

CURRICULUM VITAE

Daniel S. Bennett, MD, DABPM

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AREAS OF PRINCIPAL INTEREST AND EXPERIENCE:

Interventional Spine / Pain Surgery
Minimally Invasive Spine
Etiology and Control of Chronic Pain
Electrical Neuromodulation
Chemical Neuromodulation
Opioids in Malignant and Non-Malignant Pain
Complex Regional Pain Syndromes
Failed Back Surgical Syndromes

EDUCATION:

Barry University Miami Shores, Florida GPA: 3.68 Cumulative GPA: 4.00 Chemistry	B.S./1985 Biology/Chemistry
University of Miami School of Medicine Miami, Florida GPA: 3.91 Cumulative Honors: <i>Alpha Omega Alpha</i>	M.D./1989

POST-DOCTORAL TRAINING:

Loma Linda University Medical Center Pediatric Internship 6-mos Neonatal Intensive Care	1989 – 1990
University of Colorado Health Sciences Center Anesthesiology Residency	1990 – 1993
University of Colorado Health Sciences Center Interventional Spine/Pain	1993

HONORARY SOCIETY MEMBERSHIPS:

Delta Epsilon Sigma	1984
Alpha Omega Alpha	1989

PROFESSIONAL BOARD STATUS:

National Board of Medical Examiners	1990	Cert# 378895	7/90
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SPECIALTY BOARD STATUS:

American Board of Anesthesiology	1994	Cert# 24307	9/94
American Board of Pain Medicine	1997	Cert# 18197	2/97

OTHER CERTIFICATIONS:

American Academy of Medical Review Officers	2001	Cert# 010506237	5/01
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LICENSURE:

State of Colorado	1991	Cert# 31118	
State of New Jersey	2012	Cert# 25MA09186000	

ACADEMIC APPOINTMENTS:

University of Colorado Health Sciences Center Assistant Clinical Professor Anesthesiology/Pain Medicine	1995 – 1999
Visiting Professor, Queen Elizabeth The Queen Mother Hospital Margate, England	2000 – 2001
Senior Editor, Spine Universe	2004 – present
Visiting Professor, Surgery/Interventional Pain Medicine St. Vincent's University Hospital, University College Dublin, Ireland	2006 – 2009

HOSPITAL APPOINTMENTS:

Northwest Regional ASC/Westminster, CO	2005 – present
HealthONE/Presbyterian St. Luke's Medical Center; Denver, CO	2006 – present
HealthONE/Midtown ASC; Denver, CO	2011 – present
Exempla/Lutheran Medical Center; Wheat Ridge, CO	2013 – present

ADMINISTRATIVE APPOINTMENTS:

Medical Director, Advanced Cardiac Life Support Training Nurses PRN; Denver, CO	1991 – 1994
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Pharmacy and Therapeutics Committee Centura/St. Anthony Hospitals; Denver, CO	1995 – 2002
Chair, Pain Management Committee Centura/St. Anthony Hospitals; Denver, CO	1997 – 1998
Founder, The National Pain Foundation (Founder) Chairman, Board of Directors	1999 – present 1999 – 2002 2013 – present
Co-Chairman, National Pain Awareness American Academy of Pain Medicine and The National Pain Foundation	2002 – 2003
Director, Pain Medicine – Medical Executive Committee HealthOne / Lakewood Surgical Center	2005 – 2010

FUNCTIONAL SOCIETY MEMBERSHIPS/APPOINTMENTS:

American Academy of Pain Medicine Chair, Public Information and Education Committee	2001 – 2003
Section Editor, Clinical Case Studies, <i>Pain Medicine</i>	2001 – 2003
Member, Nominations Committee	2002 – 2004
Member, Training Review Committee	2005 – 2009
Planning Committee	2004 – 2006
American Board of Pain Medicine Chairman, Task force on Interventional Spine / Pain Surgery Fellowship Training	2009 – 2011
American Neuromodulation Society Board of Directors	2000 – 2004
Chair, Functional Outcomes Committee	2000 – 2001
New Technologies Committee	1999 – 2001
Chair, Recruitment Committee	2001 – 2003
American Pain Society	
Denver Medical Society Delegate - Colorado Medical Society	1996 – 1999
Alternate Delegate – Colorado Medical Society	2001 – 2008
International Association for the Study of Pain	
International Neuromodulation Society	
Society for Advanced Spinal Intervention Treasurer, Board of Directors	2012 – 2013
Secretary, Board of Directors	2013 – present

North American Spine Society

Western Pain Society

Board of Directors

Scientific Program Chair

2007 – present

2009 – 2010

Association of Clinical Research Professionals

2008 – present

ACADEMIC WORKGROUPS:

Breakthrough Pain Guidelines Task Force; *Thomas Jefferson University* 2004
Philadelphia, Pennsylvania

RESEARCH EXPERIENCE:

- 1992 The Safety and Efficacy of Desflurane during General Anesthesia in Surgical Patients; Anaquest Pharmaceuticals
- 1992 A Phase III, Multicenter, Randomized, Open-Label Study to Compare the Safety and Tolerability of Sevoflurane versus Isoflurane Administered with Nitrous Oxide and Oxygen in ASA Class I, II and III Patients; Maruishi Pharmaceuticals Co.
- 1993 PCA Use of Toradol for Post-Operative Pain Management; Slover, et al.
- 1993 A Phase III, Multi-Center, Open-Label, Randomized, Comparative Study Evaluating the Effect of Sevoflurane versus Propofol in the Maintenance of Anesthesia in Adult ASA Class I and II Outpatients; Abbott Laboratories
- 1996 Principal Investigator (Denver); A Multi-Center, Randomized, Double-Blind, Parallel Group, Placebo and Active Controlled Study of the Safety and Efficacy of Buprenorphine TDS (transdermal Delivery System) 12.5, 25, and 50 ug/hr Applied Every Three Days for Sixty Days vs IR 5mg Oxycodone/325mg Acetamenophen Tablets Q6H PRN vs. Placebo in Patients with Chronic Pain Due to Osteoarthritis; Purdue Pharma, LP
- 1996 Principal Investigator (Denver); A Long-term, Open-Label, Clinical Use Study of Buprenorphine TDS (Transdermal Delivery System) 12.5, 25, and 50 ug/hr Applied every 72 Hours for the Management of Ongoing Pain Syndromes; Purdue Pharma, LP
- 1996 Principal Invesigator (Denver); A Multi-Center Phase II/III, Placebo-Controlled Study of \ SNX-111 Administered Intrathecally to Patients with Chronic Non-Malignant Pain; Medtronic, Inc. and Neurex Corporation (Elan Pharmaceuticals)
- 1997 Principal Investigator (Denver); An Open-Label, Long-Term Safety and Efficacy Study of SNX-111 Administered Intrathecally to Patients Suffering from Chronic Pain Using the Synchromed Infusion System; Medtronic, Inc. and Neurex Corporation (Elan Pharmaceuticals)

