

RAY M. BAKER, M.D.
CURRICULUM VITAE

March 2007

Personal Data:

Birth date: April 9, 1959

Birthplace: Cambridge, England

Citizenship: United States

Business Address: 12301 NE 10th Place
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Bellevue, Washington 98005
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Academic Positions:

Clinical Professor
Director of Interventional Pain Services
Department of Anesthesiology
University of Washington
Seattle, Washington

Education:

1981-1985 Medical Degree (ranked 4th in class)
Alpha Omega Alpha
University of California, Irvine Irvine, CA

1977-1981 B.A.
Phi Beta Kappa
University of California, Berkeley Berkeley, CA
Major: Biochemistry

Residency:

1995 Pain Fellowship
University of Washington Multidisciplinary Pain Center
University of Washington, Seattle, Washington

1986-1989 Anesthesiology Residency
University of California, Irvine Irvine, California

1985-1986 Rotational Internship
University of California, San Francisco Valley Medical Center
Fresno, California

Employment History:

- 2005- Attending Physician, Department of Anesthesiology
Harborview Medical Center, Seattle, Washington
- 2003- Attending Physician, Department of Anesthesiology
University of Washington Medical Center, Seattle, Washington
- 1994- Private Practice, President of group
Washington Interventional Spine Associates, Bellevue, Washington
- 1989-1994 Staff Anesthesiologist, Overlake Anesthesiologists, P.S.
Overlake Hospital Medical Center, Bellevue, Washington

Licensure and Certification:

- 1994 Diplomat of the American Board of Pain Medicine
- 1990 Diplomat of the American Board of Anesthesiology
- 1989- Washington State Medical License
- 1986- DEA

Academic Appointments:

- 2005- Clinical Professor, Department of Anesthesiology, University of
Washington, Seattle, Washington
- 2004-2005 Clinical Associate Professor, Department of Anesthesiology, University
of Washington, Seattle, Washington
- 2003-2004 Clinical Assistant Professor, Department of Anesthesiology, University of
Washington, Seattle, Washington

Current Hospital / Surgery Center Appointments:

- 2005- Attending Physician, Harborview Medical Center, Seattle, Washington
- 2003- Attending Physician, University of Washington Medical Center, Seattle,
Washington
- 2002- Attending Physician, Evergreen Hospital Medical Center, Kirkland,
Washington
- 2002 – Attending Physician, Evergreen Surgical Center, Kirkland, Washington
- 2000- Attending Physician, Overlake Surgery Center, Bellevue, Washington

Current Hospital / Surgery Center Appointments, cont:

1989- Attending Physician, Overlake Hospital Medical Center, Bellevue, Washington

Professional Affiliations:

American Academy of Pain Medicine (AAPM)
American Medical Association (AMA)
American Pain Society (APS)
American Society of Anesthesiology (ASA)
American Society of Interventional Pain Physicians (ASIPP)
International Spine Intervention Society (ISIS)
King County Medical Society (KCMS)
North American Spine Society (NASS)
Washington State Medical Society (WSMA)

Honors and Awards:

‘Top Seattle Doctors’ Voted by peers; Seattle Metropolitan Magazine, 2007
‘Top Seattle Doctors’ Voted by peers; Seattle Metropolitan Magazine, 2006
‘Best Doctors in America’ 2005-2006
‘Top Seattle Doctors’ Voted by peers; Seattle Magazine, 2005
‘Top Seattle Doctors’ Voted by peers; Seattle Magazine, 2004
‘Best Doctors in America’ 2003-2004
‘Top Seattle Doctors’ Voted by peers; Seattle Magazine, 2003
‘Top Seattle Doctors’ Voted by peers; Seattle Magazine, 2002

1989 Resident of the Year Department of Anesthesiology
Awarded to the resident with the highest academic achievement in the graduating class. University of California, Irvine, California.
1989 Clinical Excellence Award Department of Anesthesiology
Awarded to the resident displaying the highest degree of clinical skills in the graduating class. University of California, Irvine, California
1989 Chief Resident Department of Anesthesiology
University of California, Irvine, California
1986 Intern of the Year University of California, San Francisco
Valley Medical Center, Fresno, California

Honors and Awards, cont:

1985	Alpha Omega Alpha	University of California, Irvine, California
1981	Phi Beta Kappa	University of California, Berkeley, California

Board Appointments:

2006-	Board of Directors, Secretary, International Spine Intervention Society
2006-	Spine Scientific Advisory Board, UnitedHealthGroup
2005-	Board of Directors, North American Spine Society
2005-	Scientific Advisory Board, Relievent MedSystems, Inc.
2003-	Medical Advisory Board, Spine-Health.com
2003-2006	Board of Directors, Evergreen Surgical Center, Kirkland, Washington
2002-2003	President, Board of Directors, Puget Sound Spine Interest Group
2001-2002	Board of Directors, Puget Sound Spine Interest Group

Directorships:

2005-	Education Council Co-Director North American Spine Society
06/2005	Co-Director: Lumbar Spinal Injection Workshops North American Spine Society, Memphis, TN
10/2004	Co-Director: Annual Meeting Lumbar Spinal Injection Workshops North American Spine Society, Chicago, IL
10/2003	Co-Director: Annual Meeting: Lumbar Spinal Injection Workshops North American Spine Society, San Diego, California
06/2003	Co-Director: Lumbar Spinal Injection Workshops North American Spine Society, Memphis, TN
11/2002	Co-Director: Annual Meeting: Lumbar Spinal Injection Workshops North American Spine Society, Montreal, Canada

Chairmanships:

2007-	Chairman, Audit Committee International Spine Intervention Society
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Chairmanships, cont:

2007	Co-Chairman, F.A.D. Users Group Meeting; Dallas, TX Kyphon
2006-2007	Program Co-Chair, 22 nd Annual Meeting North American Spine Society
2006	Chairman, Cervical Radicular Pain Symposium; 21 st Annual Meeting North American Spine Society
2004-2005	Co-Chairman, Radiofrequency Technique Courses Kimberly-Clark Medical / Baylis Medical
2004-2005	Chairman, Non-operative Coding Committee North American Spine Society
2003-2004	Chairman, Non-operative Coding Committee North American Spine Society

Consulting Positions:

2006-	Consultant	UnitedHealthcare Insurance
2006-	Consultant	Kyphon
2005-	Consultant	Johnson & Johnson, DePuy Biologics
2005-	Consultant	Relievent MedSystems, Inc.
2005- 2006	Consultant	Smith and Nephew
2004-2006	Consultant	Baylis Medical
2002-2006	Consultant	GE-OEC, Medical Imaging Division
2002-2004	Consultant	Johnson & Johnson, Healthcare Division
1993-1994	Consultant	SpaceLabs Medical

Committees:

2006-2007	Committee Member	Executive Committee International Spine Intervention Society
2006-2007	Committee Member	New Technology Sub-committee UnitedHealthcare Insurance

Committees, cont:

2006-2007	Committee Member	NASS Collaborative Guidelines Project International Spine Intervention Society Representative
2006-2007	Committee Member	Audit Committee International Spine Intervention Society
2006-2007	Committee Member	Bylaws Committee International Spine Intervention Society
2006-2007		Back Pain Clinical Improvement Team Puget Sound Health Alliance, Seattle, WA.
2006-2007	Committee Member	Standards Committee International Spine Intervention Society
2006-2007	Committee Member	Interim Performance Measure Task Force North American Spine Society
2006-2007	Committee Member	Program Committee 22 nd Annual Meeting, North American Spine Society
2006-2007	Committee Member	Non-op Coding Committee North American Spine Society
2006-2007	Committee Member	Continuing Medical Education Committee North American Spine Society
2005-2006	Committee Member	Program Committee 21 st Annual Meeting, North American Spine Society
2005-2006	Program Committee	Spring Break Meeting North American Spine Society
2005-2006	Committee Member	Non-op Coding Committee North American Spine Society
2005-2006	Committee Member	Continuing Medical Education Committee North American Spine Society
2004-2005	Committee Chairman	Non-op Coding Committee North American Spine Society
2004-2005	Committee Member	Program Committee 20 th Annual Meeting, North American Spine Society
2004-2005	Committee Member	Ethics Committee North American Spine Society

Committees, cont:

2004-2005	Committee Member	Medical Executive Committee Overlake Surgery Center, Bellevue, Washington
2004-2005	Program Committee	Spring Break Meeting North American Spine Society
2003-2004	Committee Chairman	Non-op Coding Committee North American Spine Society
2003-2004	Committee Member	Ethics Committee North American Spine Society
2003-2004	Committee Member	Research Committee International Spine Intervention Society
2003-2004	Committee Member	Medical Executive Committee Overlake Surgery Center, Bellevue, Washington
2002-2003	Committee Member	Non-op Coding Committee North American Spine Society
2002-2003	Committee Member	Research Committee International Spine Intervention Society
2002-2003	Committee Member	Ethics Committee North American Spine Society
2001-2002	Committee Member	Non-op Coding Committee North American Spine Society
2000-2001	Committee Member	Non-op Coding Committee North American Spine Society

