

June 30, 2008

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Steven Paul Cohen

## **Demographic Information**

### **Current Appointments**

Associate Professor, Dept. of Anesthesiology & Critical Care Medicine, Division of Pain Management, Johns Hopkins School of Medicine

Director of Medical Education, Pain Management Division

Associate Professor, Dept. of Anesthesiology, Uniformed Services University of the Health Sciences, Bethesda, MD

Colonel, US Army Reserve, Walter Reed Army Medical Center, Washington, DC

Director of Chronic Pain Research

Deputy Commander for Clinical Services (Chief Medical Officer), 48<sup>th</sup> Combat Support Hospital, Fort Meade, MD

### **Personal Data**

Birth Place: Philadelphia, PA

Business Address: 550 N. Broadway, Suite 301, Baltimore, MD 21205

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## **Education and Training**

BA/1985, State University of New York @ Stony Brook, Liberal Arts

MD/1989, Mount Sinai School of Medicine of the City University of New York

Internship: Internal Medicine, Beth Israel Medical Center, New York, NY, 1989-90

Residency: Anesthesiology, Columbia-Presbyterian Medical Center, Columbia University, 1990-3

Fellowship: Pain Management, Massachusetts General Hospital, Harvard Medical School, 1999-2000

## **Military Service**

Current Position: Colonel, US Army Reserve (active), 2006- present

Lieutenant Colonel, US Army Reserve, 2002-6

Lieutenant Colonel, US Army Medical Corps, 2001-2

Major, US Army Medical Corps, 1995-2001

Captain, US Army Medical Corps, 1993-5

Captain, US Army Reserve, 1989-1993

First Lieutenant, US Army Reserve, 1989

Second Lieutenant, US Army Reserve, 1986-9

Active Duty: 1993-2002

Reserve Duty: 1986-1993; 2002-present

2002-7: Chief, Anesthesia & Operative Services, 4219<sup>th</sup> Combat Support Hospital, Picatinny Arsenal, NJ  
2007- present: Chief, Anesthesia & Operative Services, 48<sup>th</sup> Combat Support Hospital, 48<sup>th</sup> Combat Support Hospital, Fort George Meade, MD  
2007- Deputy Commander for Clinical Services (Chief Medical Officer), 48<sup>th</sup> CSH, Fort George Meade, MD  
Deployed in 2003, and overseas in 2004-5, and 2007-8 for Operation Enduring Freedom

## Research Activities & Publications

### Peer Reviewed Scientific Articles

1. **Cohen SP**, Frydman C, Zimmerman MJ, Moqtaderi F. Leiomyomatous tumors- presentation of a giant gastric leiomyoma and a review of the literature. *NY State J Med* 1989; 7: 416-419.
2. **Cohen SP**. Postdural puncture headache and treatment following successful lumbar facet block. *Pain Digest* 1994; 4: 283-4.
3. **Cohen SP**, Anderson PL. Mucoid impaction following nasal intubation in a child with an upper respiratory infection. *J Clin Anesth* 1998; 10: 327-30.
4. Lee SK, Kim JR, Bai YS, Nam YT, **Cohen SP**. Effects of priming with pancuronium or rocuronium on intubation with rocuronium in children. *Yonsei Med J* 1999; 40: 327-30.
5. Slade CS, **Cohen SP**. Elicitation of the oculocardiac reflex during endoscopic forehead lift surgery. *Plast Reconstr Surg* 1999; 104: 1828-1830.
6. **Cohen SP**, Lubin E, Stojanovic M. Intravenous lidocaine in the treatment of hiccup. *South Med J* 2001; 94: 1124-5.
7. Stojanovic M, Vu T-V, Caneris O, Slezak J, **Cohen SP** and Sang C. The role of fluoroscopy in cervical epidural steroid injections: an analysis of contrast dispersal patterns. *Spine* 2002; 27: 509-14.
8. Oaklander AL, **Cohen SP**, Raju SV. Intractable post-herpetic itch and cutaneous deafferentation after facial shingles. *Pain* 2002; 96: 9-12.
9. Cluff R, Abdel-Kader M, **Cohen SP**, Sang C, Chang Y, Stojanovic M. The technical aspects of epidural steroid injections: a national survey. *Anesth Analg* 2002; 95: 403-8.
10. **Cohen SP**, Larkin T, Polly DW Jr. A giant herniated disc following intradiscal electrothermal therapy. *J Spinal Disord Tech* 2002; 15: 537-41.
11. **Cohen SP**, Oberfell R, Larkin T, Fant, G, Stojanovic M. Does needle insertion site affect discography results? A retrospective analysis. *Spine* 2002; 27: 2279-83.
12. **Cohen SP**, Dawson T. Nebulized morphine as a treatment for dyspnea in a child with cystic fibrosis. *Pediatrics* 2002; 110: E38.
13. **Cohen SP**, Abdi S. Venous malformations as a cause of central pain syndrome: Report of a case. *Anesth Analg* 2002; 9: 1358-60.
14. **Cohen SP**, Foster A. Pulsed radiofrequency as a treatment for groin pain and orchialgia. *Urology* 2003; 61: 645xxi-xxiii.
15. Stojanovic MP, Zhou Y, Hord D, Vallejo R, **Cohen SP**. Single needle approach for multiple medial branch blocks: a new technique. *Clin J Pain* 2003; 19: 134-7.
16. **Cohen SP**, Abdi S. Lateral branch blocks as a treatment for sacroiliac joint pain: A pilot study. *Reg Anesth Pain Med* 2003; 28: 113-9.
17. Larkin TM, Carragee E, **Cohen S**. A novel technique for delivery of epidural steroids and diagnosing the level of nerve root pathology. *J Spinal Disord Tech* 2003; 16: 186-92.
18. **Cohen SP**, Larkin T, Abdi S, Chang A, Stojanovic M. Risk factors for failure and complications of intradiscal electrothermal therapy: a pilot study. *Spine* 2003; 28: 1142-7.

