

CURRICULUM VITAE

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MEDICAL EDUCATION:

1962 - 1963	The University of Liverpool Medical School, Liverpool, England - M.B., Ch.B. (Liverpool)
1962 - 1963	London Conjoint Board - MRCS, LRCP (London)
1962 - 1963	House Surgeon and House Physician at the Royal Southern Hospital, Liverpool, England
1963 - 1965	Assistant Resident in Anesthesiology, SUNY Upstate Medical Center, Syracuse, New York
1965 - 1966	Senior Resident in Anesthesiology, SUNY Upstate Medical Center, Syracuse, New York

LICENSURE:

1966 to Present	Texas	# E9343
1965 to 1980	Canada - Ontario	# 24641
1969 to Present	New York	# 105053
1963 to 1980	Great Britain	# 14556
1980 to 1985	Michigan	# 1085897
1991 to Present	New Mexico	# 215501

CERTIFICATIONS:

1965 The American College of Anesthesiologists
 1969 The American Board of Anesthesiology
 1993 Fellow American College of Pain Medicine (DABPM)
 1993 Certification of Continued Demonstration of Qualifications by examination, The American Board
 of Anesthesiology
 1992 American Board of Anesthesiology Added Qualifications in Pain Management
 2001 Fellow of Interventional Pain Practice (FIPP) by World Institute of Pain
 2003 Subspecialty Certification in Pain Medicine by examination, The American Board of
 Anesthesiology
 (2006) will receive American Board of interventional Pain Practice

HOSPITALS:**State University of New York (SUNY), Upstate Medical Center:**

1966 - 1970	Assistant Attending, Anesthesiology
1966 - 1977	Respiratory Consultant, Neurosurgical Head Injury Unit
1969 - 1977	Consultant, Veterans Administration Hospital
1970 - 1973	Member, Respiratory Therapy Advisory Committee
1970 - 1977	Associate Attending, Anesthesiology
1972 - 1977	Consultant, Chenago Memorial Hospital, Norwich, New York
1973 - 1977	Medical Director, Respiratory Therapy Service
1973 - 1977	Chairperson, Respiratory Therapy Advisory Committee
1973 - 1977	Member, Intensive Care Coordinating Committee
1973 - 1977	Member, Intensive Care Unit Development Committee
1974 - 1977	Consultant, Crouse-Irving Memorial Hospital
1975 - 1977	Member, Emergency Room Committee

Department of Anesthesiology at SUNY, Upstate Medical Center:

1966 - 1977	Member, Anesthesiology Service Group
1973 - 1977	Treasurer, Anesthesiology Service Group
1975 - 1977	In the absence of Department Chairman, acting as deputy

Medical Students:

Local:

1973 - 1977 In charge of Senior Elective Program in Anesthesiology
1975 - 1977 In charge of First Year Cardiopulmonary Resuscitation Training
1976 - 1977 In charge of Second Year Cardiopulmonary Resuscitation Training
1976 - 1977 In charge of First Year Advanced Red Cross First Aid Course selection

National:

1973 - 1977 American Society of Anesthesiologists (ASA) Preceptorship Program - Local Coordinator

New York State:

1975 - 1977 New York State Society of Anesthesiologists' Postgraduate Assembly
Chairman, Subcommittee on Medical Students

SUNY, Upstate Medical Center
School of Allied Health Professions

Respiratory Therapy School - 2 year program, A.A. Degree

1968 - 1973 Associate Medical Director
1973 - 1977 Medical Director

Respiratory Therapy School - 4 years Baccalaureate Program

1973 - 1977 Member, Promotion Committee
1975 - 1977 Medical Director

National Respiratory Therapy Functions:

1969 - 1978 Oral Examiner of the American Registry of Respiratory Therapists
1971 - 1972 On-Site Visiting Physician Member of Joint Review Committee,
Inhalation Therapy for Accreditation (JRCITE)

Medical School Functions:

1966 - 1970 Assistant Professor, Department of Anesthesiology, SUNY, Upstate Medical Center
1970 - 1977 Associate Professor, Department of Anesthesiology, SUNY, Upstate Medical Center
1970 - 1977 Faculty Interviewer for Admission
1974 - 1977 Member, Grades Committee
1971 - 1972 Vice President of 5th District
1972 - 1973 President, 5th District

Committee Memberships:

1971 - 1977 Assistant Editor, publication "Sphere"
1971 - 1975 Respiratory Therapy-Acute Medicine
1974 - 1977 Scientific Exhibits
1974 - 1975 Medical Students
1974 - 1977 Continuing Education
1975 - 1977 Chairman, Subcommittee (PG) Medical Student Guests
1975 - 1976 Alternate Delegate
1971 - 1972 Alternate Delegate

Lubbock General Hospital:

1978 - 1979 Member, ICU Committee

1978 - 1982 Chairman, Operating Room Committee
 1978 - 2001 Member, Executive Committee of Lubbock General Hospital
 1978 - 2001 Member, Emergency Room Committee
 1978 - 2001 Medical Director, Respiratory Therapy Service
 1978 - 2001 Chief of Service, Department of Anesthesiology
 1978 - 2001 Director of Pain Institute
 1978 - 2001 Operating Room Committee

Texas Tech University Health Sciences Center (TTUHSC):

Department of Anesthesiology

1977 - 2001 Chairman, Department of Anesthesiology
 1977 - 2001 Member, Dean's Advisory Committee
 1977 - 1980 Member, Curriculum Council Committee
 1977 - 1982 Member, Executive Committee of TTUHSC Ambulatory
 Clinic Medical Staff
 1978 - Present Director Pain Services
 1980 - 1985 Chairman, Medical Practice Income Plan Committee
 1986 - 1987 Chairman, Tenure and Promotions Committee
 1987 - 1987 Chairman, Search Committee for Department of Neurology Chair
 1993 - 1994 Search Committee for Family Practice Chair
 1985 - 2001 Professional Liability Committee
 1993 - 1998 MD/Ph.D. Coordinating Committee
 1990 - Present Executive Committee
 1999 - Present Professor and Chairman Emeritus Department of Anesthesiology, C0-Director Pain Services

Medical Students:

Local:

1978 - 1980 In charge of Student Elective Program in Anesthesiology

National:

1978 - 1983 American Society of Anesthesiologists Preceptorship Program - Local
 Coordinator

COURTESY STAFF POSITIONS:

1977 - 1980 Consultant to Veterans Administration Hospital, Big Spring, Texas
 1978 - 1980 Courtesy Staff - West Texas Hospital, Lubbock
 1978 - 1980 Courtesy Staff - St. Mary of the Plains Hospital, Lubbock
 1978 - 2004 Courtesy Staff - R. E. Thomason, El Paso
 1983 - 1995 Courtesy Staff - South Park Medical Center, Lubbock
 1984 - Present Courtesy Staff - Methodist Hospital, Lubbock
 1995 - Present Courtesy Staff - St. Mary of the Plains SurgiCenter, Lubbock
 2000 - Present Active Staff - Covenant SurgiCenter, Ltd.
 2000 - Present Clinical Professor - The University of Texas Southwestern Medical School,
 Dallas, Texas
 2004 - Present Clinical Professor - Swiss Avenue Surg-Center, Dallas, Texas

CONSULTANT/ADVISORY BOARD:

1990-1995 University of Nevada School of Medicine, Department of Anesthesiology
 1992-Present Medical Advisory Board to the Pain Management Center of the
 Southwest Fort Worth, Texas
 1993-Present Texas State Board of Medical Examiners, Austin, Texas
 1993-Present Medtronic
 1993-Present ProHealth (Syntex) Advisory Board

1990-Present	Bristol Myers Distinguished Faculty
1994-Present	Pain Net, Inc. Advisory Board
1992-Present	Peer Reviewer: Conwall Incorporated, National Institute on Disability and Rehabilitation Research (NIDRR)
1994-Present	Roache Laboratories Speakers' Program
1993-Present	East-West International Pain Institute, Inc. International Advisory Board
1993-Present	The Center for Pain Management Advisory Board, Fort Worth, Texas
October 1996	Consultant asked to testify for Texas Society of Anesthesiology re: dealing with problems surrounding denial by Medicare for payment for stellate ganglion neurolysis. Dallas, Texas.
October 1998	Guest Reviewer on Guest Editorial Board for journal <i>Regional Anesthesia/Pain Medicine</i> .
October 1998	Peer reviewer for HealthSmart Preferred Care Utilization Management Program
October 1995	Charter member World Institute of Pain
2003-2005	Registral, First Interventional Pain Practice WIP Examination, Budapest, Hungary
2003-2005	Treasurer World Institute of Pain
2005-2008	President World Institute of Pain
1995 to Present	National Foundation of Pain
2001 to Present	Executive Committee of American Society of Interventional Pain Physician
2004 to Present	Member, Literature Selection Technical Review Committee (LSTRC of the U.S. National Library of Medicine

EDITORIAL BOARDS:

1975 to 1978	Correspondenti Stranieri for <i>La rivista italiana della Clinica Del Dolore</i>
1978 to 1990	Coordinator and Guest Editor for <i>TEXAS MEDICINE</i>
1992 to 1995	Guest Reviewer for <i>Regional Anesthesia</i> , a separate entity of the American Society of Regional Anesthesia
1993 - Present	<i>Regional Anesthesia</i>
1993 - Present	<i>Pain Digest</i>
1993 - Present	<i>Analgesia</i>
1994 - Present	<i>The Clinical Journal of Pain</i>
1996 - Present	<i>Current Review of Pain</i>
1996 – Present	<i>Pain Practice, Journal of WIP</i>
1998 – 2004	<i>Pain Physician, Journal of American Society of Interventional Pain Physicians</i>
2001 – Present	Pain Management Web Editorial Board

FACULTY:

1989 - 1991	Michigan Pain Society
1991 - Present	Dannemiller Memorial Educational Foundation
1993 - Present	Pain Net, Inc.
1994 - Present	Clinical Education Services, Inc.

SITE INSPECTOR:

1992	Joint Review Committee for Respiratory Therapy Education Site Visit, Camino Community College District, Torrance, California
1993	Joint Review Committee for Respiratory Therapy Education Site Visit. South Carolina Technical College, Greenville, South Carolina.
1995	Joint Review Committee for Respiratory Therapy Education Site Visit. Respiratory Care Program, Stony Brook Health Sciences Center School of Health Technology and Management, Division of Diagnostic & Therapeutic Sciences, Long Island, New York.