Invited National/International Presentations:

01/2007	Evidence Based Medicine and Interventional Practice. Symposium at the 23 rd Annual Meeting: American Academy of Pain Medicine. New Orleans, LA.
01/2007	Provocation Discography: Current Status and Controversies Department of Orthopedics, University of Crete, Iraklion, Crete, Greece.
01/2007	Cervical Spinal Nerve Injections: Current Status and Controversies Department of Orthopedics, University of Crete, Iraklion, Crete, Greece.

Invited National/International Presentations, cont:

- 09/2006 Complications in Spine Care Management: The Requirement of Accurate Imaging and Interventional Diagnostics. Symposium at the 21st Annual Meeting: North American Spine Society. Seattle, WA.
- 09/2006 The Role of Pre-operative Imaging and Diagnostics in Preventing Surgical Complications. Protect Your Patients (and Yourself): Clinical and Legal Scenarios in Patient Safety. Pre-course at the 21st Annual Meeting: North American Spine Society. Seattle, WA
- 09/2006 Fundamentals in Evidence-Based Medicine for Authors: Searching the Literature, Rating the Evidence and Assessing the Grades of Recommendation for Your Presentations and Publications. Pre-course at the 21st Annual Meeting: North American Spine Society. Seattle, WA
- 09/2006 Symposium Director: Non-operative Management of Cervical Radicular Pain. 21st Annual Meeting: North American Spine Society. Seattle, WA
- 07/2006 The corticosteroid controversy: Is our infatuation with corticosteroids justified? 14th Annual Meeting: International Spine Intervention Society. Salt Lake City, UT
- 07/2006 Complication of Injection, Part 2. Panel Member. 14th Annual Meeting: International Spine Intervention Society. Salt Lake City, UT
- 07/2006 Symposium Director and Moderator: Post-Surgical Neurologic Dysfunction: Pain to Paresthesia to Paralysis: The role of Pain Management. Spine across the Sea: Joint Meeting of the North American Spine Society and the Japanese Spine Research Society. Maui, HI
- 07/2006 Post-Surgical Neurologic Dysfunction: Pain to Paresthesia to Paralysis: The role of Pain Management. Spine across the Sea: Joint Meeting of the North American Spine Society and the Japanese Spine Research Society. Maui, HI
- 05/2006 Complications of Cervical Interlaminar Epidural Steroid Injections, Atlanto-axial and Atlanto-occipital Joint Injections. 25th Annual Meeting: American Pain Society, San Antonio, TX
- 03/2006 Discography in the Diagnosis of Chronic Low Back Pain. 3rd Annual Spring Break Meeting: North American Spine Society, San Diego, CA
- 03/2006 Intradiscal Therapies in the Treatment of Chronic Low Back Pain. 3rd Annual Spring Break Meeting: North American Spine Society, San Diego, CA
- 03/2006 Radiofrequency Neurotomy for Chronic Low Back Pain. 3rd Annual Spring Break Meeting: North American Spine Society, San Diego, CA

Invited National/International Presentations, cont:

- 03/2006 Epidural Steroid Injections. Spinal Intervention Pre-course. 2006 AANS/CNS Section on Disorders of the Spine and Peripheral Nerves, Lake Buena Vista, FL.
- 03/2006 Lumbar Provocation Discography. Spinal Intervention Pre-course. 2006 AANS/CNS Section on Disorders of the Spine and Peripheral Nerves, Lake Buena Vista, FL.
- 03/2006 Provocation Discography in the era of Total Disc Arthroplasty. 2006 AANS/CNS Section on Disorders of the Spine and Peripheral Nerves, Lake Buena Vista, FL.
- 03/2006 Lumbar Discography is Efficacious for Diagnosis and Treatment. David Cahill Memorial Controversies Session: 2006 AANS/CNS Section on Disorders of the Spine and Peripheral Nerves, Lake Buena Vista, FL.
- 09/2005 Moderator: Interventional Spine Care, Scientific Session. 20th Annual Meeting: North American Spine Society, Philadelphia, PA
- 07/2005 Transforaminal versus Interlaminar Injections for Cervical Axial Pain. World Spine II. Rio de Janeiro, Brazil
- 04/2005 Provocation Discography and PDD in the era of Total Disc Arthroplasty. 3rd Annual Spring Break Meeting: North American Spine Society, Bal Harbour, FL.
- 10/2004 Lumbar Radiofrequency Neurotomy: An Evidence-Based Approach to Treatment. 19th Annual Meeting: North American Spine Society. Chicago, IL
- 04/2004 Cervical Injections: Transforaminal vs. Interlaminar vs. Interlaminar with Catheter. 1st Annual Spring Break Meeting, North American Spine Society. Boca Raton, FL
- 11/2003 Thoracic & Lumbar Spine Patho-Anatomy: Diagnosis and Treatment Considerations. Radionics Radiofrequency cadaver course. Irvine, CA.
- 08/2003 Imaging and Provocation Testing for Lumbar Discogenic Pain. World Spine II, Chicago, IL
- 06/2003 Lumbar Provocation Discography: Spinal Injection Workshops North American Spine Society, Memphis, TN
- 03/2003 Minimally Invasive Technologies for Low Back Pain. Annual Meeting: American Medical Society for Sports Medicine, San Diego, CA
- 09/2002 Non-Invasive Diagnosis of Discogenic Low Back Pain. 10th Annual Meeting: International Spine Intervention Society, Orlando, FL
- 02/2002 Basic Cervical Injection Algorithms. 9th Annual Meeting: International Spine Intervention Society, Orlando, FL

Invited National/International Presentations, cont:

- 02/2002 Thoracic Transforaminal Injection Guidelines. 9th Annual Meeting: International Spine Intervention Society, Orlando, FL
- 06/1999 Facet Neurotomies in Failed OMT Treatment. Annual Meeting: Northwest Osteopathic Medical Association, OR.

Poster Presentations:

- 1999 **Baker RM.** Cervical Radiofrequency Neurotomy Outcomes. Cervical Spine Research Society Annual Meeting, Seattle. 1999

Faculty Positions in Continuing Education:

- 2006- Teaching Physical Medicine and Rehabilitation Fellows in the Department of PMR, University of Washington, Seattle, Washington
- 2004- Teaching Neuroradiology Fellows in the Department of Radiology, University of Washington, Seattle, Washington
- 2003- Teaching Pain Medicine Fellows in the Department of Anesthesiology, University of Washington, Seattle, Washington
- 2000- Master Level Instructor, Teaching Faculty
International Spine Intervention Society
- 10/2006 Radiofrequency Cadaveric Workshop. Kimberly Clark Medical / Bayliss Medical
Phoenix, AZ
- 03/2006 Discography Cadaveric Workshop. American Academy of Neurologic Surgeons
Lake Buena Vista, FL
- 10/2005 Radiofrequency Cadaveric Workshop. International Spine Intervention Society
Muenster, Germany.
- 10/2005 Radiofrequency Cadaveric Workshop. Kimberly Clark Medical / Baylis Medical
Phoenix, AZ.
- 06/2005 Discography Cadaveric Workshop. International Spine Intervention Society
Memphis, TN.
- 06/2005 Spinal Injection I Cadaveric Workshop. North American Spine Society
Memphis, TN.
- 06/2005 Spinal Injection II Cadaveric Workshop. North American Spine Society
Memphis, TN.

Faculty Positions in Continuing Education, cont:

- 10/2004 Spinal Injection I Cadaveric Workshop. North American Spine Society
Chicago, IL
- 10/2004 Spinal Injection II Cadaveric Workshop. North American Spine Society
Chicago, IL
- 10/2004 Radiofrequency Cadaveric Workshop. Kimberly Clark Medical
Phoenix, AZ
- 09/2004 Basic Lumbar Injections Cadaveric Workshop. UW Harborview Medical Center
Synthes Spine Forum: "The Aging Spine". Seattle, Washington
- 05/2004 Advanced Cervical Cadaver Workshop. International Spine Intervention Society
New Orleans, LA
- 10/2003 Radiofrequency Cadaveric Workshop. Kimberly-Clark Medical
San Diego, California
- 11/2003 Radiofrequency Cadaveric Workshop, Radionics Medical
Irvine, California
- 10/2003 Spinal Injection I Cadaveric Workshop. North American Spine Society
San Diego, California
- 10/2003 Spinal Injection II Cadaveric Workshop. North American Spine Society
San Diego, California
- 06/2003 Spinal Injection I Cadaveric Workshop. North American Spine Society
Memphis, TN
- 06/2003 Spinal Injection II Cadaveric Workshop. North American Spine Society
Memphis, TN
- 11/2002 Spinal Injection I Cadaveric Workshop. North American Spine Society
Montreal, Canada
- 11/2002 Spinal Injection II Cadaveric Workshop. North American Spine Society
Montreal, Canada
- 04/2002 Interventional Spine Course. Stanford University
Palo Alto, California
- 10/2001 Advanced Cervical Workshop. International Spine Intervention Society
- 05/2001 Phase I Lumbar Workshop. International Spine Intervention Society
- 01/2001 Phase I Lumbar Workshop. International Spine Intervention Society