- 1998 Bennett, DS (Principal); Hagen, JS; Disorbio, JM
High Frequency Spinal Cord Stimulation in CRPS I: A Prospective Study of Efficacy and Functional Improvement; Prism Healthcare Foundation
- 2004 Bennett, DS (Principal); Assessment of Prevalence and Characteristics of Breakthrough Pain in Patients with Chronic Non-Cancer Pain; Sagemed, Inc.
- 2004 Bennett, DS (Principal/Denver); ELN92045-501 – “An Open-Label, Long-Term, Multi-Center, Intrathecal ziconotide (Prialt) Effectiveness and Safety Trial (ZEST) in Patients with Chronic Severe Pain”; Elan Pharmaceuticals, Inc.
- 2004 Principal Investigator (Denver); HMP4005 – “A Randomized, Multiple-dose, Double-Blind, Placebo-controlled, Parallel-group Study Comparing the Safety and Efficacy of Hydromorphone HCl Extended-release and Duragesic® in Subjects with Non-malignant pain; Purdue Pharma LP
- 2006 Principal Investigator (Denver); “Precision Implantable Stimulation System for Migraine Headache Phase II/III Study”; Advanced Bionics, Inc.; Valencia, CA
- 2006 Bennett, DS (Principal Investigator), Hagen, JE; “Occipital Nerve Stimulation utilizing a Dual-Octapolar Electrode Array Paddle with Multiple Independent Constant Current Architecture in the Treatment of Occipital Neuralgia with Intractable Headache”; Prism Healthcare Foundation; Denver, CO
- 2006 Bennett, DS Co-Principal Investigator, Passik, SD Co-Principal Investigator, Hagen, JS, Jass, C; “Chemical Coping Inventory”, Pilot Study; Prism Healthcare Foundation; Denver, CO
- 2007 Principal Investigator; “Supraorbital and Infraorbital Nerve Stimulation in the Treatment of Trigeminal Neuralgia: A Pilot Study of Safety and Efficacy”; Prism Healthcare Foundation; Denver, CO
- 2007 Principal Investigator, “Supraorbital and Infraorbital Nerve Stimulation in the Treatment of Trigeminal Neuralgia: Study of a New Endoscopic Technique for Lead Placement”; Prism Healthcare Foundation; Denver, CO
- 2008 Principal Investigator; “Non-instrumented Lumbar Facet Arthrodesis in the Management of Back Pain of Lumbar Facet Origin: A Pilot Study of Technique, Safety and Efficacy”; Prism Healthcare Foundation; Denver, CO
- 2008 – present
- Medical Monitor, “Evaluation of Safety and Effectiveness OsseoFix Spinal Fracture Reduction System in Treating Spinal Compression Fracture” Protocol 08-02-A (510k FDA Study) sponsored by Alphatec Spine; Carlsbad, CA

ACADEMIC LECTURES/PRESENTATIONS/CONFERENCES:

United States:

- Invited Lecture; "Fibromyalgia, Myofascial Pain and Sleep Disorder" April 1995
G.D. Searle Dinner Symposium; Denver, Colorado
- Invited Lecture; "Acute and Chronic Pain Management in the '90's" July 1995
for Rocky Mountain Pain Nurses Association;
Denver, Colorado
- Invited Lecture; "It's a Pain in the Back, Legs, Arms: Fibromyalgia" October 1996
for American Society of Pain Management Nurses;
Nashville, Tennessee
- Invited Lecture; "Change and the Future of Chronic Non-Malignant Pain Management" for National Convention for the American Society of Pain Management Nurses; Nashville, Tennessee October 1996
- Invited Lecture; "State of the Art: Acute Pain Management" September 1997
National Convention of Post Anesthesia Nurses;
Denver, Colorado
- Television Interview; "SNX-111" on CBS *This Morning* June 1997
- Invited Member; "SNX-111 Phase II/III Protocol Research Panel" June 1997
for Neurex Corporation at Therapeutic Developments
in Chronic Pain: An International Conference;
Washington, DC *sponsored by NMHCC Biotechnology Trends in Neuroscience Symposia*
- Invited Lecture; "Narcotics and Non-Malignant Pain: Clinical Practice Guidelines and Algorithms of Care", Rocky Mountain Education Foundation; Denver, Colorado September 1997
- Invited Faculty; "State of the Art: Pain Medicine in the 90's" October 1997
Clinical Day Symposium *sponsored by Rocky Mountain Educational Foundation*; Grand Junction, Colorado
- Faculty; Symposium on the Application of Advanced Technology in Complex Pain Syndromes with Cadaveric Workshop; June 1998
Medical Education and Research Institute; Memphis, Tennessee
Moderator, "SCS in Complex Regional Pain"
- Faculty; Symposium on the Application of Advanced Technology in Complex Pain Syndromes with Cadaveric Workshop; October 1998
Medical Education and Research Institute; Memphis, Tennessee