MEMBERSHIPS:

American Academy for Cerebral Palsy and Developmental Medicine (elected)

American Academy of Neurological & Orthopaedic Surgeons (honorary)

American Academy of Pain Medicine (AAPM)
Member, Committee on Medical Practice

American Academy of Thermology

American Association for Advancement of Science

American Association of Medical Colleges (AAMC)

American Association for Respiratory Care (AARC)

American College of Pain Medicine (ACPM)

American Medical Association

American Neuromodulation Society - Fellowship Status 1998

American Pain Society (APS)

American Society of Regional Anesthesia
1986 - 1987 Newsletter - Assistant Editor
1992 - Guest Reviewer

American Society of Anesthesiology
1982 - 1983 Ad Hoc Committee on Refresher Course
1985 - 1986 Scientific Exhibit Committee
1988 - present Scientific Exhibit Committee
1991 Chairman
1989 Invited Participant - Pain Panel on Intraoperative Techniques for Acute and Chronic Pain

American Society of Interventional Pain Physicians - Life Member (ASIPP)

American Society of Post Anesthesia Nurses

American Thoracic Society

Anesthesia Patient Safety Foundation

American Society of Neurosurgical Anesthesia

Association of University Anesthetists (elected)
1992 - Moderator, Annual Meeting, Redwood City, California

College of American Pathologists (CAP)

Council for Advancement and Support of Education (CASE)

International Anesthesia Research Society

International Association for the Study of Pain

International Pain Foundation

International Spinal Injection Society (ISIS)

Lubbock-Crosby-Garza County Medical Society

Lubbock Surgical Society

National Association of Medical Directors of Respiratory Care
National Pain Institute

New York Academy of Sciences
Panhandle District Medical Society

North American Spine Society

Reflex Sympathetic Dystrophy Syndrome Association
1988 - Professional Advisor - Haddenfield, New Jersey

Sigma XI, National Research Honor Society (elected))

Society for Ambulatory Anesthesia (SAMBA)

Society for Education in Anesthesia

Society of Academic Anesthesia Chairman, Inc.

Society of Critical Care Medicine

Society for Intravenous Anesthesia (SIVA)

Society for Neuroleptanalgesia (SONLA)
1988 - Member, Board of Directors

Society of Neurosurgical Anesthesia and Critical Care

Society of Neurosurgical Anesthesia and Neurologica Supportive Care

Society for Obstetric Anesthesia and Perintology

Society of Cardiovascular Anesthesiologists

Southern Pain Society

Texas Medical Association
1991 -- Program Chairman

Texas Cancer Pain Institute

Texas Medical Foundation

Texas Pain Society
1990 - President
1994 - Pain Management Specialty Coalition Task Force (TPA and TMA)

Texas Society of Anesthesiologists
1978 - Member, Education Committee
1979 - 1981 Chairman, Education Committee and Scientific Program
1990 - 1992 Texas Society for Respiratory Therapy

The Royal Society of Medicine (elected)

INVITED PARTICIPATION:

- 1989 Pain Panel on Intraoperative Techniques for Acute and Chronic Pain
- 1993 Neurosurgical Management of Pain Consensus Conference, Boston.
- 1993 3rd Franco-American Symposium on the Management of Pain Paris France.
- 1993 Workshop on the Diagnosis of Reflex Sympathetic Dystrophy with discussion eventually resulting in publication of a book, Diagnosis of RSD, to be published by IASP. Workshop held in conjunction with the Annual Meeting of the American Pain Society. Sponsored by The Cleveland Clinic Foundation, Michael Stanton-Hicks, Director, and Orlando, Florida.
- 1994 Bristol Myers Distinguished Faculty in Pain Management Conference, New Orleans, Louisiana.
- 1995 Bristol Myers Distinguished Faculty in Pain Management Conference, Washington, DC
- 1995 Closed workshop of physicians at Johns Hopkins Pain Treatment in Baltimore. Directed by James N. Campbell, M.D. and Mitchell J. Cohen, M.D. discussing Pain Treatment Practical and Conceptual Reappraisal. A proceedings textbook will be developed from the "think tank" discussion, debate, and reflection on the history, present, and future of pain medicine. Baltimore, Maryland, October, 1995.
- 1995 Closed Workshop to complete a current reappraisal of those conditions termed RSD and causalgia (CRPS Types I and II - new taxonomy). Proceeds will be published by the IASP Press. November, Beverly Hills, California
- 1997 Current Status of Intrathecal Therapy for Nonmalignant Pain: Clinical Realities and Economic Considerations. Invited participation in Non-Malignant Pain Management roundtable, January, Memphis, Tennessee
- 2004 Present Member of Literature Selection Technical Review Committee (LSTRC) of the U.S. National Library of Medicine has three meetings annually in Washington DC for purposes of selecting medical publications to be placed in National Library of Medicine

PUBLICATIONS:

1. Evers W, Racz GB, Dobkin AB: Orahesive as a protection for the teeth during general anesthesia and endoscopy. CASJ 14:123-128, 1967.
2. Evers W, Racz GB, Dobkin AB: A study of plasma potassium and electrocardiographic changes after a single dose of succinylcholine. CASJ 16:273-281, 1969.

3. Evers W, Racz GB: Prevention and treatment of reactions to radiographic contrast media: its life-saving importance. Published by Wyeth Pharmaceuticals. 1969.
4. Thomas ET, Evers W, Racz GB: Post-infusion phlebitis. *Anesth and Analg* 49:150-59, 1970.
5. Evers W, Racz GB: The anesthesiologist's role in a modern cardiopulmonary resuscitation program in a teaching hospital. *York State J Med* 80:(15), 2003-2006, 1970.
6. Evers W, Racz GB, Bell EG: Survivance d'Erythrocytes apres usage clinique du mannitol (In vivo, en utilisant le radiosotope) E Preliminaire An *Anesth Franc* XI, 3 Juillet, Aout, 535-538, 19??.
7. Racz GB: Of dye and dying. *Emerg Med* Sept:89095, 1970.
8. Racz GB: Humidification in a semi-open system for infant anesthesia. *Anesth Anal* 50:995-1001, 1971.
9. Racz GB: Tissue concentrations of antibiotic following oral doses of tetracycline phosphate complex. *Current Therapy Res* 13(8):553-557, 1971.
10. Evers W, Racz GB, and Bell EG: Red blood cell survival after mannitol infusion: a clinical study in human volunteers using CR⁵¹. *Can Anaesth Soc J* 18(6):631-651, 1971.
11. Racz GB: Management of respiratory problems in neurosurgical intensive care units. In: *Ventilators and Inhalation Therapy* AB Dobkin, Editor. Boston: Little, Brown, and Company. p. 209-220, 1972.
12. Evers W, Racz GB, AA Levy: The usage of plastic (Polypropylene) and glass syringes in blood gas analysis: a comparative study. *Anesth Analg* 51(1):92-97, 1972.
13. Evers W, Racz GB: Les complications de L+usage intraveineux de Ia succinylcholine: dangers, precautions. *Ann Anesth Franc* XIII, 4:529-533, 1972.
14. Racz GB: Fat Embolism-rationale for treatment. October, 1974.
15. Murray DG, Racz GB: Fat embolism syndrome (Respiratory Insufficiency Syndrome): A rationale for treatment. *J Bone and Joint* 56A(7):1339-1349, 1974.
16. Parker FB, Jr, GB Racz, Wax SD: The hemodynamics of experimental fat embolism and associated therapy. 65(4):54S-56S, 1974.
17. Evers W, Racz GB: Problems and mistakes in teaching cardiopulmonary resuscitation. *Anesth Rean Inten Terap* 6:103-108, 1974.
18. Evers W, Racz GB: Occupational hazards in anesthesiology: enzymatic, hematological and electrophoretic changes. *Anesth Rean Inten Terap*.
19. Racz GB: Pulmonary blood flow in normal and abnormal states. *Surg Clinics of N Amer* 54(5):967-977, 1974.
20. Racz GB: Now it's respiratory insufficiency syndrome. *Emerg Med* 155-159, May, 1975.
21. Evers W, Racz GB, Levy AA: Changes in plasma potassium and calcium levels and in the electrocardiogram after a single dose of succinylcholine preceded by D-tubocurarine. *CASJ* 23(4):383-394, 1976.

22. Gintautas J, Kraynack B, Thomas E, Racz GB: Effects on adenine nucleotides on lidocaine induced contractions in isolated arteries. *Proceedings of the Western Pharmacology Society* 23:299-300, 1980.
23. Kraynack B, Gintautas J, Kraynack L, Racz GB: Effect of naloxone on ketamine induced narcosis in rats. *Proceedings of the Western Pharmacology Society* 23:143-146, 1980.
24. Kraynack B, Gintautas J, Kraynack L, Racz GB: Adenosine triphosphate protection of global hypoxia in the mouse. *Proceedings of the Western Pharmacology Society* 23:295-297, 1980.
25. Kraynack B, Gintautas J, Kraynack L, Racz GB: Effects of adenine guanine and inosine nucleotides on procaine induced nerve blockade in vivo. *Proceedings of the Western Pharmacology Society* 23:130-144, 1980.
26. Gintautas J, Kraynack B, Racz GB: Responsiveness of isolated cerebral arteries to various pharmacologic agents to transmural electrical stimulation. *Proceedings of the Western Pharmacology Society* 23:63-67, 1980.
27. Kraynack B, Gintautas J, Racz GB: Antagonism of procaine conduction block by adenosine 5' triphosphate in vitro. *Proceedings of the Western Pharmacology Society* 23:429-432, 1980.
28. Gintautas J, Kraynack B, Havasi G, Hughston T, Thomas E, Dolan E, Racz GB: Response of isolated uterine arteries to local anesthetic agents. *Proceedings of the Western Pharmacology Society* 24:191-192, 1981.
29. Gintautas J, Kraynack B, Hughston T, Thomas E, Racz GB: Activation of coeruleospinal systems by nociceptive stimulus. *Proceedings of the Western Pharmacology Society* 24:303-304, 1981.
30. Havasi G, Gintautas J, Warren PR, Havasi I, Thomas ET, Racz GB: Reversibility of diazepam overdose by physostigmine. *Proceedings of the Western Pharmacology Society* 24:109-112, 1981.
31. Havasi I, Havasi G, Gintautas J, Kilaru N, Racz GB: Physostigmine, naloxone, narcotic and sedatives in patients recovering from general anesthesia. *Proceedings of the Western Pharmacology Society* 24:27-28, 1981.
32. Lawson NW, Racz GB: What's News. Isoflurane (Forane) -- in search of the ideal anesthetic. *Texas Medicine* 77:36-37, 1981.
33. Racz GB, Sabonghy M, Gintautas J, Kline WM: Intractable pain therapy using a new type of epidural catheter. *JAMA* 248:579-580, 1982.
34. Racz GB: Improved vision modification for the Macintosh laryngoscope. *Anesthesia* 39:1249-1250, 1984.
35. Racz GB, Heavner JE, Haynesworth R: Repeat epidural phenol injections in chronic pain and spasticity. In Lipton S and Miles J (eds): *Persistent Pain Modern Methods of Treatment (VS)*, London: Grune and Stratton, pp. 157-179, 1985.
36. Racz GB: Technical advance: A new epidural catheter. *Persistent Pain-Modern Methods of Treatment (VS)*, S Lipton and J Miles (eds): London, Grune and Stratton 267-273, 1985.
37. Racz GB, Haynesworth RF, Lipton S: Experiences with an improved epidural catheter. *The Pain Clinic*, 1985.
38. Lewis R, Racz GB, Fabian G: Therapeutic approaches to reflex sympathetic dystrophy of the