19. Hord ES, **Cohen SP**, Cosgrove GR, Ahmed SU, Vallejo R, Chang Y, Stojanovic MP. The predictive value of sympathetic block for the success of spinal cord stimulation. *Neurosurgery* 2003; 53: 626-32.
20. Freedman BA, **Cohen SP**, Kuklo TR, Lehman RA, Larkin P, Giuliani JR. Intradiscal electrothermal therapy (IDET) for chronic low back pain in active duty soldiers: 2-year follow-up. *Spine J* 2003; 3: 502-9.
21. **Cohen SP**, Larkin TM. Sedation using ketamine during intradiscal electrothermal therapy (IDET). *Spine* 2004; 29: 1590-2.
22. Kozikowski GP, **Cohen SP**. Pneumocephalus associated with lumbar puncture: report of a case. *Anesth Analg* 2004; 98: 524-6.
23. **Cohen SP**, DeJesus M. Ketamine patient-controlled analgesia for dysesthetic central pain. *Spinal Cord* 2004; 42: 425-8.
24. **Cohen SP**, Larkin TM, Chang A, Stojanovic MP. The causes of false-positive medial branch (facet joint) blocks in soldiers and retirees. *Mil Med* 2004; 169: 781-6.
25. **Cohen SP**, Chang AS, Larkin T, Mao J. The IV ketamine test: a predictive response tool for an oral dextromethorphan treatment regimen in neuropathic pain. *Anesth Analg* 2004; 99: 1753-9.
26. **Cohen SP**, Narvaez J, Stojanovic MP, Lebovits A. Corticosteroid injections for trochanteric bursitis: is fluoroscopy necessary? A pilot study. *Br J Anaesth* 2005; 94: 100-6.
27. **Cohen SP**, Williams S, Kurihara C, Griffith S, Larkin T. Nucleoplasty with or without intradiscal electrothermal therapy (IDET) as a treatment for lumbar herniated disc. *J Spinal Disord Tech* 2005; 18: S119-S124.
28. Stojanovic MP, Dey D, Hord ES, Zhou Y, **Cohen SP**. A prospective crossover comparison study of the single-needle and multiple-needle techniques for facet-joint medial branch block. *Reg Anesth Pain Med* 2005; 30: 484-90.
29. **Cohen SP**, Kent C. Persistent, unexplained preoperative tachycardia heralding a serious cardiac event: a series of 3 cases. *Can J Anesth* 2005; 52: 858-63 (with editorial).
30. **Cohen SP**, Griffith S, Villena F, Larkin TM, Larkin R. Presentation, diagnoses, mechanisms of injury, and treatment in soldiers injured in Operation Iraqi Freedom: an epidemiological study conducted at two military pain management centers. *Anesth Analg* 2005; 101: 1098-103.
31. **Cohen SP**, Verdolin MH, Chang AS, Kurihara C, Morlando BJ, Mao J. The IV ketamine test predicts subsequent response to an oral dextromethorphan treatment regimen in fibromyalgia patients. *J Pain* 2006; 7: 391-8.
32. **Cohen SP**, Sireci A, Wu CH, Larkin TM, Williams K, Hurley RW. Pulsed radiofrequency of the dorsal root ganglia is superior to pharmacotherapy or pulsed radiofrequency of the intercostal nerves in the treatment of chronic postsurgical thoracic pain. *Pain Physician* 2006; 9: 227-35.
33. **Cohen SP**, Villena F, Mao J. Two unusual cases of postamputation pain from Operation Iraqi Freedom. *J Trauma* 2007; 62: 259-61.
34. **Cohen SP**, Hurley RW, Christo PJ, Winkley J, Mohiuddin MM, Stojanovic MP. Clinical predictors of success and failure for lumbar facet radiofrequency denervation. *Clin J Pain* 2007; 23: 45-52.
35. Stojanovic MP, Cheng J, Larkin TM, **Cohen SP**. Psychophysical measurements during lumbar discography: a heart rate response study. *J Spinal Disord Tech* 2007; 20: 387-91.
36. **Cohen SP**, Shockey SM, Carragee EJ. The efficacy of repeat intradiscal electrothermal therapy (IDET) for discogenic low back pain *Anesth Analg* 2007; 495-8.
37. **Cohen SP**, Wenzell D, Hurley RW, Kurihara C, Buckenmaier CC 3<sup>rd</sup>, Griffith S, Larkin TM, Dahl E, Morlando BJ. Intradiscal etanercept as a treatment for discogenic low back