- Moderator, "Neuropathic Pain and the Application of SCS"
Moderator, "SCS in Complex Pain Syndromes"
- Invited Lecture; "Advanced Modalities of Treatment – Radiofrequency Neurolysis and Neuromodulation in Cervical/Upper Extremity Pain Syndromes" at Symposia for Surgical vs. Nonsurgical Approaches to Cervical Spine Dysfunction SunSpectrum Rehabilitation Centers; Thornton, CO December 1998
- Invited Speaker; "Applications of Neuromodulation Modalities in the Treatment of Complex Pain Syndromes: Spinal Cord Stimulation and Spinal Drug Delivery Systems" at HealthSouth Nursing Grand Rounds; Golden, Colorado January 1999
- Faculty; Interventional Pain Management Techniques Symposium and Cadaver Workshop, *sponsored by Clinical Education Services*; New York, New York July 1999
Invited Speaker; "Bilateral Spinal Cord Stimulation in Complex Pain"
- Dinner Speaker; "New Technologies in the Application of Electrical Neuromodulation: Lumbar and Sacral Nerve Root Stimulation", *sponsored by Krieger Medical, Inc. and Advanced Neuromodulation Systems (ANS)* July 1999
- Invited Lecture; "Interventional Pain Medicine Case Studies: A Rationale Approach" at Interventional Pain Management Techniques Symposium; Denver, Colorado September 1999
- Faculty; Symposium on the Application of Advanced Technology in Complex Pain Syndromes and Cadaver Workshop; Medical Education Research Institute; Memphis, TN March 2000
Moderator, "Neuropathic Pain and the Application of SCS"
Moderator, "SCS in Complex Regional Pain Syndromes"
- Invited Speaker; "Application of SCS for Failed Back Surgical Syndrome: Patient Selection, Operative Techniques, and Outcomes" at Dinner Symposium; *sponsored by University of Virginia* June 2000
- Faculty; Cadaveric Workshop, "Sympathetic Blockade of Cervical, Thoracic and Lumbar Plexuses" at 9th World Congress: The Pain Clinic *sponsored by World Institute of Pain*; San Francisco, California July 2000
- Invited Speaker; "CRPS: A Multicenter Study for Efficacy" at Pain and Neuromodulation: The New Millennium *sponsored by* July 2000

World Congress International and American Neuromodulation Societies; San Francisco, California

- Session Chair; Intrathecal Therapies for Pain Control at The 9th World Congress: The Pain Clinic; San Francisco, California July 2000
- Invited Lecture; "Pharmacology of Intrathecally Applied Pharmacotherapeutics" at The 9th World Congress: The Pain Clinic; San Francisco, California July 2000
- Session Chair; Low Back Pain at The 9th World Congress: The Pain Clinic; San Francisco, California July 2000
- Invited Lecture; "SCS for Failed Back Surgery Syndrome" at The 9th World Congress: The Pain Clinic; San Francisco, California July 2000
- Invited Panel Member, "SCS – Selecting the Best Treatment for Patients" At 5th Annual Congress of The American Neuromodulation Society Orlando, Florida March 2001
- Chair, "Pain – Drug Infusion Neuromodulation Symposium" At 5th Annual Congress of The American Neuromodulation Society Orlando, Florida March 2001
- Invited Speaker, "Outcomes Research and National Database Development" At 5th Annual Congress of The American Neuromodulation Society Orlando, Florida March 2001
- Invited Lecturer, "Physiology of SCS for Pain"
"SCS in FBSS"
"SCS: Patient Selection, Techniques, Expectations"
"Diagnostic Spinal Injections: Targeted Spinal Diagnostics"
"Complex Pain and Neuromodulation: A Case Study Approach"
11th Annual Bonica Pain Conference; Kona, Hawaii March 2001
- Faculty; Symposium on the Application of Advanced Technology in Complex Pain Syndromes and Cadaver Workshop; Medical Education Research Institute; Memphis, TN August 2001
Moderator, "Neuropathic Pain and the Application of SCS"
Moderator, "SCS in Complex Regional Pain Syndromes"
- Invited Speaker; "Physiology of Pain: Acute to Chronic" at *Colorado Neurological Society* October 2001
- Invited Speaker, "Pain Assessment, Balanced Analgesia and Quality of" November 2001

Life” for University of Wisconsin Medical School CME
Symposia “New Strategies and Commitments for Effective Pain
Management. Houston, TX and Los Angeles, CA

- Invited Speaker; “Strategies for Diagnosis and Management of Chronic Pain” January 2002
At *Colorado Academy of Physician’s Assistants Annual Meeting*;
Copper Mountain, Colorado
- Invited Speaker, “Intractable Pain Initiative” at Arkansas State Symposium on February 2002
Intractable Pain; Ft. Smith, AR
- Faculty, Symposium on Pain Psychology and Clinical Applications, February 2002
At *American Academy of Pain Medicine Annual Meeting*; San Francisco, CA
- Invited Speaker, “Pain Perception and Clinical Decision Making” at February 2002
American Academy of Pain Medicine Annual Meeting; San Francisco, CA
- Invited Speaker, “Newer antiseizure medications and Neuropathic Pain:
A Balanced Analgesia Approach” At *Alaska Spine Institute*, April 2002
Anchorage, AK
- Invited Speaker, “Looking into the Crystal Ball – predicting future trends
in Global Pain Management” August 2002
At European Satellite Symposia “Tomorrows World –
The Future of Pain Management around the Globe” at *International
Association for the Study of Pain (IASP) World Congress*; San Diego, CA
- Chairman, UK Symposia on Opioids for Chronic Pain at *International* August 2002
Association for the Study of Pain (IASP) World Congress; San Diego, CA
- Invited Lecturer, “Electrical Neuromodulation: New Trends for Pain Control” October 2002
Oregon Health Sciences University, Portland, Oregon
- Invited Faculty Leader, “Advancing the Chronic Pain Paradigm” at November 2002
Chronic Pain: Advancing the Paradigm Conference
Ft. Lauderdale, Florida
- Invited Faculty, “Neuropathic Pain: The Treatment Continuum” for Clinical February 2003
Controversies and Strategies in the Treatment of Neuropathic Pain at
The American Academy of Pain Medicine Annual Conference;
New Orleans, Louisiana
- Invited Faculty, “Rational Use of Opioids in Pain Management” March 2003
for 2003 Pain Management Update at Shawnee Mission Medical Center;
Kansas City, Kansas
- Invited Faculty, “Recognition and Treatment of Common Pain Syndromes I & II” April 2003
for *Clinical Medicine Issues in Personal Injury Litigation Seminar* for