- upper extremity. *Clinical Issues in Regional Anesthesia* 1:3 March, 1985.
39. Racz GB, Allen FB: A new pressure-sensitive laryngoscope. *Anesthesiology* 62:3, 1985.
 40. Rosenberg PH, Heavner JE, Racz GB: Comparisons of lidocaine plus reserpine for intravenous regional anesthesia in volunteers. *Reg Anesth* 10:160-164, 1985.
 41. Haynesworth RF Jr, Heavner JE, Racz GB: Continuous brachial plexus blockade using an axillary catheter for treatment of accidental intra-arterial injections. *Reg Anesth* 10:187-190, 1985.
 42. Racz GB, McCarron RG, Talboys P: Percutaneous dorsal column stimulation for chronic pain control. *Spine* 14:1-4, 1989.
 43. Racz GB, Browne T, Lewis R: Peripheral nerve stimulator for treatment of nerve injury (causalgia) caused by electrical burns. Report of two cases. *Texas Medicine* 84:45-50, 1988.
 44. Rosenberg PH, Heavner JE, Kovach K, Pacinda M, Racz GB: Dural permeability to epinephrine, bupivacaine, lidocaine and phenol. In Wust HJ and Stanton-Hicks M (eds): *New Aspects in Regional Anesthesia*. Heidelberg, Verlag fur Medizin, pp. 130-137, 1988.
 45. Duncan KH, Lewis RC, Nordyke MD, Racz GB: Treatment of upper extremity reflex sympathetic dystrophy with joint stiffness using sympatholytic Bier blocks and manipulation. *Orthopedics* 11:6:883-886, 1988.
 46. Heavner JE and Racz GB: Gross and microscopic lesions produced by phenol neurolytic procedures. In Racz GB (ed): *Techniques of Neurolysis*. Boston, Kluwer Academic Publishers 27-32, 1989.
 47. Racz GB, Holubec JT: Lysis of adhesions in the epidural space. In Racz GB (ed): *Techniques of Neurolysis*. Boston, Kluwer Academic Publishers 57-72, 1989.
 48. Racz GB, Heavner JE, Singleton W, Carline M: Hypertonic saline and corticosteroid injected epidurally for pain control. In Racz GB (ed): *Techniques of Neurolysis*. Boston, Kluwer Academic Publishers 73-86, 1989.
 49. Racz GB, Kline WA: Technical advance: New epidural adapter and epidural needle. In Racz GB (ed): *Techniques of Neurolysis*. Boston, Kluwer Academic Publishers, 95-98, 1989.
 50. Racz GB, Holubec JT: Stellate ganglion phenol neurolysis. In Racz GB (ed): *Techniques of Neurolysis*. Boston, Kluwer Academic Publishers 133-144, 1989.
 51. Heavner JE, Coates PW, Racz GB: Myelinated fibers of spinal cord blood vessels--sensory innervation. *Acta Anatomica*, 1989.
 52. Heavner JE, Racz GB: Conduction block by lidocaine and bupivacaine: neonate and adult. In Tyler DC and EJ Krane EJ (eds): *Advances in Pain Research and Therapy Vol 15*_New York, Raven Press 181-186, 1990.
 53. Racz GB, Lewis R Jr, Heavner JE, Scott J: Peripheral nerve stimulator implant for treatment of RSD. In Janig W and Boas RA (eds): *Reflex Sympathetic Dystrophy* M Stanton-Hicks. Boston, Kluwer Academic Publishers, 135-141, 1989.
 54. Racz GB, Heavner JE, Haynesworth R: Repeat epidural phenol injections in chronic pain and spasticity. In Racz GB (ed): *Techniques of Neurolysis*. Boston, Kluwer Academic Publishers, 193-212, 1989.
 55. Kao YJ, Racz GB: Loss of consciousness after emergence from anaesthesia. *Anaesthesia* 45:738-

- 740, 1990.
56. Racz GB, Lewis R Jr, Heavner JE, Scott J: Peripheral nerve stimulator implant for treatment of causalgia. In Stanton-Hicks M (ed): Pain and the Sympathetic Nervous System. Boston, Kluwer Academic Publishers, 225-239, 1990.
 57. Racz GB, Holubec J, Heavner JE: Lysis of adhesions in the epidural space. *La Revista Italiana Per La Clinica Del Delore*, June: 19-30, 1990.
 58. Arter OE, Racz GB: Pain Management of the Oncologic Patient. *Seminars in Surgical Oncology* 6:162-172, 1990.
 59. Racz GB, Heavner JE: Hypertonic saline and corticosteroid injected epidurally for pain control. *La Revista Italiana Per La Clinica Del Delore*, Vol 1, No 2, pp. 119-128, 1990.
 60. Elenbas RM, Iacono CU, Koellner KJ, Pribble JP, Gratton M, Racz GB, Evans RP: Dose Effectiveness and Safety of Butorphanol in Acute Migraine Headache. *Pharmacotherapy* 11(1):56-63, 1990
 61. Kao YJ, Zavisca FG, Tellez JM, Norton RG, Racz GB: Backache after extradural anaesthesia in the postpartum period: Dissection of thoracic aneurysm. *British Journal of Anaesthesia*. 67:335-338, 1991.
 62. Racz GB, Noe C Colvin J, Heavner JE: Sympathetic nerve block, pelvic, hypogastric plexus block. In Raj JJ (ed.): *Practical Management of Pain*, Second Edition., 813- 817, 1992.
 63. Racz GB, Lewis R, Laros G, Heavner JE: Electrical stimulation analgesia. In Raj JJ (ed.): *Practical Management of Pain*, Second Edition. 922-933, 1992.
 64. Racz GB: Upper cervical lead placement for spinal cord stimulation using percutaneous leads. Technical concept paper for Medtronic. 1993.
 65. Rosenberg PH, Heavner JE, Chokhavatia S, McDaniel K, Racz GB: Epiduroscopy with a thin flexible and deflectable fiberscope. *Br J Anaesth* 72:S1; A233, 1994.
 66. Ackerman W, Racz GB, Diede JH: Chronic pain treatment in elderly patients. *Pain Digest* 4:(3)195-203, 1994.
 67. Paggioli JJ, Racz GB: Intravenous and oral anesthetics in pain management: Reflections on intravenous lidocaine and mexiletine. *Pain Digest* 5:69-72, 1995.
 68. Ackerman W, Diede JH, Racz GB: Pain of herpes zoster and postherpetic neuralgia in the elderly. In Gurkowski MA, Smith B, Bracken C (eds): *Anesthesia and pain control in the geriatric patient*, McGraw-Hill. 1993.
 69. Racz GB, Heavner JE, Diede JH: Epidural approach for lysis of epidural adhesions. In Waldman SD and Winnie AP (eds): *The Interventional Pain Management Text*, Philadelphia, WB Saunders Co. 1996.
 70. Noe C and Racz GB: Radiofrequency ablations for pain relief. In Raj PP (ed): *Pain Management: A Comprehensive Review*, First Edition., Mosby Yearbook, St. Louis, 1995.
 71. Arthur JM and Racz GB: Cryoanalgesia. In Raj PP (ed): *Pain Management: A Comprehensive Review*, First Edition., Mosby Yearbook, St. Louis, 1995.
 72. Kramer DL and Racz GB: Thermography. In Raj PP (ed): *Pain Management: A Comprehensive Review*, First Edition., Mosby Yearbook, St. Louis, 1995.

73. Sanel H, Racz GB, Diede JH: Atlanto-Occipital injections in the treatment of headache and neck pain. In Waldman SD and Winnie AP (eds): *The Interventional Pain Management Text*, Philadelphia, W.B. Saunders Co. 1996.
74. Racz GB, Morton A, Diede JH: Sphenopalatine ganglion block. In Waldman SD and Winnie AP (eds): *The Interventional Pain Management Text*, Philadelphia, W.B. Saunders Co. 1996.
75. Heavner JE, Racz GB Diede JH: Peripheral nerve stimulation-current concepts. In Waldman SD and Winnie AP (eds): *The Interventional Pain Management Text*, Philadelphia, W.B. Saunders Co. 1996.
76. Racz GB, Heavner JE, Noe CE: Definitions, Classification, and Taxonomy: An Overview. In: Tollison CD and Satterthwaite JR, eds: *Sympathetic pain syndromes: Reflex sympathetic dystrophy and causalgia. (Series: State of the Art Reviews: Physical Medicine and Rehabilitation)* Philadelphia, Hanley and Belfus, Inc. 1996.
77. Stanton-Hicks M, Raj PP, and Racz GB: Use of regional anesthetics for diagnosis of reflex sympathetic dystrophy and sympathetically maintained pain: A critical evaluation. In Janig W and Stanton-Hicks M (eds): *Reflex sympathetic dystrophy: A reappraisal, Progress in pain research and management.* Seattle, IASP Press, 1996.
78. Racz GB, Heavner JE: Invited Response to Article by Drs. Devulder et al.: Review of article: Devulder, et al: Relevance of epidurography and epidural adhesiolysis in chronic failed back surgery patients. *The Clin J of Pain* 11:151-158 Raven Press, Ltd. New York, 1995.
79. Racz GB, Heavner JE and Noe CE: Complex regional pain syndrome. *Seminars in Anesthesia*, 15:1, 70-87, 1996.
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GRANTS:

Heart Association, Chairman of CPR Committee, from Regional Medical Program for public CPR training

Grant Period: Sep 1, 1972 - Dec 31, 1973 -- \$12,163.00
Grant Period: January 1, 1974 - June 30, 1974 -- \$15,113.00

Medical Director of Respiratory Therapy School, Upstate Medical Center, which received a Veterans Administration Grant to develop a Baccalaureate Program.
Grant Number 1C(74)I-32-0216-01, Grant for 3 years -- \$197,640.00

Co-Principal Investigator of National Heart Lung Institute funded project on Aerosol Therapy.
Reference Number 1R01HL19700-Olsss
Grant for 3 years -- \$136,359.00

Laboratory and Clinical Evaluation of a New Type of Arterial Sampling Device, Sherwood Medical -- \$10,000.00

Clinical Evaluation of a New Epidural Catheter, Arrow International -- \$5,000.00

Anesthesia Research, Roberts Foundation -- \$22,000.00

Dr. Stella M. Traweek Endowed Fund in Pain Research -- \$225,000.00

AWARDS:

- 1983 Best Instructional Exhibit: Repeat Epidural Injections of Phenol for Pain and Spasticity Therapy in Non Terminal as well as Terminal Patients. 37th
- 1984 First Prize: Capnography in the Operating Room. American Society of Anesthesiologists.
- 1984 Exceptional Merit Award: Therapeutic Approaches to Reflex Sympathetic Cystrophies of the Upper Extremity. American Society of Anesthesiologists, October, 1984.
- 1984 Best Exhibit for Clinical Application Award: A New Improved Catheter for Epidural Anesthesia and Continuous Plexus Block and CSF Drainage. 38th Postgraduate Assembly of New York State Society of Anesthesiology, December 15-19, 1984.
- 1985 Second Place Scientific Exhibit: International Anesthesia Research Society 59th Congress, Houston, Texas, March, 1985.
- 1987 First Place Best Instructional Exhibit: Epidural Injection of Hypertonic Saline and Corticosteroid for Lysis of Adhesions and Pain Control. New York PostGraduate Assembly, New York, New York, December, 1987.
- 1989 Second Place of Twenty: Peripheral Nerve Stimulator Implantation in the Treatment of Causalgia and Reflex Sympathetic Dystrophy. 63rd Congress of the Internal Anesthesia Research Society, Lake Buena Vista, Florida, March 4- 8, 1989.
- 1989 Honorable Mention: Diagnostic and Neurolytic Hypogastric Plexus Blockade for Pelvic Pain. 43rd New York Post-Graduate Assembly, New York, New York, December 9-13, 1989.
- 1990 Honorable Mention: Spinal Cord Stimulation: Use of a Dual Purpose Catheter in Screening and Therapy for Benign and Malignant Pain. 44th New York Post Graduate Assembly, New York, New York, December 8-12, 1990.
- 1991 Third Place: Spinal Cord Stimulation: Use of a Dual Purpose Catheter in Screening and

- Therapy for Benign and Malignant Pain. IARS 65th Congress, March, 1991.
- 1991 Exceptional Merit: Spinal Cord Stimulation: Use of a Dual Purpose Catheter in Screening and Therapy for Benign and Malignant Pain. American Society of Anesthesiologists Annual Meeting, San Francisco, California, October 26-30, 1991.
- 1991 Listed in book: *The Best Doctors in America 1992-1993*. Woodward/White, Inc.
- 1992 1991 Best Exhibit for Clinical Application: Epidural Space: Identification of Filling Defects and Lysis of Adhesions in the Treatment of Chronic, Painful Conditions. Presented at the 46th Postgraduate Assembly of The New York State Society of Anesthesiologists, Inc., December 12-16, 1992.
- 1993 Listed in book: *The Best Doctors in America 1994-1995*. Woodward/White, Inc.
- 1996 Gabor Racz named first recipient of Grover E. Murray Professorship awarded May 10, 1996 by Texas Tech University Health Sciences and TTU Board of Regents for distinguished service. This professorship established by the Board of Regents in honor of Grover Murray, who was president of Texas Tech University in 1977 when TTUHSC was founded.
- 1997 Lecture: Balanced Approaches to Pain Management. First Annual Terence M. Murphy Memorial Lecture Series presenting Gabor B. Racz as First Lecturer. The University of Washington Multidisciplinary Pain Center and Department of Anesthesiology, John Loeser Chairman, Seattle, Washington.
- 1998 Listed in book: *The Best Doctors in America* 1997-1998. Woodward/White, Inc. (every edition since book originated)
- 1998 Awarded Endowed Professorship from Texas Tech University Health Sciences Center
- 2001 Awarded Outstanding Physician by American Neuromodulation Society at annual meeting
- 2002 Outstanding Physician Award presented by American Society of Interventional Pain Physicians
- 1995-2004 Who's Who (listed in several versions)
- 2004 Listed in book: *The Best Doctors in America* 2002-2004. Woodward/White, Inc. (has appeared in every edition since book originated)
- 2003 Invited to serve on Advisory Council of *For Grace*, an organization with mission of raising awareness of the chronic pain disease, CRPS
- SEP 2004 Presented Lifetime Achievement Award at Awards Dinner 6th Annual Meeting of American Society of Interventional Pain Physicians, Washington, D.C.
- 2001-2004 Treasurer and Registrar of FIPP Examinations for World Institute of Pain. President elect (elected in September 2004 and will take office as President in May, 2005).
- 2004 Presented the *Lifetime Achievement Award* by American Society of Interventional Pain Physicians (ASIPP), the largest organization of interventional pain physicians in the world. This was presented in Washington, D.C. at the annual ASIPP .
- 1992-2004 Named in each edition of *The Best Doctors in America*, 1992-2004. Woodward/White, Inc.
- 1992-2005 Director of the annual Budapest Workshop and Conference for Pain Physicians from

around the world, and the next one, in September 2005, will be the Tenth Annual meeting, where once again the FIPP examination will be offered.

2005-2008 President of World Institute of Pain.

2006 Awarded the MORICCA AWARD presented by the Italian Pain Society, July 2006
HONORARY MEMBER OF CATALONIAN PAIN SOCIETY – BARCELONA,
SPAIN SEPTEMBER, 2006

VISITING PROFESSOR:

MAR 1981	Medical College of Virginia Richmond, Virginia Critical Care -- Win Some, Lose Some
APR 1981	University of Texas Health Sciences Center San Antonio, Texas Anesthetic Management of the Trauma Patient / Controversies in Anesthetic Management
MAY 1981	The Abraham Lincoln School of Medicine Chicago, Illinois Aspiration Pneumonitis and Other Respiratory Problems
APR 1983	American Osteopathic College of Anesthesiologists Mid-Year Conference Chicago, Illinois Use of the Racz Epidural Catheter for Labor and Delivery
MAY 1983	University of Texas A & M, Temple, Texas New Epidural Catheter in Chronic Pain Management Intubation -- New Laryngoscope Designs
APR 1984	St. Louis University School Medicine, St. Louis, Missouri
AUG 1984	University of Texas Southwestern School of Medicine, Dallas, Texas Workshop on Pain
MAR 1985	University of Texas, Houston, Texas Newer Tricks on Pain
APR 1986	Jefferson Medical College of Thomas Jefferson University, Philadelphia, Pennsylvania Epidural Phenol and Other Neurolytic Agents and Regional Block Procedures in Pain Management and Reflex Sympathetic Dystrophy
MAY 1986	Tulane Medical Center, New Orleans, Louisiana Epidural Phenol and Other Neurolytic Agents and Regional Block Procedures in Pain Management and Reflex Sympathetic Dystrophy
NOV 1986	Bridgeport Hospital, Bridgeport, Connecticut Pain Management in Reflex Sympathetic Dystrophy and Spasticity
MAY 1987	Redding General Hospital, Redding, Pennsylvania Pain Management
1987	University of Cincinnati, Cincinnati, Ohio Techniques in Neurolysis

- 1989 Medical College of Ohio, Toledo, Ohio
- 1990 Columbia University College of Physicians & Surgeons, New York, New York
New Methods of Pain Management
- 1990 Rush-Presbyterian St. Luke's Medical Center, Chicago, Illinois
Reflex Sympathetic Dystrophy
- 1990 AMI Brownsville Medical Center, Brownsville, Texas
Clinical Presentation
- 1991 New York University Medical Center, New York, New York
Nerve Blocks for Chronic Pain Management
- 1991 Louisiana State University, Shreveport, Louisiana
Department of Orthopedics Annual Alumni Meeting
Discussion of Research Paper: Electro Microscopy of Lumbar Facet Joint:
Peripheral and Spinal Cord Stimulation, Epidural, Hypertonic Saline Phenol and
Hypogastric Plexus Blocks
- 1991 Georgetown University Medical Center, Washington, DC
Clinical Presentations
- 1992 New York University Medical Center, New York, New York
Clinical Presentations.
- MAY 1993 University of Medicine & Dentistry of New Jersey Robert Wood Johnson
Medical School, New Brunswick, New Jersey.
Neuroaugmentation and Lysis of Adhesions.
- APR 1995 Understanding the new description of reflex sympathetic dystrophy as Complex
Regional Pain Syndrome. Grand rounds Department of Neurology Texas Tech
University Health Sciences Center, Lubbock, Texas.
- OCT 1995 New concepts in pain management. Keynote lecture, visiting professor and
grand rounds. St. Luke's-Roosevelt Hospital Center, New York, New York.
- DEC 1995 Lecture. Texas Tech University Health Sciences Center at El Paso, Department of
Anesthesiology, El Paso, Texas.
- JAN 1995 Southwestern Medical School
- JUN 1996 Visiting Professor and Consultant: to evaluate the status of pain service, to see
if utilization of staff and faculty is appropriate. university of Medicine and
Dentistry of New Jersey, Robert Wood Johnson Medical School, Sanford L.
Klein, DDS, MD, Chairman, New Brunswick, New Jersey.

LECTURE PRESENTATIONS:

- 1966 American Association of University Neurosurgeons.
- 1968 Continental Orthopedic Society.
- 1969 The Anesthesiologist's Role in Modern Cardiopulmonary Resuscitation Program In
a Teaching Hospital. Medical Society of the State of New York Annual Meeting.

- 1969 A Study of Plasma Potassium and Electrocardiographic Changes After a Single Dose of Succinylcholine. Canadian Anesthesiologists Society Annual Meeting, Toronto, Canada.
- 1969 - 1970 Central New York Surgical Society.
- 1970 Fat Embolism-rationale for Treatment. Syracuse, New York, Continental Orthopedic Society's 4th Annual Meeting.
- 1970 Society of Critical Care Medicine, Pittsburgh, Pennsylvania.
- 1971 Les Complications de Usage Intravenous de Ia Succinylcholine: Dangers, Precautions. XXI Congress National Francais d'Anesthesia-Reanimation, Marseilles, France.
- 1972 Radiology National Meeting.
- 1970 - 1972 Upstate Neurosurgical Society.
- 1973 Orthopedics National Meeting, Las Vegas, Nevada.
- 1973 American Society of Neurosurgeons, Los Angeles, California.
- 1974 Continental Orthopedic Society's 4th Annual Meeting, Syracuse, New York.
- 1975 International European Anesthesia Congress, Valatofured, Hungary.
- 1976 Canadian Anaesthetists' Society, Montreal, Canada.
- 1976 Malignant Hyperpyrexia Following Posterior Fossa Craniotomy. European Society of Pediatric Neurosurgery, Stresa, Italy.
- 1976 Seminars and Symposia, ten lectures given in Hong Kong, Tokyo, and Hawaii on a Far East Tour.
- 1976 Postgraduate Assembly, NYSSA Chairmen, Critical Care and Respiratory Care: A Practical Approach Workshop.
- 1976 Postgraduate Assembly, NYSSA Chairman, Medical Student Program.
- NOV 1977 Deposition of Therapeutic Aerosols in the Human Airways. 70th Annual Meeting of the American Institute of Chemical Engineers, New York, New York.
- JUL 1977 Guest Speaker (35 hours of lectures) with Seminars and Symposia, Critical Care topics. Vienna, Austria, Prague, Czechoslovakia, Budapest, Hungary.
- MAR 1978 Caring for the Patient with Fat Embolism. Symposium on Cancer and Trauma, presented by TTUHSC Department of Surgery, Office of Continuing Education, Regional Academic Health Center, El Paso, Texas.
- MAR 1978 Acute Respiratory Failure (Chronic Airway Obstruction). One day seminar presented by the South Plains Chapter of the Texas Academy of Family Physicians in cooperation with the Family Practice Department of TTUHSC.