- pain and sciatica: a double-blind, placebo-controlled, dose-response pilot study. *Anesthesiology* 2007; 107: 99-105.
38. **Cohen SP**, Stojanovic MP, Crooks M, Kim P, Shields CH, Schmidt RK, Hurley RW. Lumbar zygapophysial (facet) joint radiofrequency denervation success as a function of pain relief during diagnostic medial branch blocks: a multi-center analysis. *Spine J* 2007 June 18 (ePub ahead of print).
  39. **Cohen SP**, Bajwa ZH, Kraemer JJ, Dragovich A, Williams KA, Stream J, Sireci A, McKnight G, Hurley RW. Factors predicting success and failure for cervical facet radiofrequency denervation: a multi-center analysis. *Reg Anesth Pain Med* 2007; 32: 495-503.
  40. White RL, **Cohen SP**. Diagnoses, treatment, and return-to-duty rates in soldiers treated in a forward-deployed pain treatment center: a prospective observational study. *Anesthesiology* 2007; 107: 1003-8 (with editorial).
  41. **Cohen SP**, Kurihara C, Hurley RW, Dahl E, Buckenmaier CC, Morlando BJ. A randomized, placebo-controlled study evaluating lumbosacral primary dorsal rami and lateral branch radiofrequency denervation for sacroiliac joint pain. Accepted to *Anesthesiology* 1/08.
  42. **Cohen SP**, Christo PJ, Wang S, Chen L, Stojanovic MP, Shields CH, Brummett C, Mao J. The Effect of Opioid Dose and Treatment Duration on the Perception of a Painful Standardized Clinical Stimulus. *Reg Anesth Pain Med* 2008; 33: 199-206.
  43. Larkin TM, Dragovich A, **Cohen SP**. Acute renal failure following a spinal cord stimulation trial. Accepted to *Pain Physician* 7/08.
  44. **Cohen SP**, Maine DN, Shockey SM, Kudchakdar S, Griffith S. Inadvertent Disc Injection During Transforaminal Epidural Steroid Injection: Steps for Prevention and Management. Accepted to *Pain Med* 3/08.
  45. Dahl E, **Cohen SP**. Perineural injection of etanercept as a treatment for acute and subacute postamputation pain. *Clin J Pain* 2008; 24: 172-5.
  46. **Cohen SP**, Wang S, Chen L, Kurihara C, McKnight G, Marcuson M, Mao J. An intravenous ketamine test as a predictive response tool in opioid-exposed patients with persistent pain. Accepted to *J Pain Symptom Manage* 3/08.
  47. **Cohen SP**, Strassels S, Kurihara C, Crooks MT, Bleckner LL, Forsythe A, Marcuson M. Outcome predictors for sacroiliac (lateral branch) radiofrequency denervation. Accepted to *Reg Anesth Pain Med* 7/08.
  48. **Cohen SP**, Bogduk N, Buckenmaier CC III, Dragovich A, Griffith S, Kurihara C, Raymond JL, Williams N, Yaksh TL. A double-blind, placebo-controlled, dose-response safety study evaluating transforaminal epidural etanercept for sciatica. Submitted to *Anesthesiology* 7/08.
  49. Carragee EJ, **Cohen SP**. "Life-time Asymptomatic for Back Pain": A Study of the Validity of this Back Pain Subgroup in Soldiers. Submitted to *Spine* 7/08.
  50. Dragovich A, Verdolin MH, Wenzell D, **Cohen SP**. Spinal cord stimulation in deployed soldiers. Submitted to *Neurosurgery* 7/08.

### Non-Peer Reviewed (Invited) Articles

1. **Cohen SP**, Dubois M. The pharmacological treatment of complex regional pain syndromes. *Curr Rev Clin Anesth* 2003; 24: 35-41.
2. **Cohen SP**, Martineau B, Abdi S. Central pain resulting from venous malformations: a case report. *J Neuropathic Pain* 2004; 1: 23-5.

3. **Cohen SP**, Maharlouei B, Larkin TM. A giant herniated disc after intradiscal electrothermal therapy. *J Neuropathic Pain* 2004; 2: 24-6.
4. Larkin TM, Algeo D, Lynch TT, Gray D, **Cohen SP**. The non-surgical management of spinal pain in the elderly: NSAIDS, opioids and epidural steroid injections. *Seminars in spine surgery* 2005; 17: 144-57.
5. **Cohen SP**. "Ask the Expert". Should there be a limit as to how much opioid medication a patient should be prescribed? Available at: <http://www.painknowledge.org/asktheexpert/AskTheExpert.aspx>
6. **Cohen SP**. "Ask the Expert". How should you treat phantom limb pain? Available at: <http://www.painknowledge.org/asktheexpert/AskTheExpert.aspx>
7. White RL, **Cohen SP**. Chronic pain management in combat support hospitals. American Society of Anesthesiologists NEWSLETTER March 2007; 71: 21-6. Available at: [http://www.asahq.org/Newsletters/2007/03-07/white03\\_07.html](http://www.asahq.org/Newsletters/2007/03-07/white03_07.html)