The Colorado Trial Lawyers Association; Denver, Colorado

- Invited Lecture, "Patient Selection for Neuromodulation Modalities" during *Practical Workshop on Spinal Cord Stimulation at University of Tennessee*, Memphis, TN June 2003
- Invited Faculty Moderator, "Neuromodulation: Mechanisms of Action" Grand Rounds Presentation at *Texas Tech University*, Lubbock, TX June 2003
- Invited Lecture, "New Trends in Electrical Neuromodulation" *Colorado Pain Society 1st Annual Symposium*, "New Directions in Pain Medicine", Denver, CO July 2003
- Grand Rounds, "Management of Breakthrough Pain" at Via Christi Riverside Hospital, Wichita, KS August 2003
- Grand Rounds, "Pelvic Pain: Directions for Treatment" *University of Colorado Health Sciences Center/OB-GYN*, Denver, CO September 2003
- Invited Lecturer, "Pain Medicine: Physiology, Balanced Analgesia, and the Pain Medicine Paradigm" For *Colorado Association of Physician Assistants* Denver, CO September 2003
- Grand Rounds, "Balanced Analgesia: Rationale for Treatment of Chronic Pain" *Baylor University School of Medicine*, Houston, TX September 2003
- Invited Lecture, "Pain Management of the Hospitalized Patient: Physiology and Strategies for Treatment" at *Optimal Management of the Hospitalized Patient: "Big Easy Fall Symposium"* for Ochsner Clinic Foundation, New Orleans, LA October 2003
- Invited Lecture, "Retrograde Access to the Sacral Nerve Roots" at *Third Annual Congress of The International Pelvic Neuromodulation Society*, San Diego, CA January 2004
- Invited Lecture, "SCS for treatment of CRPS" at *North American Neuromodulation Congress*, Orlando, FL March 2004
- Invited Lecture, "The Management of Chronic Back Pain" at *Pain Management Stand Down*, Continuing Medical Education Symposia, *Management of Acute And Chronic Pain* for Department of Defense (Navy), Bremerton, WA March 2004
- Chair, Chronic and Breakthrough Pain Section, Medical Education Forum at *Clinical Experts in Pain*, Sponsored by Medicom, Miami, FL November 2004
- Invited Lecture, "Spinal Cord Stimulation for Critical Limb Ischemia" at *Colorado Limb Preservation Society*, Denver, CO December 2004

- Invited Lecture, "Intrathecal Medications: The Old and The New for Chronic Pain" February 2005
Alaskan Spine Institute, Anchorage, AK
- Course Director, "Cadaveric Workshop in Techniques of Spinal Cord Stimulator and Nerve Root Stimulator Implantation", at *Arizona State University, Tempe, AZ* June 2005
- Invited Faculty, Entry Level Cadaveric Workshop for Spinal Cord Stimulation June 2005
At Louisiana State University, New Orleans, LA
- Invited Lecture, "Complex Regional Pain Syndrome and Spinal Cord Stimulation: Advances in Therapy", at *Desert Pain Institute, Phoenix, AZ* June 2005
- Invited Lecture, "Neuromodulation in the Treatment of Axial and Extremity Pain" at *Current Techniques in the Treatment of Cranial and Spinal Disorders, Boulder, CO* October 2005
- Chairman, "Electrical Neuromodulation for the Central Nervous System and Related Structures", a Joint Symposium of the American Neuromodulation Society and the American Academy of Pain Medicine at the *22nd Annual Meeting of the American Academy of Pain Medicine, San Diego, CA* February 2006
- Invited Lecture, "CRPS and SCS", at the *22nd Annual Meeting of the American Academy of Pain Medicine, San Diego, CA* February 2006
- Invited Lecture, "What you can do to create an interdisciplinary pain clinic" at the *22nd Meeting of the American Academy of Pain Medicine, San Diego, CA* February 2006
- Chair, "Complex Regional Pain Syndrome: New Directions in Treatment" at the *22nd Meeting of the American Academy of Pain Medicine, San Diego, CA* February 2006
- Invited Lecture, "Neuromodulation in the Treatment of CRPS" at the *22nd Annual Academy of Pain Medicine, San Diego, CA* February 2006
- Invited Lecture, "Breakthrough Pain: Etiology and Pathophysiology" at *Johns Hopkins American Conference on Pain Medicine, New York, NY* April 2006
- Invited Lecture, "Neuromodulation in the Treatment of Peripheral Neuropathies and Neuropathic Pain Syndromes" at the *Neuropathic Pain Society Meeting, Denver, CO* April 2006
- Invited Lecture, "Pain Management, Chronic on Acute, New Technologies" at the *CMSA Fall Conference, Denver CO* October 2006
- Invited Lecture, "Pharmacological Management of Persistent Breakthrough Pain" at *Persistent and Breakthrough Pain Management Conference, Sponsored by John Hopkins University, Chicago, IL* October 2006