- MAY 1978 Retrolental Fibroplasia. Neonatal Care Symposium: Respiratory Distress Syndrome, Lubbock Memorial Civic Center.
- OCT 1978 Guest Speaker at the Texas Nurse Anesthetists' National Meeting, El Paso, Texas.
- DEC 1978 Diagnosis and Management of Adult Respiratory Distress Syndrome. Midland Critical Care Workshop, Midland, Texas.
- JAN 1979 Cardiovascular Problems in the Aged Patient / Preanesthesia Rehabilitation of the Chronic Pulmonary Cripple / Care of the Post Cardiac Arrest Patient. Texas Nurse Anesthetists Society Seminar on Geriatric Anesthesia.
- MAY 1979 Interpretation of Blood Gas Analysis. Texas Society for Respiratory Therapy presented by the Texas Society of Respiratory Therapy and TTUHSC, Lubbock, Texas.
- MAY 1979 The Role of the Respiratory Care Medical Director. Washington State Society for Respiratory Therapy, Inc. presented by the American Association of Respiratory Therapy, Seattle, Washington.
- JUN 1979 Two lectures: Fluid Electrolytes and Hemodynamic Monitoring / The Neurological Patient. First Annual Critical Care Symposium presented by the Department of Respiratory Therapy, Department of Anesthesiology and TTUHSC, Lubbock, Texas.
- NOV 1979 Pulmonary Physiopharmacology - 1979. The Physiology and Pharmacology of the Perioperative Period. Bay/Cap IV meeting at Baylor College of Medicine, Houston, Texas.
- JAN 1980 The In Vitro Antagonism of Procaine Conduction Block by Adenosine Triphosphate. Western Pharmacology Society Meeting, Vancouver, B.C.
- SEP 1980 American Society of Anesthesiologists meeting, St. Louis, Missouri.
- SEP 1980 Acid Base Balance. Workshop, Texas Society of Anesthesiologists, Houston, Texas.
- MAR 1982 Acid Base Balance Interpretation Cardiovascular Problems of the Elderly. Western Canadian Anesthetists Annual Meeting, Regina, Canada.
- OCT 1982 A New Epidural Catheter. Cook County Hospital, Chicago, Illinois.
- MAR 1984 Epidural Phenol in the Management of Chronic Pain and Spasticity. Refresher Course in Anesthesiology, Lubbock, Texas.
- AUG 1984 Pain Symposium, Department of Anesthesiology, TTUHSC School of Medicine, Lubbock, Texas.
- SEP 1984 Development of a New Epidural Catheter and Its Use in Anesthesia and Chronic Pain Management. Pain Mechanisms and Evaluation Joint Meeting of the Hungarian Society of Anesthesia and the American Society of Regional Anesthesia, Budapest, Hungary.
- OCT 1984 Neurolytic Lumbar Sympathetic Blocks. American Society of Anesthesiologists Workshop, Annual Meeting of American Society of Anesthesiologists, New Orleans, Louisiana.

- OCT 1984 New Approaches to Chronic Pain Management. Central New York Surgical Society Annual Meeting, Syracuse, New York.
- FEB 1985 Therapeutic Approaches to Reflex Dystrophy and the Use of Thermography. Thermography Seminar, Houston, Texas.
- FEB 1985 Pain and Other Goodies. Greater Atlanta Society of Anesthesiologists, Atlanta, Georgia
- MAR 1985 Newer Tricks in Pain. Texas Gulf Coast Anaesthesia Society, Houston, Texas.
- MAR 1985 Reactions of Dog Anterior Spinal Artery Rings to Epinephrine, Potassium, and Histamine. American Society of Regional Anesthesia.
- MAY 1985 Reflex Sympathetic Dystrophy. Texas Tech Alumni Association, Washington, DC.
- SEP 1985 Pain Management Seminar Course Director, New York, New York.
- SEP 1985 The Bier Block Technique for Treatment of RSD New York State Society of Anesthesiologists, Albany, New York.
- OCT 1985 The Use of Cervical Epidural Phenol Blocks in Upper Extremity Movement Disorders. American Academy for Cerebral Palsy, Seattle Washington.
- OCT 1985 The Use of Cervical Epidural Pheno Blocks in Upper Extremity Movement Disorders in Cerebral Palsy (AV Presentation), American Academy for Cerebral Palsy and Developmental Medicine.
- FEB 1986 Sympathetic Dystrophy and Spasticity. Finnish Society of Anesthesiologists, Helsinki, Finland.
- FEB 1986 Epidural Phenol and Other Neurolytic Agents and Regional Block Procedures In Pain Management. Presented before ASTRA, Stockholm, Sweden.
- MAR 1986 Pain - Invasive Management. Presented before the Thermography in Neuromusculoskeletal Disorders seminar, Acapulco, Mexico.
- MAR 1986 Local Anesthetic Facilitation of Local Anesthetic Passage Through the Dura. American Society of Regional Anesthesia.
- JUL 1986 Management of Difficult Pain Syndromes / Diagnosis and Recent Concepts in the Treatment of Reflex Sympathetic Dystrophy / Pain and Spasticity - the Role of Neurolysis. Presented before the Mexican Society of Anesthesiologists, Mexico City.
- JAN 1987 Pain Management. Western Regional Oncology Conference, El Paso, Texas January, 1987
- MAY 1987 Inhibition of MAO A and MAO B Activity by Tetracaine vs. a Tetracaine Homologue. Veterinary Midwest Anesthesia Conference.
- JUN 1987 Technique of Upper Extremity Anesthesiology Procedures with Thermographic Monitoring. Thermography and Anesthesia in Pain Management, San Diego, California.

- JUN 1987 Complications of I.V. Regional Guanethidine. Ciba-Geigy Pharmaceuticals, Summit, New Jersey.
- AUG 1987 Lysis of Epidural Adhesions in Pain Patients. 5th World Congress on Pain.
- SEP 1987 Pain Management and the Cancer Patient. Texas Society of Anesthesiologists.
- OCT 1987 Lysis of Epidural Adhesions in Pain Patients. Southern Pain Society Annual Conference.
- OCT 1987 Classification of Reflex Sympathetic Dystrophies. American Academy of Neurological and Orthopaedic Surgeons, Las Vegas, Nevada.
- DEC 1987 Neuro--Introduction of Implant Patient. Medtronic, Inc.
- MAR 1988 Epidural Injection of Hypertonic Saline and Corticosteroid for Lysis of Adhesions and Pain Control. International Anesthesia Research Society.
- MAY 1988 Medico legal Considerations - Case Discussions / New Pain Procedures. Texas Society of Anesthesiologists, San Antonio, Texas.
- MAY 1988
and New Pain Procedures - Epidural Neurolytics, Stellate Ganglion Block - Local Phenol, Epidural Scar Lysis, Peripheral Nerve Stimulator Implants for Causalgia and RSD. Texas Society of Anesthesiologists, San Antonio, Texas.
- MAY 1988 Lysis of Epidural Adhesions in Pain Patients. 9th World Congress of Anesthesiologists, Washington, DC.
- JUN 1988 End Stage RSD and New Techniques. Thermography Seminar, Chicago, Illinois.
- JUL 1988 Reflex Sympathetic Dystrophy. European Society of Regional Anesthesia, Germany.
- SEP 1988 RSD and Newer Approaches to Chronic Pain Management. Michigan Pain Society, Lansing, Michigan.
- OCT 1988 Teaming Up on Difficult RSD/Causalgia: Peripheral Nerve Stimulator Implantation. American Society of Anesthesiologists.
- DEC 1988 Combination Therapy for Back and Neck Pain With Dorsal Column Stimulation / Epidural Scar Lysis and Anterior Communication Radiofrequency Rhizotomy / Caudal Epidural Approach For Lysis of Post-Laminectomy Adhesions. The Anesthesiology Academy of Neurological and Orthopaedic Surgery Convention, Las Vegas, Nevada.
- MAR 1989 Plasma Levels of Bupivacaine Are Age Dependent in Young Pigs. ASRA Annual Meeting.
- MAY 1989 Pain Management Techniques for Enhanced Pain Relief with Opiate Infusion. 2nd International Symposium of Algology, Milan, Italy.
- MAY 1989 Peripheral Nerve Stimulator Implantation in the Treatment of Causalgia and RSD. Texas Medical Association Annual Meeting.
- MAY 1989 Peripheral Nerve Stimulator Implantation in the Treatment of Causalgia and RSD. Texas Medical Association Annual Meeting.

- SEP 1989 Useful New Nerve Blocks. Texas Society of Anesthesiologists, Amarillo, Texas.
- SEP 1989 Newer Approaches in Pain Management. XXIV Mexican Congress of Anesthesiology, Guars, Mexico.
- SEP 1989 Techniques in Neurolysis. E.W. Sparrow Hospital & Pain Management Services, East Lansing, Michigan.
- SEP 1989 Chronic Pain Syndromes; Low Back Pain, RSD, Diabetic Neuropathy and Tic Douloureux. Fourth Annual Fall Seminar in Anesthesia, Wichita, Kansas.
- OCT 1989 Intraoperative Techniques for Management of Acute and Chronic Pain.
American Society of Anesthesiologists Annual Meeting, New Orleans, Louisiana.
- OCT 1989 Diagnosis and Treatment of Abdominal and Pelvic Pain in Women. Eighth Annual Scientific Meeting of the American Pain Society, Phoenix, Arizona.
- OCT 1989 Neurolytic Techniques in Cancer Pain Management / Workshop on Neurolytic Procedures. Michigan Pain Society Meeting, The Challenge: Managing Cancer Pain in the 1990's, Traverse City, Michigan.
- DEC 1989 Regional Anesthesia for Trauma Surgery / Phenol and Neurolytic Techniques
for Pain Control. Emory University School of Medicine's Regional Anesthesia: Surgery, Obstetrics and Pain Meeting, Atlanta, Georgia.
- DEC 1989 Epidural Neurolytics and Lysis of Adhesions / Dorsal Column Stimulation and Peripheral Nerve Stimulation / Hands On - Techniques of Racz. Professional Instruments Seminar, Cocoa Beach, Florida.
- MAR 1990 Peripheral Nerve Stimulation. Sixth World Congress on Pain, Adelaide, Australia.
- APR 1990 Peripheral Nerve Stimulation / Hypogastric Plexus Block / Dorsal Column Stimulation. Spinal Pain Meeting, Perth, Australia.
- MAY 1990 Peripheral Nerve Implant and Dorsal Column Stimulation / Lysis of Post Laminectomy Adhesions. International College of Surgeons, San Antonio, Texas.
- MAY 1990 Peripheral Nerve Stimulation / Spinal Cord Stimulation / Hypogastric Plexus Block for Pelvic Pain. International Pain Meeting, Kansas City, Kansas.
- MAY 1990 Treatment of the Cancer Patient. Bristol Regional Medical Center Annual Medical Symposium, Bristol, Virginia.
- SEP 1990 Workshop on Reflex Sympathetic Dystrophy and Neurolytic Procedures. International Symposium on Advances in Pain Management Update, Houston.
- NOV 1990 Neurolysis in Epidural Space. Holmes Regional Medical Center, Melbourne, Florida.
- FEB 1991 Epidural Hypertonic Saline and Epidural Phenol - Uses and Abuses / Avoiding Technical Difficulties and Troubleshooting Post-Implantation Problems / New Uses for Spinal Cord Stimulation / Stimulation of Peripheral Nerves in the Palliation of Chronic Pain. Interventional Pain Management - An Advanced Techniques Workshop, Scottsdale, Arizona.

