hopkins Hospital

CME instruction

2003-present. Course Director, Acute Neurosciences Seminar. Departments of Anesthesiology Critical Care Medicine, Neurology and Neurosurgery, Johns Hopkins Hospital.

This is a weekly CME-accredited conference devoted to the understanding and management of acute neurological disorders, often with nationally and internationally recognized speakers

May 2006, "Neurological complications of critical illness." Lecturer. Research Conference Department of Anesthesiology and Critical Care Medicine, Johns Hopkins Hospital

June 2006. "Aneurysmal subarachnoid hemorrhage: an evidence-based approach." Lecturer. Grand Rounds Department of Anesthesiology and Critical Care Medicine, Johns Hopkins Hospital

June 2006, "Hypertensive emergencies in Intracerebral hemorrhage: Pathophysiology and Management." Lecturer. Grand Rounds, Department of Medicine, Flushing Hospital Medical Center, Flushing, NY,

August 2006, "Hypertensive emergencies in surgery: pathophysiology and perioperative management." Lecturer. Medical / Surgical Grand Rounds, Integris Baptist Medical Center, Oklahoma City, Oklahoma

October 2006, "Aneurysmal subarachnoid hemorrhage: medical complications." Lecturer. Acute Neurosciences Conference, Department of Anesthesiology and Critical Care Medicine, Johns Hopkins Hospital

November 2006. "Hypertensive emergencies in ischemic stroke: pathophysiology and management." Lecturer. Grand Rounds Department of Medicine, Mercer University/Medical Center of Central Georgia, Macon, GA,

July 2007, "Hypertensive emergencies in ischemic stroke: pathophysiology and management. Lecturer." Grand Rounds Department of Medicine, Integris Baptist Medical Center, Oklahoma City, OK,

May 2007, "Neurological complications in critical illness." Lecturer. Grand Rounds Department of Anesthesiology and Critical Care Medicine, Johns Hopkins Hospital

October 2007, "Blood pressure management in stroke." Lecturer. Grand Rounds Department of Neurology/Neurosurgery, Medical University of South Carolina, Charleston, SC

November 2007, "Blood pressure management in stroke." Lecturer. Regional Stroke Conference, Spartanburg, SC

September 2008, ""Mechanisms of Critical Illness Brain Dysfunction - the Role of Structural Brain Injury". Lecturer. Johns Hopkins Delirium Summit. Johns Hopkins Hospital, Baltimore, MD

March 2009. "Imaging traumatic brain injury". Lecturer. Grand Rounds. Department of Anesthesiology, Pharmacology, and Intensive Care Medicine, University of Geneva, Geneva, Switzerland.

April 2009. "Physiological paradigms in traumatic brain injury." Lecturer. Grand Rounds Department of Anesthesiology and Critical Care Medicine, Johns Hopkins Hospital

May 2009, "Imaging traumatic brain injury". Lecturer. Grand Rounds. Department of Anesthesia and Critical Care Medicine, University of Pennsylvania.

May 2009. "Neuromuscular complications in critical illness". Lecturer. Anesthesia Resident Lecture. Department of Anesthesia and Critical Care Medicine, University of Pennsylvania.

June 2009. "Medical Complications in the Post-Subarachnoid Hemorrhage Patient". Dr. Judah Skolnick and Dr. Douglas David Pulmonary Symposium. Jewish Hospital Rudd Heart and Lung Center, Louisville, Kentucky

October 2009. "Hypertonic saline therapy in brain resuscitation". Lecturer. Institute for Liver Studies. King's College Hospital, London.