### Review Articles, Editorials and Book Reviews (Peer Reviewed)

1. **Cohen SP**, Abdi S. New developments in the use of tricyclic antidepressants for the management of pain. *Curr Opin Anaesthesiol* 2001; 14: 505-11.
2. **Cohen S**, Abdi S. Central pain. *Curr Opin Anaesthesiol* 2002; 15: 575-81.
3. **Cohen SP**, Christo PJ, Moroz L. Pain management in trauma patients. *Am J Phys Med Rehabil* 2004; 83: 142-61.
4. **Cohen SP**, Mullings R, Abdi S. The pharmacological treatment of muscle pain. *Anesthesiology* 2004; 101: 495-526.
5. **Cohen SP**, Barna SA, Larkin TM, Palmer WE, Hecht AC, Stojanovic MP. Lumbar discography: a comprehensive review of outcome studies, diagnostic accuracy and principles. *Reg Anesth Pain Med* 2005; 30: 163-83.
6. **Cohen SP**. Sacroiliac joint pain: a comprehensive review of anatomy, diagnosis and treatment. *Anesth Analg* 2005; 101: 1440-53.
7. **Cohen SP**. Doctors should play role in prisoner interrogation. *Baltimore Sun* (print). 2006 Feb 14; 11A. Available at: <http://www.baltimoresun.com/news/opinion/oped/bal-op.doctors14feb14,0,7172452.story?coll=bal-oped-headlines>
8. Gottschalk A, **Cohen SP**, Yang S, Ochroch A. Preventing and managing postthoracotomy pain. *Anesthesiology* 2006; 104: 594-600.
9. Hurley RW, **Cohen SP**, Williams KA, Rowlingson AJ, Wu CL. The analgesic effects of perioperative gabapentin on postoperative pain: A meta-analysis. *Reg Anesth Pain Med* 2006; 31: 237-47.
10. **Cohen SP**, Raja SN. The middle way: a practical approach to prescribing opioids. *Nature Clinical Practice Neurology* 2006; 2: 580-1.
11. **Cohen SP**, Erdek M. Book Review on "Atlas of Image-Guided Intervention in Regional Anesthesia and Pain Medicine" by James P. Rathmell. *Anesthesiology* 2007; 106: 197-8.
12. Hansen HC, McKenzie-Brown AM, **Cohen SP**, Swicegood JR, Colson JD, Manchikanti L. Sacroiliac joint interventions: a systematic review. *Pain Physician* 2007; 10: 165-84.
13. **Cohen SP**, Dragovich A. Intrathecal Analgesia. *Med Clin North Am* 2007; 91: 251-70.
14. **Cohen SP**, Raja SN. Pathogenesis, diagnosis and treatment of lumbar zygapophysial (facet) joint pain. *Anesthesiology* 2007; 106: 591-614 (ASA CME article).
15. **Cohen SP**. Epidemics, evolution and sacroiliac joint pain. *Reg Anesth Pain Med* 2007; 32: 3-6.
16. **Cohen SP**, Hurley RW. The ability of diagnostic spinal injections to predict surgical outcomes. *Anesth Analg* 2007; 105: 1756-75 (cover article; with editorial).
17. **Cohen SP**, Dragovich A. Intrathecal Analgesia. *Anesthesiol Clin* 2007; 25: 863-82.

18. **Cohen SP.** Cannabinoids for chronic pain. *BMJ* 2008; 336: 167-8.
19. **Cohen SP, Rathmell JP.** Predictive Value of Intravenous Infusions Tests for Selecting Long-Term Drug Therapy in Patients with Chronic Pain: A Systematic Review. To be submitted to *J Pain* 7/07.
20. **Cohen SP, Hurley RW, Argoff CE.** Low back pain. Invited review for *BMJ*. In preparation.

### Peer Reviewed Letters to the Editor

1. **Cohen SP.** Disillusionment with medicine. *Postgraduate Medicine* 1988; 12: 40.
2. **Cohen SP, Adams S, Toon RD.** Development of a midline lumbar lipoma following spinal anesthesia: complication or coincidence. *J Clin Anesth* 1997; 9: 170-1.
3. Stojanovic MP, Sang CN, **Cohen SP.** Reply to Merrill. *Anesth Analg* 2003; 96: 908.
4. **Cohen SP, Abdi S.** Reply to Dr. Manchikanti. *Reg Anesth Pain Med* 2003; 28: 490-1.
5. **Cohen SP, Mao J.** Is the analgesic effect of intravenous lidocaine mediated through opioid receptors? *Acta Anaesthesiol Scand* 2003; 47: 910-11.
6. **Cohen SP, Kozikowski GP.** In response to Dr. Kuczkowski. *Anesth Analg* 2004; 99: 303-4.
7. **Cohen SP, Larkin TM, Carragee E.** Transforaminal epidural steroid delivery and diagnosing the level of nerve root pathology. Comments on Baker et al. *Pain* 2004; 109: 526-7.
8. Stojanovic MP, Hord ED, **Cohen S.** The value and validity of single-needle approach for multiple medial branch blocks is not proven. *Clin J Pain* 2005; 21: 457.
9. **Cohen SP.** Doctors and interrogation. *New Engl J Med* 2005; 353: 1633-4.
10. Stojanovic MP, **Cohen SP.** Reply to Dr. Ackerman. *Reg Anesth Pain Med* 2006; 31: 181.
11. **Cohen SP, Wenzell D, Larkin TM.** A Critique of Intradiscal Administration for Treatment of Radiculopathy. *Anesthesiology* 2008; 108: 335.
12. **Cohen SP, Dragovich A, Hurley RW, Bajwa ZH.** Response to Manchikanti. Accepted to *Reg Anesth Pain Med* 5/08.

### Book Chapters

1. **Cohen SP.** Pain in AIDS. In: Ballantyne J, Fishman S, Abdi S, eds. *The Massachusetts General Hospital Handbook of Pain Management*, 2<sup>nd</sup> edition. Philadelphia: Lippincott-Raven Publishers, 2002:437-49.
2. **Cohen SP, Abdi S.** Clinical applications of spinal analgesia. In: Smith HS, ed. *Drugs for Pain*. Philadelphia: Hanley and Belfus, 2002: 339-51.
3. **Cohen SP, Abdi S, Rowlingson JC.** Low Back Pain. In: Warfield C, Bajwa Z, eds. *Principles and Practice of Pain Medicine*, 2<sup>nd</sup> edition. New York: McGraw-Hill, 2004: 273-284.
4. **Cohen SP, Stojanovic MP.** Therapeutic injections for axial neck pain and cervicogenic headaches. In: Slipman CW, Derby R, Simeone FA, Mayer TG, eds. *Interventional Spine: An Algorithmic Approach*. London: Elsevier Science, 2007: 707-12.
5. Larkin TM, **Cohen SP.** Spinal analgesia in the elderly. In: McClean G, Smith HS, eds. *Clinical Management of the Elderly Patient in Pain*. Binghamton, NY: Haworth Press, 2006: 149-77.
6. Carragee EJ, **Cohen S.** Diagnostic injections in the spine. In: Herkowitz H, Garfin SR, Eismont FJ, Bell GR, Balderston RA, eds. *Rothman-Simeone: The Spine*, 5<sup>th</sup> edition, Volume 1. Philadelphia: Saunders Elsevier, 2006: 243-65.