- FEB 1991 Peripheral Neurostimulation / Panel Discussion. Eighth Annual Advances in Pain Management: Sympathetically Maintained Pain Syndrome, Lake Buena Vista, Florida.
- MAR 1991 Control of Chronic Pain. Sixth Annual Spring Seminar of the Texas Medical Auditors Association, Arlington, Texas.
- MAR 1991 Spinal Cord Stimulation in the Management of Cancer Pain and Related Pain Syndromes Neurolytic Sphenopalatine & Stellate Ganglion Blocks in the Management of Cancer Pain & Related Pain Syndromes / Epidural Neurolysis in the Management of Cancer Pain & Related Pain Syndromes / Celiac Plexus Neurolysis The Fluoroscopic Guided Approach / Hypogastric Plexus Neurolysis in the Management of Cancer Pain & Related Pain Syndromes / Phrenic Nerve Block Technique. Cancer Pain Update - Principles and Practice of Cancer Pain Management, Maui, Hawaii.
- MAR 1991 Acute and Chronic Pain Management with Epidural Infusion. American Operating Room Nurse's Association, Lubbock, Texas.
- APR 1991 Stellate Ganglion Block / Obturator Nerve Block / Celiac Plexus Block. Sixth Annual Society Ambulatory Anesthesia, San Diego, California.
- MAY 1991 New Perspectives in the Treatment of Low Back Pain. 14th Congress of the Italian Association for the Study of Pain - IASP Chapter, Alghero, Italy.
- MAY 1991 and Dual Purpose Catheter for Intractable Pain Management and Update on PNS SCS. 8th Annual Pain Symposium, Lubbock, Texas.
- JUN 1991 Update on Pain Management. Highland Hospital Staff, Lubbock, Texas.
- AUG 1991 Avoiding Technical Difficulties and Troubleshooting Post-Implantation Problems / New Application - Spinal Cord Stimulation / Stimulation of Peripheral Nerves in the Management of Chronic Pain / Implantation Techniques for Implantable Drug Delivery Systems / Management of Problems and Complications of Infusion Techniques / Epidural Neurolysis and Lysis of Adhesions / Atlanto-Occipital Block, Cervical Facet Block and Destruction of the Sphenopalatine Ganglion in the Management of Intractable Neck and Head Pain. Dannemiller Memorial Educational Foundation's Advanced Techniques Workshop, Boston, Massachusetts.
- SEP 1991 Program Chairman at the Texas Society of Anesthesiologists Annual Meeting, Galveston, Texas.
- SEP 1991 Moderator of Scientific Program at the Texas Society of Anesthesiologists Meeting, Galveston, Texas.
- SEP 1991 Management of Intractable Back and Leg Pain. South Plains Claims Association, Lubbock, Texas.
- OCT 1991 Nerve Blocks in the Treatment of Back Pain and RSDS / Implantable Spinal Cord Stimulator and Morphine Pump / Pain Management Seminar-Back Pain and Reflex Sympathetic Dystrophy Syndrome. Denver, Colorado.
- NOV 1991 Diagnosis and Treatment of RSD. First Texas Tech Podiatry Seminary, Lubbock, Texas.

- OCT 1991 Nerve Blocks in the Treatment of Back Pain and RSDS. Pain Management Seminar: Back Pain and RSDS, Denver, Colorado.
- JAN 1992 Pain Management Treatment and Reimbursement. South Plains Auditors Association, Lubbock, Texas.
- JAN 1992 Avoiding Technical Difficulties and Troubleshooting Post-Implantation Problems / New Application - Spinal Cord Stimulation / Stimulation of Peripheral Nerves in the Management of Chronic Pain / Management of Problems and Complications of Infusion Techniques / Epidural Neurolysis and Lysis of Adhesions / Atlanto Occipital Block, Cervical Facet Block and Destruction of the Sphenopalatine Ganglion in the Management of Intractable Neck and Head Pain. Dannemiller Memorial Educational Foundation, Interventional Pain Management: An Advanced Techniques Workshop, Tampa, Florida.
- JAN 1992 Anaphylactic Shock. Northwest Texas Area Counselor's Meeting of the South Plains Society of Radiologic Technologists.
- MAR 1992 Non-Neurolytic Sympathetic Nerve Blocks in the Management of Cancer Pain and Related Pain Syndromes / Spinal Cord Stimulation in the Management of Cancer Pain and Related Pain Syndromes / Neurolytic Sphenopalatine and Stellate Ganglion Blocks in the Management of Cancer Pain and Related Pain Syndromes/ Epidural Neurolytic Blocks in the Management of Cancer Pain and Related Pain Syndromes / Neurolytic Celiac Plexus Block - The Fluoroscopic Guided Approach / Hypogastric Plexus Neurolysis in the Management of Cancer Pain and Related Pain Syndromes / The Use of Cryoanalgesia in the Management of Cancer Pain. Dannemiller Memorial Educational Foundation, Principles and Practice of Cancer Pain Management, Big Island of Hawaii.
- MAR 1992 Spinal Cord Stimulation: Indications and Results. Seventeenth Annual Meeting, American Society of Regional Anesthesia, Tampa, Florida.
- APR 1992 The Pain Clinic. Southwest Rotary, Atlanta, Georgia.
- MAY 1992 Chronic Intrathecal Narcotic Administration: Technique and Indications / Spinal Cord Stimulation Update: Patient Selection and Modalities. 2nd International Symposium on the Management of Acute and Cancer Pain, Paris, France.
- MAY 1992 Spinal Cord and Brain Stimulation. International Symposium on Advances in Pain, The Cleveland Clinic Foundation, Cleveland, Ohio.
- MAY 1992 Peripheral Nerve Stimulation and Spinoscopy. Texas Back Institute Research Foundation, Neurosciences Conferences for Second Quarter, 1991, Plano, Texas.
- JUN 1992 Approaching Pain from TI Cephalad / Combined Pain Therapy. Ninth Annual Pain Symposium, Lubbock, Texas.
- JUL 1992 Epidural Neurolysis and Lysis of Adhesions. Kentucky Anesthesia Symposium: Anesthesia and the Critically Ill Patient, Louisville, Kentucky.
- JUL 1992 Epidural Neurolysis and Lysis of Adhesions - Uses and Abuses in the Failed Back Patient / New Uses for Spinal Cord Stimulation / The Failed Back: Past Problems and Future Directions. Dannemiller Memorial Educational Foundation, San Francisco, California.

- SEP 1992 Head, Neck and Upper Extremity Pain Management. South Plains Dental Society, Lubbock, Texas.
- SEP 1992 Hands-On Regional Anesthesia Workshop / Atlanto-Occipital, Cervical Facet, and Neurolytic Sphenopalatine Ganglion Blocks. Maximizing Reimbursement Under the New Medicare RVS System: A SPPM Revenue Enhancement Seminar and Hands-On Regional Anesthesia Workshop Hands-On Billing Workshop, Society for Pain Management, Chicago, Illinois.
- OCT 1992 Chronic Pain Management. Lubbock Area Pharmaceutical Association, Lubbock, Texas.
- OCT 1992 Chronic Pain. National Pharmacological Society, El Paso, Texas.
- OCT 1992 Medical-Legal Issues in Chronic Pain Management: How to Stay Out of Trouble. 1992 Annual Meeting of the American Society of Anesthesiologists. Chronic Pain Management: Current Clinical Issues (panel discussion), New Orleans, Louisiana.
- DEC 1992 Spinal Cord Stimulation - The Good News / Hypogastric Plexus Blockade, lectures; Spinal Cord Stimulation, exhibit workshop. Innovative Pain Management Strategies. American Society of Regional Anesthesia, LaJolla, California.
- JAN 1993 Hands-On Regional Anesthesia Workshop / Facet Block / Lumbar Sympathetic Block / Ilioinguinal Nerve Block / Lateral Femoral Cutaneous Block. Vail Anesthesia Update Advanced Regional Workshop, Dannemiller Memorial Educational Foundation, Vail, Colorado.
- FEB 1993 Spinal Cord Stimulation: Neuroaugmentation in Chronic Pain Management. 1993 Review Course in Pain Medicine, Annual Conference, American Academy of Pain Medicine, San Diego, California.
- MAR 1993 Epidural Neurolysis in the Management of Cancer Pain and Other Painful Conditions / Factors in Patient Selection for Spinal Cord Stimulation / Why Trial Stimulation is So Important / Implantation Techniques for Spinal Cord Stimulation / New Applications of Neuroaugmentation. The Third Annual Regional Anesthesia and Pain Management Update, Dannemiller Memorial Educational Foundation, Waikoloa, Hawaii.
- MAR/APR 1993 Lysis of Adhesions, Peripheral Nerve Stimulation, Spinal Cord Stimulation, Hypogastric Plexus Block and Neurolytic Blocks of the Stellate Ganglion lumbar Sympathetic. 2nd John J. Bonica Hawaii Pain Conference, Maui, Hawaii.
- MAY 1993 Epidural Lysis of Adhesions and Neuroaugmentation: Spinal Cord and Peripheral Nerve Stimulation in Pain. The Seventh Annual International Conference & Workshops on Neuropathic, Musculoskeletal and Ischemic Pain, New York, New York.
- MAY 1993 Peripheral nerve stimulation - RSD / Spinal Cord Stimulation / Case Presentations: Patient Treatments and Epiduroscopy. Tenth Annual Pain Symposium, Texas Tech University Health Sciences Center Institute for Pain Management and Department of Anesthesiology, Lubbock, Texas.
- JUL 1993 Ilioinguinal, Lateral Femoral Cutaneous Nerve Block and Blocks of the Lower Extremity / Epidural Neurolysis / Facet Block / Sphenopalatine Ganglion Block.