Faculty Positions in Continuing Education, cont:

10/2000 Advanced Cervical Workshop. International Spine Intervention Society

05/2000 Advanced Cervical Workshop. International Spine Intervention Society

Peer Reviewed Publications:

A. Book Chapters:

Baker R: Implantables: Neurostimulation and Intrathecal Drug Delivery Systems. In Low Back Pain Handbook. Second Edition, Eds; Cole A, Herring S. Hanley and Belfus, 2003, Chapter 18

Baker R: Percutaneous Intradiscal Therapies. In Low Back Pain Handbook. Second Edition, Eds; Cole A, Herring S. Hanley and Belfus, 2003, Chapter 18

B. Book Contributor / Editor:

International Spine Intervention Society: Practice Guidelines-Spinal Diagnostic and Treatment Procedures. ISIS. 2004

Baker R. Contributing Editor. Clarifying Terms: Your Musculoskeletal Dictionary. Alexander, J. 2004; Adler and Giersch

C. Original Research/Case Reports:

Dreyfuss P, **Baker R**, Bogduk N. Comparative effectiveness of cervical transforaminal injections with particulate and non-particulate corticosteroid preparations for cervical radicular pain. Pain Medicine. 2006 May-June; 7(3): 237-42.

Baker R, Dreyfuss P, Mercer S, Bogduk N. Cervical Transforaminal Injection of Corticosteroids into a Radicular Artery: A Possible Mechanism for Spinal Cord Injury. Pain 2003; 103:211-215

D. Letters to the Editor:

Bogduk N, **Baker R**, Dreyfuss P, Mercer S. Transforaminal epidural steroid injections. Pain 2004; 109:527-528

Lieberman R, Dreyfuss P, **Baker R**; Fluoroscopically Guided Interlaminar Cervical Epidural Injections, Arch Phys Med Rehabil 2003; 84:1568

Dreyfuss P, **Baker R**. Radiofrequency facet joint denervation in the treatment of low back pain; a placebo controlled clinical trial to assess efficacy. Spine 2002; 27:566-567

E. Non-Peer Reviewed Papers:

Derby R, **Baker R**, Wright R, Lee CH. The DeKompressor. ISIS Scientific Newsletter 2007 5(5):4-7.

E. Non-Peer Reviewed Papers, cont:

Baker R, Garg V, Bogduk N. Local Anesthetic Primer for the Interventional Pain Specialist. ISIS Scientific Newsletter 2007 5(5):4-7.

Baker R, Bogduk N. Death During Nerve Root Block Raises Safety Questions: CT or Fluoroscopy. Topics in Pain Management March 2004. 19(8): 6-9.

Derby R, **Baker R**, Dreyfuss P, Weinstein S. Cervical Radicular Pain: Transforaminal vs. Interlaminar Steroid Injections. ISIS Scientific Newsletter 2005 5(1):31-37.

Baker R, Dreyfuss P. Curve/CounterCurve: 2004, Cervical Radicular Pain: Transforaminal vs. Interlaminar Steroid Injections, July/August, pp 16-21, SpineLine NASS Publication

Geraci M, **Baker R**, Sasso R. Lumbar zygapophysial joint evaluation and treatment. SpineLine. 2005 6(1):10-17.

Baker, R. Lumbar Provocation Discography. SpineLine. 2005 6(1):34-35.

Baker R. Evaluation and Management Service on the same day as a procedure. SpineLine 2004 5(2): 33-34.

Baker R. Coding Paravertebral Facet Joint Nerve Destruction by Neurolytic Agent. SpineLine 2004 5(5): 33-34.