7. **Cohen SP.** Pain diagnosis. In: Smith HS, Abdi S, Chopra P, eds. *Pain Medicine: A Comprehensive Review*. New York: McGraw-Hill. In Press.
8. **Cohen SP, Maine D.** Drug delivery methods. In: Mao J, ed. *Translational Pain Research. Current Status and Trends*. Volume I. New York: Nova Publishers, 2006: 415-52.
9. Hurley RW, **Cohen SP.** Neuraxial agents. In: Benzon HT, Wu CL, Rathmell JP, Turk DC, Argoff CE, eds. *Raj's Practical Management of Pain, 4<sup>th</sup> edition*. London: Mosby Elsevier, 2008, 699-714.
10. **Cohen SP, Larkin TM.** Lumbar discography. . In: Benzon HT, Wu CL, Rathmell JP, Turk DC, Argoff CE, eds. *Raj's Practical Management of Pain, 4<sup>th</sup> edition*. London: Mosby Elsevier, 2008, 1079-108.
11. Brummett C, **Cohen SP.** Facet joint pain. In: Benzon HT, Wu CL, Rathmell JP, Turk DC, Argoff CE, eds. *Raj's Practical Management of Pain, 4<sup>th</sup> edition*. London: Mosby Elsevier, 2008, 1003-38.
12. **Cohen SP, Griffith SR.** Radiofrequency procedures of dorsal root ganglia. In: Manchikanti L, Singh V, eds. *A Practical Guide to Interventional Techniques*. ASIPP Publishing, Paducah, KY, 2007, 623-32.
13. Dragovich A, **Cohen SP.** Spinal analgesia. In: Smith HS, editor. *Current Therapy in Pain, 2<sup>nd</sup> edition*. London: Elsevier Science, 2008. In Press.
14. Hurley RW, **Cohen SP, Wu CL.** Acute Pain Management. In: Ballantyne JC, Rathmell JP, eds. *Bonica's Management of Pain, 4<sup>th</sup> edition*. Lippincott Williams and Wilkins, Philadelphia, PA, 2008. In press.
15. Dragovich A, **Cohen SP.** Interventional therapies. In: Ballantyne JC. *Evidence-based Chronic Pain Management*. Blackwell Publishing, Oxford, England, 2008, In press.
16. Larkin TM, **Cohen SP.** Anatomy and pathophysiology of pain. In: Manchikanti L, Singh V, eds. *Interventional Procedures in Chronic Nonspinal Pain*. ASIPP Publishing, Paducah, KY. In Press.
17. **Cohen SP, White R, Griffith SR.** Interventional pain management for non-battle related injuries. In: Buckenmaier CC 3<sup>rd</sup>, Bleckner LL, eds. *Acute Pain Management in Wartime*. Office of the Surgeon General, Department of the US Army. In press.
18. Dahl E, Foster L, Crooks M, Cohen SP. Opioid hyperalgesia in the perioperative period. In: Mao J, ed. *Opioid Hyperalgesia*. London: Mosby Elsevier. In preparation.

### **Ongoing Approved Research Projects**

1. The efficacy and safety of epidural etanercept in patients with sciatica: a pilot study
  - a. Role: Principal Investigator
2. The reliability of low back pain history in asymptomatic subjects. The prevalence and incidence of reported back pain correlates with surveillance frequency
  - a. Role: Co-investigator
  - b. Presented at the North American Spine Society (NASS) Annual Meeting, Chicago, IL, 10/04, and the International Society for the Study of the Lumbar Spine Annual Meeting, New York, 05/05.
3. Prospective randomized study comparing 0, 1, & 2 diagnostic lumbar medial branch (facet joint) blocks before radiofrequency denervation in patients with chronic low back pain: a cost: benefit analysis.
  - a. Role: Principal Investigator
4. A randomized study comparing outcomes between fluoroscopically-guided and blind trochanteric bursa injections.
  - a. Role: Principal Investigator

5. A Computed Tomography Study Comparing the Specificity of 0.25 ml and 0.5 ml of local anesthetic for Cervical Medial Branch Blocks
  - a. Role: Principal Investigator
6. A 3-arm double-blind placebo-controlled study comparing transforaminal epidural etanercept, corticosteroids and saline for lumbosacral radiculopathy
  - a. Role: Principal Investigator
  - b. Status: Submitted

### **Non-medical Publications**

Columnist for Korea Times, Korea Herald, Pacific Stars & Stripes and Seoul World, 1997-9