Invited Lecture, " <u>Neuromodulation for Neuropathic Pain</u> " at the 3 rd Annual Boulder Neurosurgical Associates Symposium, Denver, CO	November 2006
Invited Lecture, " <u>Electrical Neuromodulation and the Treatment of Neuropathic Pain</u> " at the CMSA Meeting, Denver, CO	November 2006
Invited Lecture, " <u>Neuromodulation in the Treatment of Extremity Pain</u> " at the <i>Neuropathic Pain Society Meeting</i> , Denver, CO	April 2007
Invited Lecture, " <u>CRPS and Medical Therapies</u> " at <i>John Hopkins American Conference on Pain Medicine</i> , New York, NY	June 2007
Invited Lecture, " <u>Newer Trends in Neuromodulation</u> " – Grand Rounds Presentation at <i>St. Luke's-Roosevelt Medical Center</i> , New York, NY	October 2007
Course Director, " <u>Electrical Neuromodulation Cadaveric Workshop</u> " at <i>Montifiore Medical Center (NYU)</i> , New York, NY	October 2007
Invited Lecture, " <u>Occipital, Somatosensory Cortex and Other Stimulation for Neuropathic Pain</u> " at the 4 th Annual Boulder Neurosurgical Associates Symposium, Boulder, CO	November 2007
Course Director, " <u>Facet Arthrodesis via MIS Approach</u> ", at Northwestern University Chicago, IL	April 2008
Invited Lecture, " <u>Neuromodulation: Present Technologies and Future Directions</u> " at University of Arizona, Phoenix, AZ	April 2008
Course Director, " <u>Facet Arthrodesis via MIS Approach</u> " at University of California at Los Angeles, Los Angeles, CA	May 2008
Invited Lecture, " <u>Motor Cortex Stimulation</u> " at the 5 th Annual Boulder Neurosurgical Associates Symposium, Boulder CO	May 2008
Invited Paper, " <u>Facet Arthrodesis utilizing a Morse Tapered Cortical Graft via an MIS Approach: Retrospective Study of 81 patients</u> " at the 1 st International Minimally Invasive Spine Congress, Honolulu, HI	June 2008
Invited Lecture, Neurosurgical Grand Rounds, " <u>Newer Trends in Electrical Neuromodulation</u> " at Columbia University, New York, NY	June 2008
Invited Lecture, " <u>Application of Electrical Neuromodulation for Treatment of Chronic Pain</u> " at the American Society of Pain Management Nurses 18 th Annual National Conference, Phoenix, AZ	September 2008
Course Director, " <u>Facet Arthrodesis via MIS Approach</u> " and Cadaveric Lab University of Virginia, Richmond, VA	September 2008

Course Director, " <u>Facet Arthrodesis via MIS Approach</u> " and Cadaveric Lab at Montifiore Medical Center, New Brunswick, NJ	September 2008
Course Director, " <u>Facet Arthrodesis via MIS Approach</u> " and Cadaveric Lab University of California, San Francisco; San Francisco, CA	October 2008
Course Director, " <u>Facet Arthrodesis via MIS Approach</u> " and Cadaveric Lab Rush Medical Center, Chicago, IL	October 2008
Course Director, " <u>Facet Arthrodesis via MIS Approach</u> " and Cadaveric Lab Tulane University, New Orleans, LA	October 2008
Course Director, " <u>Facet Arthrodesis via MIS Approach</u> " and Cadaveric Lab University of California, San Francisco; San Francisco, CA	February 2009
Course Director, " <u>Facet Arthrodesis via MIS Approach</u> " and Cadaveric Lab Duke University Medical Center, Durham, NC	March 2009
Invited Lecture, " <u>Advancements in Technology – Multiple Independent Current Control in SCS</u> ", Pain Medicine Grand Rounds; New York University, New York, NY	August 2009
Invited Lecture, Anesthesia Grand Rounds, " <u>Interventional Spine: Future Directions</u> " New York University, New York, NY	August 2010
Invited Lecture, AANS/CNS Joint Section on Pain, " <u>Ulterior Stimulation: Where are we going in Neuromodulation</u> " at <i>American Academy of Neurological Surgeons Annual Scientific Congress</i> ; Denver, CO	April 2011
Invited Lecture, " <u>Non-Instrumented Facet Arthrodesis</u> "; Society for Pain Practice Management; Kansas City, MO;	November 2011
Faculty, Cadaveric Training; Society for Pain Practice Management; Kansas City, MO " <u>Non-Instrumented Facet Arthrodesis via MIS Approach</u> " " <u>SI Joint Radiofrequency Lesioning</u> "	November 2011
Invited Speaker, " <u>Quantitative Urine Drug Testing in Chronic Pain</u> " with panel Discussion at <i>Pain Week</i>	September 2012

International:

Faculty; Symposium on the Application of Advanced Technologies in Complex Pain Syndromes and Cadaveric Workshop; Swiss Pain Institute; Reinfelden, Switzerland Moderator, " <u>Neuropathic Pain</u> " Moderator, " <u>SCS in Complex Regional Pain Syndrome</u> "	September 1998
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- First Paper Presentation; "Spinal Cord Stimulation in Complex Regional Pain Syndrome - Experience from 1995-1998" in Symposium on Complex Pain; International Neuromodulation Society Congress; Lucerne, Switzerland September 1998
- Faculty; Interventional Pain and Cadaver Workshop
Hellenic Pain Society; Athens, Greece
Invited Lecture, "Spinal Cord Stimulation: Patient Selection, Techniques, and Expectations"
Invited Lecture; "Dual Octrode Stimulation in Complex Regional Pain Syndromes" October 1998
- Faculty; Interventional Pain and Cadaver Workshop
Hellenic Pain Society; Athens, Greece
Invited Lecture, "SCS for Failed Back Surgical Syndrome"
Invited Lecture, "Dual Octrode Stimulation for Complex Regional Pain Syndrome" July 1999
- Invited Lecture; "SCS in Complex Regional Pain Syndromes: Patient Selection and Results of Advanced Technologies in SCS" at Le Tecniche di Neurostimolazione nelle Sindromi Dolorose Complesse, *sponsored by istituto ricerca e formazione in scienze algologiche (ISAL)*; Rimini, Italy July 1999
- Faculty; 5th Annual Advanced International Pain Conference and Cadaver Workshop; Budapest, Hungary September 2000
- Invited Lecture; "Physiology of Spinal Cord Stimulation" at 5th Annual Advanced International Pain Conference and Cadaver Workshop; Budapest, Hungary September 2000
- Chair; Neuromodulation for Complex Pain: Designing Therapies for Optimized Functional Outcomes;
London, England *Sponsored by Algotec, Ltd.* October 2000
- Invited Faculty; "Advanced Complex Pain Medicine: A Case Study Approach"
British Pain Society, York University, York, England March 2001
- Invited Lecturer; "Physiology of Pain and SCS"
Birmingham Symposium on Pain Medicine; Birmingham, England March 2001
- Chair, "Symposium on Advanced Applications in Pain Medicine"
St. Thomas Hospital; London, England March 2001
- Invited Lecture, "Opioids in Non-Malignant Pain: Rheumatology"
EULAR Congress; Prague, Czechoslovakia June 2001
- Invited Lecturer; "Cultures Issues and the Legalities of Prescribing Opioids" June 2001

in the US”; International Consensus Symposia on the Use of Opioids
in Pain; Istanbul, Turkey