F. Spine Related Abstracts:

Baker R. Cervical Radiofrequency Neurotomy Outcomes. Cervical Spine Research Society Annual Meeting, Seattle. 1999

G. Published Web Content:

Baker R, Medial Branch Blocks. Spine-Health.com, April 26, 2006

Baker R, Hip Joint Injections for Pain Relief. Spine-Health.com, August 23, 2005

Baker R, Radiofrequency neurotomy for facet and sacroiliac joint pain. Spine-Health.com, December 27, 2004

Baker R, Cervical, thoracic and lumbar facet joint injections. Spine-Health.com, November 12, 2004

Baker R, Costotransverse and costovertebral joint injections. Spine-Health.com, September 24, 2004

G. Published Web Content, cont:

Baker R, Cervical, thoracic and lumbar interlaminar epidural injections. Spine-Health.com, September 10, 2004

Baker R, Hip Joint Injections for Pain Relief. Spine-Health.com, August 23, 2005

Current Research:

Co-Principle Investigator: Functional anesthetic discography (F.A.D.) in the diagnosis of discogenic low back pain.

Co-Principle Investigator: RhGDF-5 Disc treatment for lumbar degenerative disc disease.

A randomized control trial of lumbar radiofrequency neurotomy in the treatment of lumbar zygapophysial joint pain.

Grants Awarded:

\$400,000 International Spine Intervention Society. Grant for Randomized Controlled Trial of Lumbar Medial Branch Nerve Radiofrequency Neurotomy: A Multicenter Trial, 2006

Miscellaneous:

9/2000 Invited Participant: Medtronic “Meeting of the Minds”
San Francisco: “Advances in Intrathecal Drug Delivery”

Invited Local Presentations

- 03/2007 Diagnostic and Therapeutic Cervical Spine Injections. Department of Physical Medicine and Rehabilitation, University of Washington, Seattle, WA.
- 02/2007 Patient Selection for Spine Interventions. Department of Radiology, University of Washington Medical Center, Seattle, WA.
- 11/2006 Is our infatuation with corticosteroids justified? An EBM Case Study
Washington Association of Independent Medical Examiners, Bellevue, WA
- 09/2006 An Evidence Based Medicine Approach to Spinal Injections. UW
Multidisciplinary Pain Center Didactics, University of Washington. Seattle,
Washington
- 02/2006 Complications of Interlaminar Epidural Steroid Injection. University of
Washington, Department of Anesthesiology Grand Rounds.
- 09/2005 Low Back Pain: Recent Insights in Causation and Treatment: Radiofrequency
Neurotomy. Synthes Spine Forum, Seattle, Washington

Invited Local Presentations, cont.

- 04/2005 The Dilemma of Low Back Pain. Grand Rounds, Overlake Hospital Medical Center, Bellevue, Washington
- 04/2005 Update on Interventional Spinal Diagnostics and Therapeutics. Spring Meeting: Washington State Society of Anesthesiologists
- 02/2005 Diagnosis and Treatment of Lumbar Discogenic Pain. UW Multidisciplinary Pain Center Didactics, University of Washington. Seattle, Washington
- 01/2005 Lumbar Provocation Discography. UW Orthopedic/Neurosurgery Combined Grand Rounds. University of Washington. Seattle, Washington
- 10/2004 What to Expect from an Interventionist and When to Order Imaging Studies. UW Orthopedic/Neurosurgery Combined Grand Rounds. University of Washington. Seattle, Washington
- 06/2004 Cervical Injections as an Aid to Chiropractic Management of Neck Pain. Puget Sound Chiropractors, Bellevue, Washington
- 10/2003 Lumbar Interventional Techniques. UW Orthopedic/Neurosurgery Combined Grand Rounds. University of Washington, Seattle, Washington
- 05/2003 Lumbar Spine Injections: General Principles. UW Multidisciplinary Pain Center Didactics. University of Washington, Seattle, Washington
- 05/2003 Minimally Invasive Treatment of Lumbar Discogenic Pain. UW Multidisciplinary Pain Center Didactics. University of Washington, Seattle, Washington
- 02/2001 Practical Pain Management for the Primary Care Physician. Grand Rounds, Overlake Hospital Medical Center. Bellevue, Washington
- 10/2000 Facet Injections: Patient Selection and Technique. UW Multidisciplinary Pain Center Didactics. University of Washington, Seattle, Washington
- 03/1999 Radiofrequency Facet Denervation. UW Multidisciplinary Pain Center Didactics, University of Washington, Seattle, Washington
- 03/1999 New Concepts in Pain Management. Grand Rounds, Evergreen Hospital Medical Center. Kirkland, Washington
- 11/1998 Radiofrequency Facet Denervation. Puget Sound Spine Interest Group. Seattle, Washington
- 01/1996 New Concepts in Pain Management. Grand Rounds, Overlake Hospital Medical Center. Bellevue, Washington