- Dozens of columns available on request

### **Extramural Sponsorship**

1. Dept. of Defense, Contract No. W91ytz-05-0061, 2004-5:
  - a. \$78,000 (75% clinical work, 25% research)
  - b. 520 hours/ year
  - c. Efficacy of intradiscal etanercept in the treatment of discogenic and radicular low back pain. WU#05-20007A.
2. Baylis Medical Research Grant, 2005-2007
  - a. Role: Principal Investigator on radiofrequency studies
  - b. Funding: \$30,000 for disposable equipment costs
  - c. 0% effort
3. Dept. of Defense, Contract No. W91ytz-05-0062, 2005-6:
  - a. \$80,600 (75% clinical work, 25% research)
  - b. 520 hours/ year
  - c. A randomized, placebo-controlled study assessing lateral branch radiofrequency (RF) denervation for sacroiliac joint pain. WU#05-20008A
4. John P. Murtha Pain and Neuroscience Institute. Congressional Grant administered thru Army Regional Anesthesia & Pain Management Initiative/ Henry M. Jackson Foundation, #CFS139196, Grant # 100289, 2006
  - a. Role: Principal Investigator
  - b. Title: Efficacy of epidural etanercept in the treatment of lumbosacral radiculopathy. WU#06-20009A
  - c. Funding received \$75,000
  - d. Percent effort: 10%
5. Dept. of Defense, Contract No. W91ytz-05-0062, 2006-67
  - a. \$80,600 (75% clinical work, 25% research)
  - b. 520 hours/ year
  - c. A randomized study comparing outcomes between fluoroscopically-guided and blind trochanteric bursa injections. (Funding approved, final IRB approval pending).

6. John P. Murtha Pain and Neuroscience Institute. Congressional Grant administered thru Army Regional Anesthesia & Pain Management Initiative/ Henry M. Jackson Foundation, Grant # 100289-2, 2007-8
  - e. Role: Principal Investigator
  - f. Title: Efficacy of local administration of etanercept for postamputation residual limb pain.
  - g. Funding \$75,000
  - h. Percent effort: 10%
  
7. John P. Murtha Pain and Neuroscience Institute. Congressional Grant administered thru Army Regional Anesthesia & Pain Management Initiative/ Henry M. Jackson Foundation, 2008
  - i. Role: Co-Investigator
  - j. Title: Animal (dog) safety study evaluating epidural etanercept.
  - k. Funding: \$20,000
  - l. Percent effort: 0%
  - m. Status: pending
  
8. International Spinal Intervention Society, 2008.
  - a. Role: Principal Investigator
  - b. Title: 3-arm randomized double-blind, placebo-controlled study comparing transforaminal epidural corticosteroids, etanercept, and saline for lumbosacral radiculopathy.
  - c. Funding: \$50,000
  - d. Status: pending

## **Educational Activities**

### **Teaching Positions**

1. Medical Correspondent, Armed Forces Korea Network (AFKN) TV/Radio, 1993-4
2. Director, Resident Education for 121<sup>st</sup> General Hospital's Anesthesia Service teaching affiliation with Yonsei University Medical School, 1993-5, 1997-9
1. Director, Medical Student Education for Wuerzburg Army Hospital's Anesthesia Service teaching affiliation with University of Wuerzburg School of Medicine, 1995-6
2. Director, Walter Reed Army Medical Center (WRAMC) Anesthesia Journal Club, 2000-2
3. Director of Pain Research, Walter Reed Army Medical Center, 2005- present
4. Director of Medical Education, Pain Management Division, Johns Hopkins Dept of Anesthesiology, 2004-present

### **Mentoring**

1. Clinical Research Preceptor (CRP) for Ron Oberfoell. Current position is MAJ, US Army, Walter Reed Army Medical Center.
  - i. Awarded 2<sup>nd</sup> place in Washington, DC anesthesia resident research contest.
2. CRP for MAJ Scott Griffith. Current position is Director, Pain Management Center, Walter Reed Army Medical Center.
3. CRP for MAJ Daniel Wenzell. Current position is Director, Pain Management Center, Madigan Army Medical Center.

4. CRP for Robert Hurley. Current position is Assistant Professor, Dept. of Anesthesiology & Critical Care Medicine, Johns Hopkins School of Medicine.
5. CRP for Chad Brummett. Current position is Assistant Professor, Dept. of Anesthesiology, University of Michigan School of Medicine.
6. CRP for MAJ Ron White. Current position is Director, Pain Management Center, Landstuhl Regional Army Medical Center.
7. CRP for MAJ Anthony Dragovich. Current position is Director, Pain Management Center, Fort Bragg, NC.
8. CRP for Commander Necia Williams. Current position is Chief, Anesthesia & Operative Services, Walter Reed National Medical Center, Bethesda, MD

## **Editorial Activities**

1. Ad Hoc Reviewer: *BMJ, Lancet, Anesthesiology, Spine, Anesthesia & Analgesia, Regional Anesthesia & Pain Medicine, BMC Musculoskeletal Disorders, Military Medicine, Pediatric Pulmonology, Acta Anaesthesiologica Scandinavica, Medical Science Monitor, BMC Anesthesiology, Archives of Physical Medicine & Rehabilitation, Pain Medicine, American Journal of Physical Medicine & Rehabilitation, European Journal of Pain, Journal of Pain, Current therapeutics Research, Seminars in Arthritis and Rheumatism, Journal of Clinical Anesthesia, Journal of Women's Health*
2. Editorial Board Membership:
  - a. *Regional Anesthesia and Pain Medicine*, 2007- present
    - i. Associate Editor, 2008-present
  - b. Associate Editor, *Pain Physician*, 2006- present
  - c. *Journal of Cancer Pain and Symptom Palliation*, 2005- present
  - d. *Local and Regional Anesthesia & Analgesia*, 2008- present
3. North American Delegate, International Centre for the Advancement of Health Regional Innovation and Science, 2003- present.
4. Chairman, McMahon Publishing Advisory Board on the Management of Breakthrough Pain- Curriculum Development, Wall Poster & Pocket Handbook, 2006- 7.
  - a. Sponsored by Cephalon Inc.
  - b. Approved by Johns Hopkins CME
5. Chairman, McMahon Publishing Advisory Board on the Management of Breakthrough Pain- Curriculum Development and Case Studies, 2007- present
  - a. Sponsored by Cephalon Inc.
  - b. Approved by Johns Hopkins CME
6. Dept. of the Army Medical Advisory Board, 2008- present