- Dannemiller Memorial Educational Foundation, Kansas City, Missouri.
- AUG 1993 Neurolytic Atlanto-Occipital Block: Indications and Technique / Neurolytic Sphenopalatine Ganglion Block: Indications and Technique / Thermal Neuro-Ablative Techniques: Cryo and Radio Frequency Lesions / Epidural Neurolysis and Lysis of Adhesions / Why Trial Stimulation Is So Important / A Look Into the Future: New Uses for Electro-Neurostimulation. Dannemiller Memorial Educational Foundation Interventional Pain Management Principles & Current Practices Meeting. Nice, France.
- SEP 1993 Neurodestructive Procedure / Neuroaugmentation and Neurolytic Procedure. Pain Management Review Course, The Osler Institute, Chicago, Illinois.
- SEP 1993 Neurolytic Block / Spinal Cord Stimulation / Epidural Lysis of Adhesion. The First East-West International Conference on Pain Management, Korean Pain Research Institute, Inc., Seoul, Korea.
- OCT 1993 Low Back Pain and Radiculopathy / Peripheral Nerve Stimulation / Panel Discussion with Prithvi Raj and Elliot S. Krames. American Osteopathic College of Anesthesiologists Annual Meeting, Orlando, Florida.
- NOV 1993 Intraspinal Infusion / Epidural Lysis of Adhesions / Dorsal Column Stimulation / Peripheral Nerve Stimulation. Third Annual Seminar on Pain, The Institute for Post-Graduate Education, Inc. Key West, Florida.
- DEC 1993 Neurolysis for Non-malignant Pain: Do We Have An Indication? Panel Discussion with Russell K. Portenoy, Neil Schechter, Elliot S. Krames, Betty R. Ferrell and Kathleen M. Foley. Current Concepts in Acute, Chronic, and Cancer Pain Management, a postgraduate course presented by the Pain Management Group in the Department of Anesthesiology and Critical Care of Memorial Sloan-Kettering Cancer Center, New York, New York.
- JAN 1994 Stellate ganglion block / Occipital nerve block / Ganglion impar block / Interpleural block / Facet block / Intercostal nerve block / Update on spinal cord stimulation / update on implantable pumps. Vail Anesthesia Update, by Dannemiller Memorial Educational Foundation, Vail, Colorado.
- JAN 1994 Neurostimulation & neurolytic pain therapy. Comprehensive Pain Medicine/Management Certification Examination Review Course, Pain Net Education Inc. and Park Medical Center, Dallas, Texas.
- FEB 1994 Epidural neurolysis: fact or fantasy? / Epidural neurolysis and lysis of adhesions: indications and technique / New uses for spinal cord stimulation. The Failed Back Past Problems and Future Directions, Dannemiller Memorial Education Foundation, Scottsdale, Arizona.
- FEB 1994 Session Chairman. Refresher Course in Anesthesiology, Texas Tech University Health Sciences Center Department of Anesthesiology, Lubbock, Texas.
- MAR 1994 Integrating neural blockade into your acute pain management service / Everything the pain specialist needs to know about headaches and facial pain / A pain specialist guide to neck and low back pain / epidural neurolysis & lysis of adhesions: theoretical basis & clinical applications / Factors in patient selection for spinal cord stimulation / Why trial stimulation is so important / Recent applications of neuroaugmentation in the management of pain / hypogastric plexus and ganglion of Walter block. The Fourth Annual Regional Anesthesia and Pain Management Update {"The State of the Art," Dannemiller Memorial Education

Foundation, Maui, Hawaii.

- APR 1994 Panel: Techniques of pain management and their efficacy: anesthesiology / Panel: Medtronic, case study / Plenary session chairperson: Cancer Pain / Panel: Malpractice and pain management / Workshop: Implantation of epidural and peripheral stimulation. 6th International Congress-Pain Clinic, sponsored by World Society of Pain Clinicians, co-hosted by National Pain Institute, The Medical College of George, Atlanta, Georgia.
- APR 1994 Peripheral nerve and spinal cord stimulation. Reflex sympathetic dystrophy seminar, organized by Joseph V. Uricchio, Jr., M.D., Orlando, Florida.
- APR 1994 Peripheral nerve stimulation / Spinal cord stimulation. Expanding your Pain Practice: 1994 update in pain management, special workshop offering myeloscopy. Presented by University of Louisville, New Orleans, Louisiana.
- JUN 1994 Lysis of epidural adhesion update / neuroaugmentation. 11th Annual Pain Symposium, Department of Anesthesiology, Texas Tech University Health Sciences Center, Lubbock, Texas.
- JUL 1994 Neurostimulation and neurolytic pain therapy. Comprehensive Pain Medicine/Management Certification Examination Review Course, Pain Net, Inc. Dallas, Texas.
- AUG 1994 Ilioinguinal, lateral femoral cutaneous nerve block and blocks of the lower extremity / Sphenopalatine ganglion block / Stellate ganglion block / Diagnostic and neurolytic facet blocks. The principles and practice of pain management: a keyword oriented review of the specialty, Dannemiller Memorial Educational Foundation, St. Louis, Missouri.
- SEP 1994 Treatment of chronic pain. Munson Medical Center, Traverse City, Michigan.
- OCT 1994 Chronic spinal pain: advanced injection techniques. 3rd annual International Spinal Injection Society, Minneapolis, Minnesota.
- OCT 1994 Intervention of pain management / Spinal cord stimulation. Licensed Vocational Nurses Association of Texas Annual Meeting, Lubbock, Texas.
- OCT 1994 Therapeutic and neurolytic blocks for the management of facial pain. Ophthalmic Anesthesia Society 8th Scientific Meeting, San Antonio, Texas.
- OCT 1994 Management of RSD / Management of RSD (two lectures). Pain Update 1994: 4th Annual Meeting, Greater Philadelphia Pain Society, Philadelphia, Pennsylvania.
- NOV 1994 Intraspinal medication / Neurolysis for non-malignant pain. Third International Conference and Post Graduate Course in Invasive Pain Management, Aruba in the Dutch West Indies.
- NOV 1994 Epidural lysis of adhesions / Reflex sympathetic dystrophy. First Annual International Symposium on Pain, sponsored by the Uruguayan Society of Physical Medicine, Montevideo, Uruguay.
- NOV 1994 New applications of electrical stimulation techniques / Atlanto-occipital and sphenopalatine block / Stellate ganglion block / Peripheral neurolysis / Epidural neurolysis / Subarachnoid neurolysis / Hypogastric plexus and ganglion impar block / Facet Block. Interventional Pain Management, An Advanced Techniques Seminar, sponsored by Dannemiller Memorial Educational Foundation, San

	Diego, California.
JAN 1995	Neurostimulation and neurolytic pain therapy. Comprehensive Pain Medicine/Management Certification Examination Review Course, Pain Net, Inc. Dallas, Texas.
FEB 1995	Lectures at Radionics/Pain Net, Inc. Radiofrequency Pain Management Workshop Symposium, Palm Springs, California.
MAR 1995 Johns	Pain treatment centers at a crossroads: A practical and conceptual reappraisal, Hopkins Pain Treatment, Baltimore, Maryland. (A proceedings textbook will be developed from this symposium.)
MAR 1995	Peripheral nerve stimulation: techniques and complications / Fire and ice: cryoneurolysis and radiofrequency thermocoagulation / Management of chronic sympathetically maintained pain / Management of Chronic Epidural Adhesions. Managing the experience of Chronic Pain, A Multidisciplinary Approach, sponsored by Dannemiller Memorial Educational Foundation, Scottsdale, Arizona.
APR 1995	RSD and new techniques of pain management: Grand Rounds for Department of Neurology, Texas Tech University Health Sciences, sponsored by Continuing Medical Education, Lubbock, Texas.
JUN 1995	How to stay out of medico legal trouble / RFTC and somatic nerve blocks for CRPS. 12th Annual Pain Symposium, Texas Tech University Health Sciences Center, Lubbock, Texas.
JUN 1995	Consultant: Botulinum toxin: Basic Science and Clinical Therapeutics Conference hosted by Allergan. Munich, Germany.
JUN 1995	Consultant/lecturer (pain management): Physicians in university and private groups. Budapest, Hungary.
JUL 1995	Electrical stimulation analgesia (lecture) / Techniques of spinal cord stimulation (workshop): 29th Annual Meeting of the Japan Society of Pain Clinicians, Sapporo, Japan.
AUG 1995	Interventional Therapy. The Second East-West International Conference on Pain Management, Beijing, China
SEP 1995	Role of radiofrequency in interventional pain management. Radiofrequency Techniques in the Management of Chronic Pain, a Radionics Inc. Seminar, Newport Beach, California.
SEP 1995	Stimulators, implantable therapies, and invasive therapies. Restoring the Body, Mind and Spirit - New Horizons in Chronic Pain Management Symposium hosted by Meridia Center for Rehabilitation and Pain Management, Cleveland, Ohio.
SEP 1995	CRPS: Complex Pain Regional Syndrome: Grand Rounds for Department of Internal Medicine, Texas Tech University Health Sciences Center.
OCT 1995	New concepts in pain management. Keynote lecture, visiting professor and grand rounds. St. Luke's-Roosevelt Hospital Center, New York, New York.
OCT 1995	Adding cryoneurolysis to your practice / cryoneurolysis ' Adding spinal cord stimulation to your practice / Complications and the management of spinal cord stimulation 'Adding epidural neurolysis to your practice / Epidural chemical

- neurolysis / Epidural hypertonic saline and steroids for chronic radicular pain / Neurolytic stellate ganglion block. Dannemiller Memorial Educational Foundation Review Course, Lake Buena Vista, Florida.
- OCT 1995 Update on benefits and risks of new invasive techniques. Panel presented at 1995 Annual Meeting American Society of Anesthesiologists, Atlanta, Georgia. A new technique for lumbar sympatholysis using radiofrequency thermal coagulation and somatic nerve block. Video produced at Texas Tech University Health Sciences Center in Lubbock. Presented at 1995 Annual Meeting American Society of Anesthesiologists, Atlanta, Georgia.
- NOV 1995 Closed Workshop to complete a current reappraisal of those conditions termed RSD and causalgia (CRPS Types I and II - new taxonomy). Proceeds will be published by the IASP Press. Beverly Hills, California.
- NOV 1995 The indications and efficacy of nerve blocks for CRPS (RSD). American Pain Society Annual Meeting, Los Angeles, California.
- DEC 1995 Role of peripheral nerve stimulation for the Management of Intractable Pain (lecture) and Neurolysis for non-malignant pain: Do we have an indication? (panel). Current Concepts in Acute, Chronic and Cancer Pain Management Conference hosted by Memorial Sloan-Kettering Cancer Center, Subhash Jain, MD, Director, New York, New York.
- DEC 1995 Role of radiofrequency in interventional pain management. Radiofrequency Techniques in the Management of Chronic Pain, a Radionics Inc. Seminar, San Antonio, Texas.
- DEC 1995 Lecture. Texas Tech University Health Sciences Center at El Paso, Department of Anesthesiology, El Paso, Texas.
- JAN 1996 Interventional workshop speaker: Neurolysis. Pain Net, Inc.'s January Interactive Pain Management Diagnostic & Interventional Workshop, Irving, Texas.
- FEB 1996 Role of radiofrequency in interventional pain management. Radiofrequency Techniques in the Management of Chronic Pain, a Radionics Inc. Seminar, Miami, Florida.
- FEB 1996 Guest lecturer. Annual Meeting Liverpool Medical Institution, Liverpool, England. Side trip to teach, lecture and direct pain management procedures in Budapest, Hungary.
- MAR 1996 Lumbar sympatholysis using radiofrequency thermal coagulation and somatic nerve block: A new approach to CRPS. IARS 19th Clinical and Scientific Congress, Washington, DC.
- MAR 1996 Invited attendee to Napa Valley conference designed to bring experts in the field of neuromodulation from the USA, Europe, and the Middle East together to informally discuss their work in the field of neuromodulation. Director, Elliot S. Krames, MD. Sponsored by Neuromed Corporation and Radionics Corporation, San Francisco, California.
- MAR 1996 Special meeting: Academic Anesthesia in Transition: 1996 to 2000. Panel: Residency, projections compared to today; planning needs; strategies, techniques for achieving training. Association of Anesthesiology Program Directors/Society of Academic Anesthesiology Chairs, Chicago, Illinois.