Symposia Member, International Consensus Symposia on the Use of Opioids in Pain; Istanbul, Turkey	June 2001
Invited Lecturer; “ <u>Opiophobia and the Under-treatment of Pain</u> ” World Institute of Pain Congress; Istanbul, Turkey	June 2001
Chair, “ <u>Advanced Symposia: Neuromodulation in the New Millennium</u> ” World Institute of Pain Congress; Advanced Neuromodulation Systems Symposia; Istanbul, Turkey	June 2001
Lecturer, “ <u>Advanced Electrode Configurations in the Management of Complex Central and Peripheral Pain Syndromes</u> ”; Advanced Neuromodulation Systems Symposia; Istanbul, Turkey	June 2001
Invited Panelist, Webcast, “ <u>Opiophobia and the Under-Treatment of Pain</u> ” Sponsored by Janssen-Cilag	June 2001
Invited Lecturer, “ <u>Balanced Analgesia and the Titration of Long Acting and Short Acting Opioids for Non-Malignant Pain</u> ”, 30.Kongress der Deutschen Gesellschaft fur Rheumatologie; Leipzig, Germany	September 2001
Invited Lecturer, “ <u>Patient Education and Technology in the New Millennium</u> ” 6 th Annual Budapest Conference; World Institute of Pain; Budapest, Hungary	September 2001
Invited Lecturer, “ <u>Spinal Cord Stimulation: Overview and Indications</u> ” 6 th Annual Budapest Conference; World Institute of Pain; Budapest, Hungary	September 2001
Invited Lecturer, “ <u>Concept of Balanced Analgesia and Use of Opioids in Malignant and Non-Malignant Pain</u> ” at 23 rd Annual Japanese Pain Society Meeting, Tokyo, Japan	December 2001
Grand Rounds, “ <u>Fentanyl Pharmacology and Use for Chronic Malignant and Non-Malignant Pain Syndromes</u> ” at <i>University of Tokyo</i> , Tokyo, Japan	December 2001
Invited Lecturer, “ <u>Pharmacokinetics and Pharmacodynamics of Fentanyl Citrate for Breakthrough Pain</u> ” at <i>European Association for Palliative Care Research Congress</i> ; Lyon, France	May 2002
Panel Presentation, “ <u>Strategies for Use of Opioids in Palliative Care</u> ” at <i>European Association for Palliative Care Research Congress</i> ; Lyon, France	May 2002
Invited Lecturer, “ <u>Balanced Analgesia: Strategies for Management of Pain of Rheumatologic Origins</u> ” at 3 rd Annual European Congress of Rheumatology (<i>EULAR</i>); Stockholm, Sweden	June 2002

- Invited Lecturer, "New Innovations in Electrical Neuromodulation" at
7th Annual World Institute of Pain Budapest Conference, Budapest, Hungary September 2002
- Faculty, Cadaver Workshop, "Thoracic SCS", "Cervical SCS", "Advanced Spinal Injections",
7th Annual World Institute of Pain Budapest Conference
Budapest, Hungary September 2002
- Invited Lecturer, "Treatment for Episodic/Breakthrough Non-Cancer Pain"
At European Association of Palliative Care (EAPC),
The Hague, The Netherlands April 2003
- Invited Lecturer, "Neuromodulation and Chronic Pain", *Irish Pain Society*,
3rd Annual Scientific Meeting, Dublin, Ireland UK October 2003
- Grand Rounds, "Transmucosal Fentanyl for Cancer Pain: A Case Study Approach"
*The Royal North Shore Hospital, The University of Sydney, Pain Management
And Research Centre*, Sydney, Australia December 2003
- Invited Lecture, "Physiology of Pain"
Irish Pain Society, Dublin, Ireland May 2004
- Invited Lecture, "Breakthrough Pain: Treatment Rationale with Opioids,
Balanced Analgesia and Opioid Trial", *Irish Pain Society*, Dublin, Ireland October 2004
- Chair, "Pan Pacific Symposium on Electrical Neuromodulation of the Spinal Cord
And Related Structures for the Control of Chronic Pain". *Pre-Symposium
Before the International Association for the Study of Pain Congress*.
Sydney, Australia August 2005
- Invited Lecture, "SCS for CRPS", *Pre-Symposium Before the International Association
for the Study of Pain Congress*. Sydney, Australia August 2005
- Invited Lecture, "SCS: A Case Study Approach", *Pre-Symposium Before the
International Association for the Study of Pain Congress*. Sydney, Australia August 2005
- Invited Lectures, "Radiofrequency in the treatment of Posterior Column
Disease" and
"Radiofrequency Sympathectomy", *Neurosurgical Grand Rounds*,
Hospital Prof. Edmundo Vasconcelos, São Paulo, Brazil October 2005
- Invited Lecture, "Radiofrequency Sympathectomy for Hyperhidrosis" at *Clinical
Meeting of the Hospital Nove de Julho*, São Paulo, Brazil October 2005
- Invited Lecture, "Radiofrequency for Cervical and Lumbar Facet Arthropathies"
at *1st Vertebral Spine Forum of the Hospital Professor Edmundo Vasconcelos*,
São Paulo, Brazil October 2005