## **Clinical Activities**

### **Current Licensure**

1. Maryland #D0061930
2. New York # 1-188412 (inactive)
3. Massachusetts # 156663 (inactive)
4. Pennsylvania # MD 424819

### **Board Certification**

1. Diplomate, National Board of Medical Examiners, 1990, No. 369967
2. American Board of Anesthesiology (ABA), 1994, No. 23536
3. ABA Pain Management, 2001, No. 23536

### **Service Responsibilities**

1. Assistant Chief, Anesthesia and Operative Services, 121<sup>st</sup> General Hospital, 1993-5, 1997
  - i. Director, Respiratory Therapy Service
2. Chief, Anesthesia and Operative Services, Wuerzburg Army Hospital, 1995-6
  - i. Director, Pain Clinic
  - ii. Director, Post Anesthesia Care Unit
3. Chief, Anesthesia and Operative Services, 121<sup>st</sup> General Hospital, 1997-9
  - i. Director, Pain Clinic
  - ii. Director, Post Anesthesia Care Unit
4. Director, Acute Pain Service, Walter Reed Army Medical Center, 2000-2
5. Director, Anesthesia Journal Club, WRAMC 2000-2
6. Director, Inpatient Pain Service, NYU Medical Center, 2002-4
7. Director, Chronic Pain Research, Walter Reed Army Medical Center, 2005-present
8. Director, Medical Education, Johns Hopkins ACCM Division of Pain Medicine, 2004-present

### **Organizational Activities**

#### **Institutional Appointments**

1. 1993-5: Member, Special Care Committee, 121<sup>st</sup> General Hospital, Seoul, Korea
  - i. Member, Drug Utilization Committee
2. 1995-6: Vice Chairman, Committee on Conscious Sedation, Wuerzburg Army Hospital, Wuerzburg, Germany
  - i. Member, Surgical QI Committee
3. 1997-9: Chairman, Committee on Conscious Sedation, 121<sup>st</sup> General Hospital, Seoul, Korea
  - i. Member, Surgical QI Committee
  - ii. Director, Anesthesia JCAHO Activities
4. 2002-3: Member, Blood Utilization Committee, New York University Medical Center, New York, NY
5. 2004-present: Member, Clinical Competency Committee, Johns Hopkins School of Medicine
6. 2005-present: Member, Clinical Competency Committee, Walter Reed Army Medical Center
7. 2005-present: Member, Educational Committee, Walter Reed Army Medical Center

#### **Professional Societies**

1. American Pain Society, 2001-present
2. American Society of Anesthesiologists, 1998-present
3. New York State Society of Anesthesiologists, 1998-2003
4. 38<sup>th</sup> Parallel Medical Society, 1993-1999
5. New York Academy of Sciences, 1999-2002

6. American Society of Regional Anesthesia, 2004-present
7. Who's Who in America, 2002-present
8. Who's Who in Medicine and Health Sciences, 2003- present
9. Maryland State Society of Anesthesiologists, 2005-present
10. American Society of Interventional Pain Physicians, 2006-present
11. International Spinal Intervention Society, 2007- present
12. Association of University Anesthesiologists (AUA), 2007-present

## **Recognition**

### **Military Awards**

1. Meritorious Service Medal, 1999
2. Army Commendation Medal with Oak Leaf Cluster, 1995 and 1996
3. Army Achievement Medal, 2008
4. National Defense Service Medal, 1991
5. Overseas Service Ribbon with Oak Leaf Cluster, 1994 and 1999
6. Army Service Ribbon, 1993
7. Global War on Terrorism Service Medal, 2003
8. Armed Forces Reserve Medal with M Device, 2003, 2005 and 2007

### **Invited Lectures/ Presentations**

1. Grand Rounds, Beth Israel Medical Center, New York, NY, April 1988
  - i. Hypertension in Pregnancy
2. Visiting Professor, Dept. of Anesthesiology, Yonsei University College of Medicine, Seoul, Korea, 1997-9
  - i. Director, Resident training at 121<sup>st</sup> General Hospital
  - ii. Numerous lectures on multiple topics
3. Chronic Pain Rounds, Dept. of Anesthesiology, Pain Management Division, Massachusetts General Hospital, Harvard Medical School, Boston, MA, May 2003
  - i. New developments in the treatment of axial low back pain
4. Pain Management Strategies for the Primary Care Provider, New York University School of Medicine, November 2002
  - a. NSAIDS and Adjuvants for pain management
5. Chronic Pain Rounds, Mount Sinai School of Medicine, December 2002
  - i. Central pain syndromes
6. Visiting Professor, Walter Reed Army Medical Center, June-August 2003
  - i. NSAIDS and adjuvants
  - ii. Central pain
  - iii. Pain management in trauma patients
7. Group Leader, Smith-Nephew Intradiscal Electrothermal Therapy (IDET) Course, September 2003, New York, NY
8. Pain Management Strategies for the Primary Care Provider, New York University School of Medicine, November 2003
  - i. Adjuvants as pain therapies
9. Visiting Professor, State University of New York at Stony Brook, April 2004
  - i. The interventional treatment of low back pain
10. New York University Departments of Orthopedics and Neurosurgery Spine Conference, December 2004