Workshops/seminars

December 2007, Evidence-Based Medicine Course for Residents. Lecturer. Department of Anesthesiology Critical Care Medicine, Johns Hopkins Hospital

Invitations to speak at national and international meetings

September 2005, "Meta-analysis in perioperative medicine." Invited faculty speaker and panelist. American Society of Anesthesiologists Meeting, Atlanta

September 2006, "Pathophysiology of traumatic brain injury." Invited faculty speaker. European Society of Intensive Care Medicine Meeting, Barcelona

September 2006, "Medical complications of aneurismal subarachnoid hemorrhage" Invited faculty speaker. European Society of Intensive Care Medicine Meeting, Barcelona

September 2006, "Initial management of traumatic brain injury." Invited faculty speaker. European Society of Intensive Care Medicine Meeting, Barcelona

February 2007, "Neuroanatomy of consciousness and structural causes of coma." Invited faculty speaker. Society for Critical Care Medicine, Orlando,

September 2007, "Impaired consciousness states." Invited faculty speaker, European Society of Intensive Care Medicine Meeting, Berlin

September 2007, "What are the causes of respiratory failure after TBI and SAH?" Invited faculty speaker. European Society of Intensive Care Medicine Meeting, Berlin

May 2008, "ICU acquired weakness." Invited faculty speaker. International Seminar of Neurological Complications of Critical Care, St Thomas' Hospital, London

September 2008, "Intensive care management in aneurysmal subarachnoid hemorrhage." Invited faculty speaker. European Society of Intensive Care Medicine Meeting, Lisbon

January 2009. "Coma and consciousness disorders". Invited faculty speaker. Neurocritical care for the General Medical and Surgical Intensivist: The Comprehensive Cerebrovascular Center. Tysons Corner, VA.

March 2009, "ICU-Acquired Weakness." Invited faculty speaker. Round Table Conference International Symposium on Intensive Care and Emergency Medicine, Brussels

March 2009, "Why is this patient unconscious?" Invited faculty speaker. International Symposium on Intensive Care and Emergency Medicine, Brussels.

March 2009, "Mechanical ventilation in acute brain injury". Invited faculty speaker. International Symposium on Intensive Care and Emergency Medicine.

March 2009, "Liberation from mechanical ventilation in acute brain injury". Invited faculty speaker. International Symposium on Intensive Care and Emergency Medicine, Brussels.

March 2009, "Role of brain imaging in severe head injury". Invited faculty speaker. International Symposium on Intensive Care and Emergency Medicine, Brussels.

May 2009, "Post SAH Heart & Lung Injury." Invited Faculty Speaker. American Thoracic Society, San Diego

May 2009, "Acquired Weakness in Critical Illness: Diagnosis and Classification" Invited Faculty Speaker and panelist. American Thoracic Society, San Diego

May 2009, "ICU acquired weakness. A need for definition". Invited faculty speaker. Second International Meeting of Physical Medicine & Rehabilitation in the Critically Ill. University of California San Diego.

March 2010, "Head CT or Brain MRI" Invited faculty speaker. International Symposium on Intensive Care and Emergency Medicine, Brussels.

March 2010, "Delirium epidemiology and outcomes." Invited faculty speaker. International Symposium on Intensive Care and Emergency Medicine, Brussels.

March 2010, "Neurologic crises: Coma." Invited faculty speaker. International Symposium on Intensive Care and Emergency Medicine, Brussels.

March 2010, "Managing the brain in acute liver failure." Invited faculty speaker. International Symposium on Intensive Care and Emergency Medicine, Brussels.

March 2010, "Blast traumatic brain injury." Invited faculty speaker. International Symposium on Intensive Care and Emergency Medicine, Brussels.

March 2010, "Prognostic models in traumatic brain injury" Invited faculty speaker. International Symposium on Intensive Care and Emergency Medicine, Brussels.

March 2010. "Outcome prediction models in traumatic and nontraumatic brain injury" Invited faculty speaker. Neurocritical care for the General Medical and Surgical Intensivist: The Comprehensive Cerebrovascular Center. Tysons Corner, VA.

May 2010, "Acquired Weakness in Critical Illness " Invited Faculty Speaker and panelist. American Thoracic Society, New Orleans

June 2010, "Structural, Metabolic, and Functional Brain Imaging". Traumatic Brain Injury in Professional Football: An Evidence-Based Perspective. Jointly sponsored by the National Football League and by Johns Hopkins Medicine. Washington, D.C.