- Grand Rounds Presentation, "Electrical Neuromodulation: New Techniques and Frontiers", at St. Vincent's University Hospital, University College, Dublin, Ireland June 2006
- Grand Rounds Presentation, "Occipital Nerve Stimulation: History, Mechanisms, And Surgical Techniques of Implantation" at Irish Society of Physicians and Surgeons, Dublin, Ireland March 2007
- Faculty, Cadaveric Workshop, "Osseo-Fix Hands-On Cadaver Course" at University of Wein, Vienna Austria March 2009
- Invited Faculty and Lecturer; Grand Rounds Presentation, "Neuromodulation Today" at The Australian School of Advanced Medicine; Sydney, Australia May 2010
- Faculty, Invited Lecturer, Royal Australasian College of Surgeon's Annual Scientific Meeting, Perth, Australia May 2010
"Neurostimulation Recent Developments"
"Pitfalls and Complications of Stimulation"
"Sacral Stimulation in the U.S."
"Cost Effectiveness of Neuromodulation"
"CRPS, the U.S. Experience"
- Invited Lecturer, Australian and New Zealand College of Anaesthetists May 2012
Michael J. Cousin's Plenary Lecture
"Opiophobia, Regulation and Risk Management – Developments in the USA – A Cautionary Tale"
- Invited Lecturer and Faculty; Australian and New Zealand College of Anaesthetists, Faculty of Pain Medicine Annual Meeting; Perth, Australia May 2012
"The Role of Opioids in Long Term Pain Management"
"Recent Advances in Neuromodulation"
"Neuromodulation Complications: Spinal Cord Stimulation and Peripheral Nerve Stimulation Trouble Shooting"
"Different Strokes for Different Folks – Outcomes in Interventional Pain Medicine"

PUBLICATIONS:

- Bennett, DS; Alo, K; Oakley, J; Feler, C; "Spinal Cord Stimulation for Complex Regional Pain Syndrome I [RSD]: A Retrospective Multi-Center Experience from 1995-1998 of 101 patients", *Neuromodulation* 1999 2(3):202-9
- Bennett, DS; "Spinal Cord Stimulation for Failed Back Surgical Syndrome: Patient Selection, Techniques, and Expectations" in *Proceedings of the Worldwide Pain Conference 2000*; July 15-21, 2000; San Francisco, California; Monduzzi Editore; Bologna, Italy

- Bennett, DS; "Spinal Cord Stimulation for Complex Regional Pain Syndrome" in *Proceedings of the Worldwide Pain Conference 2000*, July 15-21, 2000; San Francisco, California; Monduzzi Editore; Bologna, Italy
- Bennett, DS; "Pharmacology of Intrathecally Applied Pharmacotherapeutics" in *Proceedings of the Worldwide Pain Conference 2000*, July 15-21, 2000; San Francisco, California; Monduzzi Editore; Bologna, Italy
- Disorbio, JM; Bennett, DS; Bruns, D; "Presurgical Evaluation of Patients Considered for Neural Blockade and Dorsal Column Simulator Procedures; in *Proceedings of the Worldwide Pain Conference 2000*, July 15-21, 2000; San Francisco, California; Monduzzi Editore; Bologna, Italy
- Bennett, DS; Book Review, "Pain: Clinical Manual, Second Edition" in *Pain Medicine* 1(2):186, 2000
- Bennett, D; Carr, D; "Opiophobia as a Barrier to the Treatment of Pain", *Journal of Pharm Care in Pain & Symptom Control* ; 16(1):105-8, 2001
- Bennett, DS, "A Collaborative Approach to Care for Effective Pain Management", *CME Today for Primary Care Practice* 3(1):5, 2004
- Bennett, DS, "Pain Management: Improving Function and Enhancing Quality of Life", *CME Today for Primary Care Practice* 3(1):7-16, 2004
- Bennett, DS, Burton, AW, et al: "Consensus Panel Recommendations for the Assessment and Management of Breakthrough Pain Part I: Assessment", *Pharmacy & Therapeutics* 30(5):296-302, 2005
- Bennett, DS, Burton, AW, et al: "Consensus Panel Recommendations for the Assessment and Management of Breakthrough Pain Part II.", *Pharmacy & Therapeutics* 30(6): 354-361, 2005
- Portenoy, RK; Bennett, DS; Rauck, R; Simon, S; Taylor, D; Brennan, M; Shoemaker, S; "The Prevalence and Characteristics of Breakthrough Pain in Patients with Chronic Non-Cancer Pain". *J of Pain* 7(8):583-91, 2006
- Bennett, DS, Sitzman, BT, Editors, "Electrical Neuromodulation and the Treatment of Pain" *Pain Medicine* 7(S1), 2006
- Bennett, DS, Brookoff, D. "Complex Regional Pain Syndromes (Reflex Sympathetic Dystrophy and Causalgia) and Spinal Cord Stimulation", *Pain Medicine* 7(S1); 64-96, 2006
- Brookoff, D, Bennett, DS, "Neuromodulation in Interstitial Cystitis and Related Pain Syndromes" *Pain Medicine* 7(S1); 166-184, 2006
- Carr, DB, Wolinsky, JP, Stanos, S, Menefee, LA, Bennett, DS, Villavicencio, A; "Grand Rounds Case Presentation: Adjacent-Level Degeneration Following Multilevel Decompression and Fusion with Neuropathic Axial and Right Leg Pain" *Pain Medicine* 7(S1); 146-158, 2006

Bennett, DS, Rauck, R, Simon, S. “Prevalence and Characteristics of Breakthrough Pain in Patients Managed in Pain Specialty Clinics who were receiving Opioids for Chronic Back Pain.” *J Opioid Management* 3(2):101-6.