- i. Intradiscal Electrothermal Therapy
11. Visiting Professor, University of Bremen, December 2004
  - i. Percutaneous procedures in the treatment of back pain
12. 6<sup>th</sup> Annual Comprehensive Interventional Pain Management Workshop, April 2005, Bethesda, MD
  - i. Radiofrequency techniques in pain management
13. Johns Hopkins Pain Management Update, Baltimore, MD, December 2005
  - i. Radiculopathy and discogenic back pain
  - ii. Diagnostic spinal injections- indication
  - iii. Diagnostic nerve blocks
14. 7<sup>th</sup> Annual Interventional Pain Management Workshop, Naval Medical Center-San Diego, February, 2006
  - i. Provocative discography
  - ii. IDET and Accutherm
15. Radio talk show conference on: "Medicine Unplugged: military doctors & interrogation of prisoners of war", January 16, 2006
  - i. Talk show host: Wilbur Larch, MD
  - ii. WUSB, 90.1 FM radio (www.usb.org), Stony Brook (Long Island), New York
16. Blaustein Pain Management Rounds, Johns Hopkins Hospital, February 2006
  - a. The predictive value of diagnostic nerve blocks
17. American Society of Interventional Pain Management Physicians (ASIPP) 8<sup>th</sup> Annual Meeting, Washington, DC, June 24-28<sup>th</sup>, 2006
  - i. Discography & intradiscal therapies. Evidence based medicine- past, present & future.
18. American Society of Interventional Pain Management Physicians, Interventional Techniques Review Course & Cadaver Workshop, Memphis, TN, July 7-9, 2006
  - i. Intradiscal Therapies (lecture)
  - ii. Multiple stations for cadaver workshop
19. Chief Instructor, IDET and Accutherm Cadaver Course, Hilton Hotel, July 22, 2006
  - a. Pathoanatomy of the lumbar disc
  - b. Disc Stimulation
  - c. Accutherm disc decompression
  - d. IDET and Accutherm recovery
20. American Society of Interventional Pain Management Physicians, Interventional Techniques Review Course & Cadaver Workshop, Memphis, TN, November 30-December 2, 2006
  - i. Cervical discography (lecture)
  - ii. Thoracic discography (lecture)
  - iii. Sacroiliac joint injections (lecture)
  - iv. Lumbar facet injections (lecture)
  - v. Multiple stations for cadaver workshop
21. Medical Doctors and Society. Johns Hopkins School of Medicine, March 2007
  - i. Doctors and Interrogation
  - ii. Doctors and Capital Punishment
22. American Society of Interventional Pain Management Physicians (ASIPP) 9<sup>th</sup> Annual Meeting, Washington, DC, Chair, Radiofrequency Denervation Symposium, Washington, DC, June 23-27, 2007
  - i. Sacroiliac joint pain (lecture)
23. International Spinal Intervention Society 15<sup>th</sup> Annual Meeting, Baltimore, MD, July 19-21, 2007

- i. Sacroiliac joint pain treatment (lecture)
- 24. Grand rounds, Heidelberg Army Hospital and surrounding treatment centers including University of Heidelberg, November 7, 2007, Heidelberg, Germany
  - a. Evaluation and management of low back pain
- 25. Visiting Professor, Emory University Pain Management Division, December 19-20, 2007
  - a. Pain management for the global war on terrorism
- 26. Grand Rounds, Johns Hopkins Department of Anesthesiology & Critical Care Medicine, February 14, 2008
  - a. Pain management for war injuries
- 27. Hospital-wide Grand Rounds, Kimbrough Army Hospital, Fort Meade, MD, April 2, 2008
  - a. Current concepts in the evaluation and treatment of low back pain
- 28. Blaustein Pain Management Rounds, Johns Hopkins Hospital, April 18, 2008
  - a. Pain management during wartime
- 29. Visiting Professor, Harvard Medical School, April 28-30, 2007
  - a. Massachusetts General Hospital, April 21, 2007
    - i. The validity of predictive value of diagnostic spinal injections
    - ii. Chronic Pain Rounds, Pain management during wartime
  - b. Beth Israel Deaconess Medical Center, April 22-23
    - i. Grand Rounds, Pain management for the Global War on Terrorism
- 30. American Pain Society 27<sup>th</sup> Annual Meeting, Tampa, FL, May 8-10, 2008
  - a. Speaker, Symposium on pain management for trauma injuries
    - i. Pain treatment in the global war on terrorism
- 31. Grand Rounds, National Naval Medical Center, June 24, 2008
  - a. The accuracy of diagnostic injections
- 32. American Society of Interventional Pain Management Physicians (ASIPP) 10<sup>th</sup> Annual Meeting, Washington, DC, Chair, Radiofrequency Denervation Symposium, Washington, DC, June 19-23, 200
  - a. Radiofrequency procedures for chronic pain: pulsed, heat or cold?
- 33. Briefing for the Supreme NATO Commander, Surgeon General of U.S. Army and other distinguished guests
  - a. Pain management capabilities in forward-deployed areas

## **Selected Non-professional Accomplishments**

- 1. Former #2 ranked Black Belt forms competitor in NY and NJ region, Karate Illustrated Magazine, 1984
  - a. Former #6 ranked Black Belt forms competitor in NY and NJ region, Karate Illustrated Magazine, 1985
- 2. 1<sup>st</sup> place in 8<sup>th</sup> US Army 1998 photography contest (2nd place overall nationwide): "Hunger in Tibet"
- 3. Journalist for Korea Times, Korea Herald, Stars & Stripes and Seoul World, 1997-9, with dozens of published articles