October 2010, Invited faculty speaker. European Society of Intensive Care Medicine, Barcelona

Other courses and lectures

March 1997, "Pregnancy induced hypertensive disorders." Lecturer. Grand Rounds Department of Anesthesiology, Pharmacology, Surgical Intensive Care, Geneva University Hospitals, Geneva, Switzerland

October 1998, "Seizure disorders and anesthesia." Lecturer. Grand Rounds Department of Anesthesiology, Pharmacology, Surgical Intensive Care, Geneva University Hospitals, Geneva, Switzerland

April 1999, "Perioperative and critical care implications of apoptosis." Lecturer. Grand Rounds Department of Anesthesiology, Pharmacology, Surgical Intensive Care, Geneva University Hospitals, Geneva, Switzerland

May 2000, "Rapid opioid detoxification." Lecturer. Grand Rounds Department of Anesthesiology, Pharmacology, Surgical Intensive Care, Geneva University Hospitals, Geneva, Switzerland

May 2000, "Apoptosis in perioperative and critical care medicine." Lecturer. Grand Rounds Department of Anesthesiology, Pharmacology, Surgical Intensive Care, Geneva University Hospitals, Geneva, Switzerland

April 2001, "Apoptosis in critical care. Lecturer." Multidisciplinary critical care fellowship lecture series. Department of Anesthesiology and Critical Care Medicine, Johns Hopkins Hospital

June 2001, "Perioperative stroke." Lecturer. Multidisciplinary critical care fellowship lecture series. Department of Anesthesiology and Critical Care Medicine, Johns Hopkins Hospital

November 2001, "Atrial fibrillation in critical care." Lecturer. Multidisciplinary critical care fellowship lecture series. Department of Anesthesiology and Critical Care Medicine, Johns Hopkins Hospital

January 2002, "Cardio-pulmonary interactions in critical care". Lecturer. Multidisciplinary critical care fellowship lecture series. Department of Anesthesiology and Critical Care Medicine, Johns Hopkins Hospital

April 2002, "Spinal cord injury". Lecturer. Multidisciplinary critical care fellowship lecture series. Department of Anesthesiology and Critical Care Medicine, Johns Hopkins Hospital

May 2002, "Sodium and water fluxes in the injured brain". Lecturer. Multidisciplinary critical care research conference. Department of Anesthesiology and Critical Care Medicine, Johns Hopkins Hospital

Mentoring

Mentees

July 2003 – June 2005, Joao Gomes, MD. Current position: Assistant Professor of Neurology, University of Connecticut School of Medicine, Farmington, CT. Supervised the mentee in a research project which was presented in abstract form in 3 international meetings

July 2004 – June 2005, Abhijit Lele, MD. Current position: Assistant Professor of Anesthesiology and Neuro-Critical Care, Kansas University Medical Center, Kansas City.
Supervised the mentee in the writing of a case-report and in the preparation of a systematic review.

July 2005 – June 2007, Matthew Koenig, MD. Current position: Assistant Professor of Neurology, Johns Hopkins University School of Medicine, Baltimore
Supervised the mentee in 2 research projects which resulted in abstracts presented at 4 international meetings and in 2 peer reviewed publications

July 2005 – June 2007, Tamer Abdelhak, MD, Current position: Assistant Professor of Neurology, Henry Ford Hospital, Detroit, MI
Supervised the mentee in a research project which was presented in abstract form at 3 international meetings

July 2006 – June 2007, Ahmed Zaky, MB ChB, Current position: Acting Assistant Professor, Acting Assistant Professor of Anesthesiology Critical Care Medicine, University of Washington, WA
Supervised the mentee in a research project which was presented in abstract form at an international meeting

July 2007 – June 2007, Aliaksei Pustavoitau, MD. Current position: Assistant Professor of Anesthesiology Critical Care Medicine, Johns Hopkins University School of Medicine
Supervised the mentee in a research project which is to be presented in abstract form at one international meeting

July 2007 – June 2008, Hoesch, Robert, MD. Current position: Instructor in Neurology, Johns Hopkins University School of Medicine
Supervised the mentee in a research project which was presented in abstract form at one international meeting

Educational Program Building / Leadership

2003 – present, Acute Neurosciences Seminar. Neurosciences Critical Care Division. Departments of Anesthesiology Critical Care Medicine, Neurology and Neurosurgery, Johns Hopkins Hospital, Course Director.