Kirsh, KL, Jass, C, Bennett, DS, Hagen, JE, Passik, SD; “Initial Development of a Survey Tool to Detect Issues of Chemical Coping in Chronic Pain Patients” *Palliative and Supportive Care* 5:1-8, 2007

Bruns, D, Portenoy, RK, Shoemaker, S, Disorbio, JM, Bennett, DS, Simon, S; “The Pain Tolerance Index: Preliminary Validation of a Novel Measure of the Relationship Between Pain Intensity and Tolerability.” *Clin J Pain* 2009

Upcoming Publications

Bennett, DS; Hagen, JE; “Treatment of Complex Axial Pain using a Tripolar Thoracic Electrode Array supplemented with a Retrograde Nerve Root Stimulation L4 array for the Treatment of Complex Axial and Lower Extremity Pain: A Focus Article and Case Presentation”

Bennett, DS, Hagen, JE, Jass, C, Kirsh, KL, Passik, SD; “Initial Factor Analysis and Experience with a Tool for Chemical Coping in Pain Patients”

Bennett, DS, Hagen, JE; “Non-Instrumented Facet Arthrodesis utilizing a Morse-Taper Cortical Graft in the Management of Back Pain caused by Lumbar Facets: A Pilot Study of Safety and Efficacy”

Abstracts

Bennett, DS; “Spinal Cord Stimulation for Complex Regional Pain Syndrome Type I: [RSD]”; Proceedings of the International Neuromodulation Society Congress; Lucerne, Switzerland 1998

Disorbio, JM; Bennett, DS; “Diagnostic Norms for the 1-10 Pain Scale”, Abstract, Proceedings of the International Association for the Study of Pain World Congress; Vienna, Austria; August 1999

Bennett, DS; Hagen JE; “Treatment of Complex Axial and Mechanical Pain and Right Lower Extremity Neuropathic Pain Using a Tripolar Thoracic Electrode Configuration Combined with Retrograde Dorsal Nerve Root Stimulation”, Poster Presentation, 5th Congress of The American Neuromodulation Society; Orlando, FL March 9-10, 2001

Portenoy, RK, Bennett, DS (presenter) , Simon, S, et al. “Prevalence and characteristics of breakthrough pain in patients with chronic noncancer pain.” American Pain Society, Boston (Abstract), C30, #698, 2005

Bennett, DS, Simon, S, Rauck, RL, et al. “Prevalence and characteristics of breakthrough pain in noncancer patients with chronic back pain.” American Academy of Pain Medicine, Palm Springs (Abstract), #155, 2005.

- Bruns, D, Disorbio, JM, Bennett, DS, et al. "Degree of pain intolerance and adverse outcomes in chronic noncancer pain patients". American Pain Society, Boston (Abstract), G04, #865, 2005.
- Hagen, JE, Bennett, DS; "Treatment of Recalcitrant Cervicogenic Headache with Occipital Paddle Electrode Arrays placed over Point of Maximal Tenderness". International Association for the Study of Pain. Sydney, Australia (Abstract), 2005.
- Bennett, DS, Simon, S, Rauck, R, Shoemaker, S; "Pharmacologic Management of Breakthrough Pain in Patients with Chronic Low Back Pain". International Association for the Study of Pain. Sydney, Australia. (Abstract), 2005.
- Bennett, DS, Hagen, J. "Minimally Invasive [MIS] Lumbar facet non-instrumented arthrodesis for treatment of facet mediated low back pain – report on 10 patients at 1-year." *EFIC Pain in Europe VI*, Lisbon, Portugal September 2009
- Bennett, DS, Hagen, J. "Peripheral facial stimulation for Trigeminal Neuralgia (A Pilot Study) – Report of Five Patients at one year post-implantation". *EFIC Pain in Europe VI*, Lisbon, Portugal September 2009
- Bennett, DS, Webster, L, Lampert, BA, et al. "Occipital Nerve Stimulation: Surgical Technique and Outcomes from the PRISM Study of ONS for Drug-Refractory Migraine" North American Neuromodulation Society Scientific Meeting, Las Vegas, NV, 2010
- Bennett, DS, Hagen, JS "Minimally Invasive (MIS) Non-Instrumented Facet Arthrodesis for the Treatment of Low Back Pain – A Pilot Study at 1-Year" at American Academy of Pain Medicine, 26th Annual Meeting; San Antonio, TX, 2010 (*with invited oral presentation*)

Book Chapters

- Bennett, DS: "Drug Delivery System Pump Implantation" in *Fluoroscopic Manual for Pain Management*, Best, T (ed); Pain Management Innovations; Golden, Colorado; Chapter 5; Pgs 15-16; 2000
- Bennett, DS; "Neurostimulation: Thoracic Placement" in *Fluoroscopic Manual for Pain Management*, Best, T (ed); Pain Management Innovations; Golden, Colorado; Chapter 5; Pgs 38-39; 2000
- Bennett, DS; "Radiofrequency Neurolysis" in *Fluoroscopic Manual for Pain Management*, Best, T (ed); Pain Management Innovations; Golden, Colorado; Chapter 5; Pgs 52-53
- Bennett, DS; Brookoff, D; "Chapter 5: Sacral Nerve Root Stimulation for Interstitial Cystitis", in *Electrical Stimulation and Relief of Pain*, in Pain Research and Clinical Management, Simpson, B (Ed); Elsevier Science B.V., 2003; Pg 57-77
- Bennett, DS; Cameron, T; "Chapter 8: Spinal Cord Stimulation for Complex Regional Pain Syndromes", in *Electrical Stimulation and Relief of Pain*, in Pain Research and Clinical Management, Simpson, B (Ed); Elsevier Science B.V., 2003; Pg. 111-129

Bennett, DS; "Opioids and the Treatment of Chronic Pain" in Smith, H, Passik, S.
(Eds), *Pain and Chemical Dependency*. Oxford University Press, March 2008; Pg 367-76.

Multimedia Courses

Bennett, DS; "Balanced Analgesia and Strategies for Treatment of Chronic Pain" as part of
The *Emerging Solutions in Pain* series for MediCom Worldwide, Inc. 2004

Bennett, DS (Editor); "Current Trends in Pain Management"
Medical Education Broadcast Network 2004

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