2003 – present, Fellow and Resident Education and Training. Neurosciences Critical Care Division. Departments of Anesthesiology Critical Care Medicine, Neurology and Neurosurgery, Johns Hopkins Hospital, Responsible faculty.

2004-2008. Weekly article selection and evidence-based review for residency program. Department of Anesthesiology Critical Care Medicine, Johns Hopkins Hospital Responsible faculty.

CLINICAL ACTIVITIES

Certification

Medical licensure

2003 – present, Maryland Board of Physicians

2003 – present, Controlled substance registration certificate

2003 – present, Maryland controlled and dangerous substances

Board certification

2000, Swiss Society of Anesthesia-Resuscitation (SSAR), board certification in anesthesiology-reanimation

2007 – 2011, Alternate pathway for certification in anesthesiology and critical care medicine, American Board of Anesthesiologists

Other certification

2000, Educational Commission for Foreign Medical Graduates (certification number 0-332-199-5)

1994, United States Medical License Examination part II (1994) score 87

1999, United States Medical License Examination parts I (1999) score 94

2002, United States Medical License Examination part III (2002) score 92

2002, Advanced Trauma Life Support - Provider

2003, Transcranial Doppler Practicum

2007, 2009, Advance Cardiac Life Support - Instructor

Clinical Responsibilities

Overall 3.5 days per week - 70% clinical commitment distributed as follows:

2003 – present, Neurosciences Critical Care Unit, Johns Hopkins Hospital and Johns Hopkins Bayview Medical Center, Attending Physician (approximately 60% of clinical commitment)

2003 – present, Anesthesiology, Johns Hopkins Hospital, Attending Physician (approximately 10% of clinical commitment)

2006 – present, Surgical Intensive Care Units, Johns Hopkins Hospital, Attending Physician (approximately 30% of clinical commitment)

Program Building

Director, The Johns Hopkins Neurocritical Care Consult Program, June 2009 – present

Co-director, The Johns Hopkins Acute Liver Failure Program, April 2009 - present

ORGANIZATIONAL ACTIVITIES

Institutional Administrative Appointments

2006-present, Committee Member, Multidisciplinary Critical Care Committee, Johns Hopkins Hospital

2005-present, Council Member, Organ Donor Council Johns Hopkins Hospital

2005-present, Committee Member, Educational Committee Department of Anesthesiology and Critical Care Medicine, Johns Hopkins Hospital

International Society Administrative Roles

2004 – present, Member, Council on Stroke, American Heart Association

2006 – present, Member, Neurosciences Intensive Care and Emergency Medicine Committee, European Society of Critical Care Medicine

2006 – present, Member, Neurosciences Committee, Society of Critical Care Medicine

2006 – present, Member, Undergraduate Education Committee, Society of Critical Care Medicine

Editorial activities

2007, Guest Editor, Critical Care Clinics 2007

2008, Guest Editor, Critical Care Clinics

2008, Guest Editor, Neurologic Clinics 2008

2007 – present. Faculty Member and Editor. Faculty of 1000 Medicine, Critical Care & Emergency medicine section

Journal peer review activity

2003, 2004, 2005, 2006, 2007, 2008, 2009. Critical Care Medicine

2003, Anesthesiology

2004, 2007, 2008, 2009 Intensive Care Medicine
2004, Stroke
2004, Anesthesia and Analgesia
2004, Canadian Medical Association Journal
2005, JAMA
2005, 2009, 2010, The Lancet
2005, Journal of Clinical Outcomes Management
2005 and 2006, Behavioral Neurology
2006, Annals of Internal Medicine
2008, The Cochrane Collaboration
2008, The Journal of the Royal College of Physicians of Edinburgh
2008, 2009, Critical Care
2008, Acta Anaesthesiologica Scandinavica
2009, European Journal of Neurology
2009, Journal of Cerebral Blood Flow and Metabolism
2010, Journal of Critical Care

Professional societies

2000 – present, Swiss Medical Federation, member
2000 – present, Swiss Society of Anesthesia and Resuscitation, member
2002 – present, Society of Critical Care Medicine, member
Neurosciences Committee, committee member
Undergraduate Education Committee, committee member
2002 – present, American Heart Association
Council on Stroke, council member
2003 – present, American Society of Critical Care Anesthesiologists, member
2003 – present, American Society of Anesthesiologists, member
2003 – present, Maryland Society of Anesthesiologists, member
2003 – present, The Johns Hopkins Medical and Surgical Association
2004 – present, The Neurocritical Care Society, member
2004 – present, Society for Neurosurgical Anesthesia and Critical Care, member
2005 – present, European Society of Intensive Care Medicine
Neurosciences Intensive Care and Emergency Medicine Committee,
committee member
2008 – present, Society for Neuroscience

Clinical trials steering committee

2007 – present, Simvastatin in Aneurysmal Subarachnoid Hemorrhage (STASH)
– a multicenter randomized controlled clinical phase III trial, steering committee
member.

RECOGNITION**Conference Organization/Session Chairmanship**

September 2005, American Society of Anesthesiologists, Strategies to Reduce Cardiac Risk of Non-Cardiac Surgery, Panelist

September 2006, European Society of Intensive Care Medicine Meeting, Abstract Presentation Sessions, Chairman

February 2007, Society of Critical Care Medicine Meeting, Session on "Stupor and Coma", Chairman

September 2007, Society of Critical Care Medicine annual congress abstracts, Peer reviewer

September 2007, European Society of Intensive Care Medicine Meeting, Abstract Presentation Sessions, Chairman

September 2007, European Society of Intensive Care Medicine Meeting, Session "The Unconscious Patient", Chairman

Sept 2008, Annual Congress of the Society of Critical Care Medicine, Abstract reviewer

March 2009, Round Table Conference on ICU-Acquired Weakness. International Symposium on Intensive Care and Emergency Medicine, Brussels. Panelist.

March 2009, International Symposium on Intensive Care and Emergency Medicine, Brussels. Session chairman

March 2009, International Symposium on Intensive Care and Emergency Medicine, Brussels. Abstract Presentation Sessions, Chairman

March 2009. Department of Anesthesiology, Pharmacology, and Intensive Care Medicine, University of Geneva, Geneva, Switzerland. Visiting Professor.

May 2009. Department of Anesthesiology and Critical Care Medicine, University of Pennsylvania. Visiting Professor.

May 2009, Consensus conference on "Acquired Weakness in Critical Illness: Diagnosis and Classification" Co-organizer. American Thoracic Society, San Diego

Sept 2009, Annual Congress of the Society of Critical Care Medicine, Abstract reviewer

March 2010, International Symposium on Intensive Care and Emergency Medicine, Brussels. Session chairman

March 2010, International Symposium on Intensive Care and Emergency Medicine, Brussels. Abstract Presentation Sessions, Chairman

June 2010, Traumatic Brain Injury in Professional Football: An Evidence-Based Perspective. Jointly sponsored by the National Football League and by Johns Hopkins Medicine. Washington, D.C. Member, Planning Committee.

Honors/Awards

February 2007, Educational Scholarship Award, Society of Critical Care Medicine

Press

Featured in "Neurology Today", June 2008, for article on reversal of transtentorial herniation with hypertonic saline

Featured on United Press International release, November 2009, for article on ICU acquired weakness

Featured on Baltimore WJZ-TV, Dec 3, 2009: commented on ICU acquired weakness.

Featured on Washington Post Live, Comcast Sportsnet, Dec 9, 2009: provided commentary on sports-related concussions

Featured in the journal NEUROLOGIC, May 2010: article focusing on traumatic brain injury research.