- APR 1996 Techniques of diagnostic blocks and procedures: Thoracic region / Medical and legal issues. A hands-on cadaver workshop, Radiofrequency techniques in the management of chronic pain, sponsored by Radionics Inc. St. Louis, Missouri.
- MAY 1996 Investigator's meeting for Allergan Botox Protocols 145-8051 and 146-8051. Sponsored by PAREXES International Corporation and Allergan. Dallas, Texas.
- MAY 1996 Association of University Anesthesiologists Annual Meeting. Boston, Massachusetts.
- MAY 1996 Combined lumbar RFTC sympathectomy and somatic nerve block: A new technique for treating SMP + SIP, a scientific exhibit presented at Outcomes Research 5th Annual AUA Satellite Symposium, Cape Cod, Massachusetts.
- JUN 1996 Neuroplasty (Lysis) / Radiofrequency and phenol sympathectomy as part of treatment for Complex Regional Pain Syndrome I and II / Case Procedures using Botox: 13th annual Pain Symposium, Texas Tech University Health Sciences Center Department of Anesthesiology, Lubbock, Texas.
- JUN 1996 Technique of diagnostic blocks and procedures: lumbar region / Medical and legal issues: Radiofrequency Techniques in the Management of Chronic Pain, sponsored by Radionics. Philadelphia, Pennsylvania.
- JUL 1996 Catheter placement techniques: cervical, thoracic, lumbar; lysis of adhesions; direction depth direction / Curved needle techniques / Hands-on cadaver workshop: Interventional Pain Management Techniques, sponsored by Pain Net, Inc., Dallas, Texas.
- JUL 1996 Botulinum Toxin A for Use in Pain Management / Epidural Neurolysis / Facet Nerve Block Techniques / Overview of Neuroaugmentation: Spinal Cord and Peripheral Nerve Stimulation / Cryoanalgesia and Radiofrequency Neurolysis. Dannemiller Memorial Foundation Pain Review Course, Kansas City, Kansas.
- AUG 1996 Techniques of diagnostic blocks and procedures: lumbar region / medical and legal issues / Back pain and sciatica / Cervical techniques workstation: Radiofrequency Techniques in the Management of Chronic Pain, sponsored by Radionics, Newport Beach, California.
- AUG 1996 Management of complications of implantation and infusion techniques / Why trial stimulation is so important / Implantation techniques for spinal cord stimulation / Complex regional pain syndrome (CRPS): Diagnosis, management (Redefinition of RSD) / Neurolytic atlanto-occipital and sphenopalatine ganglion / Epidural neurolysis and lysis of adhesions in chronic radicular pain / Recent advances in pain pharmacotherapy: Botulism toxin. Interventional Pain Management, an official satellite meeting of the IASO 8th World Congress on Pain, Hamilton, Bermuda.
- OCT 1996 Epidural lysis / The paradigms of low back pain / Rationale for the nonsurgical invasive techniques in low back pain. 7th International Symposium The Pain Clinic, sponsored by World Society of Pain Clinicians, Organized by Turkish Society of Algology (IASP Chapter), Istanbul, Turkey.
- OCT 1996 Epidural Neurolysis / Complex Regional Pain Syndrome / Spinal Cord Stimulation for Angina, Peripheral Vascular Disease: (Director and Lecturer) First Budapest Interventional Pain Workshop on Pain Procedures for Chronic Pain, Budapest, Hungary.

- OCT 1996 Innovations in Therapy for Myofascial Pain Syndrome / Workshop: Head and Face Trigger Point Injections, Demonstrations with Live Models. Contemporary Management of Myofascial Pain Syndrome Conference chaired by P. Prithvi Raj, MD, sponsored by Allergan. Beverly Hills, California.
- NOV 1996 What's New in Pain Therapy-Botulinum Toxin / Atlanto Axial & Sphenopalatine Nerve Block / Epidural Neurolysis & Lysis of Adhesions With Hypertonic Saline. Society for Pain Practice Management presented workshop entitled An Advanced Pain Practice Management Workshop. San Francisco, California.
- NOV 1996 Lysis of Epidural Adhesions Utilizing the epidural Approach / Interventional Techniques for Complex Regional Pain Syndromes. First Hellenic Pain Congress sponsored by Hellenic Pain Society, Athens Greece.
- DEC 1996 Patient Selection for Catheter Techniques / Direction Depth Direction. Session Chairman and Cadaver workshop instructor. Interventional Pain Management Techniques workshop sponsored by Radionics. San Antonio, Texas.
- JAN 1997 Current Status of Intrathecal Therapy for Non malignant Pain: Clinical Realities and Economic Considerations. Invited participation in Non-Malignant Pain Management roundtable, Memphis, Tennessee.
- JAN 1997 Session Chairman / Mechanisms and Pathophysiology of Spinal Pain, Cervical and Lumbar / Direction Depth Direction / Complications Management / Botox. Hands-on cadaver workshop Interventional Pain Management Techniques sponsored by Radionics, San Diego, California.
- JAN 1997 Clinical Applications of Botulinum Toxin in Pain Management. Pain Intervention Interest Group of the Pain Society of Great Britain and Ireland, Whipps Cross Hospital, London, England.
- FEB 1997 Interventional Techniques for Pain Management. Refresher Course in Anesthesiology, Department of Anesthesiology, Texas Tech University Health Sciences Center, Lubbock, Texas.
- MAR 1997 Epidural Catheter Placement / Lysis of Adhesion / Direction Depth Direction. Interventional Pain Management Techniques Workshop sponsored by Radionics in Orlando, Florida
- MAR 1997 CRPS - Continuum of Care - Interventional Techniques / Lysis of Adhesions - Single/double Catheter / Radiofrequency Lesioning--stellate, thoracic, lumbar sympathetic / Trial Spinal Cord Stimulation - Reduce Complications / Cervical Epidural Catheter Placement. Society for Pain Practice Management Meeting, Scottsdale, Arizona
- APR 1997 Use of Botulinum Toxin in Pain Management / Radiofrequency Neurolysis in the Management of Pain / A Pain Specialist's Guide to Implantation Techniques for Drug Delivery Systems - Tricks of the Trade / Current Status of Spinal Opioids in the Management of Non-malignant Pain. Pain Management Update workshop sponsored by Dannemiller Memorial Educational Foundation, San Diego, California.
- APR 1997 Malpractice Experience in the World of Pain and How to Stay Out of Trouble. Texas Society of Anesthesiology Interim Meeting, Scott & White Hospital, Temple, Texas

- MAY 1997 Lecture at Hungarian Society of Anesthesia, Budapest, Hungary.
- MAY 1997 Epidural Catheter Placement Techniques / Lysis of Adhesions. Lectures at Interventional Pain Management Techniques workshop sponsored by Radionics, Boston, Massachusetts.
- JUN 1997 Lecture: Balanced Approaches to Pain Management. First Annual Terence M. Murphy Memorial Lecture Series presenting Gabor B. Racz as First Lecturer. The University of Washington Multidisciplinary Pain Center and Department of Anesthesiology, John Loeser Chairman, Seattle, Washington
- JUN 1997 Spinal Cord and Peripheral Nerve Stimulation / Neuroplasty (Lysis) / Operating Room Procedures and Cadaver Laboratory. 14th Annual Pain Symposium, Texas Tech University Health Sciences Center Department of Anesthesiology Pain Services, Lubbock, Texas.
- JUL 1997 Consultant. Interventional Therapies Workshop, Dannemiller Memorial Education Foundation, sponsored by Medtronic. Memphis, Tennessee
- JUL 1997 Epidural Catheter Placement / Complications Management / Cadaver Workshops. Interventional Pain Management Techniques Workshop sponsored by Radionics, Chicago, Illinois
- JUL 1997 Facet Nerve Block Techniques / Intercostal and paravertebral Nerve Block / Overview of Neuroaugmentation: Spinal Cord and Peripheral Nerve Stimulation / Cryoanalgesia and Radiofrequency Neurolysis. The Principles and Practice of Pain Management Workshop, Dannemiller Memorial Education Foundation, Kansas City, Kansas
- AUG 1997 Interventional Pain Management Techniques, Current Clinical Prospectives/ Interventional Pain Management Techniques, Case Study Reports/ Chairman Morning session. Radionics workshop, Newport Beach, California
- SEP 1997 Lecture: Interventional Pain Management Techniques, Current Clinical Prospectives / Interventional Pain Management Techniques, Case Study Reports. Interventional Pain Management Workshop sponsored by Radionics, New Orleans, Louisiana
- SEP 1997 Lecture: Lysis of Spinal Adhesions and Hypertonic Saline Neurolysis / Botox Therapy: Use for Dystonia and Muscle Spasm and Applicability to Pain Management. Elliot Krames, Course Director. Viadollid Spain
- SEP 1997 Lecture: Advances in Interventional Techniques in the USA at World Institute for Pain, Barcelona, Spain
- SEP 1997 Lecture and Course Director: Second Annual Budapest Conference, Budapest, Hungary
- OCT 1997 Lecture: Galvanism Electrical Stimulation and Pain, topic for Panel Discussion in the History of Anesthesia at 1997 American Society of Anesthesia in San Diego, California.
- OCT 1997 Panel Topic: Chronic Pain Management: My Way is the Correct Way. American Pain Society meeting in New Orleans, Louisiana
- NOV 1997 Complex Regional Pain Syndrome / Invasive Treatment Modalities. Chronic Pain Management Workshop, Glen Scholte, Course Director, Shreveport,

- Louisiana.
- NOV 1997 Spinal Cord Stimulation. Interventional Pain Management Workshop, Steve Waldman, Course Director. New Orleans, Louisiana.
- NOV 1997 Interventional Pain Management Techniques, Current Clinical Prospectives. Lecture and Cadaver Workshop at Radionics Workshop, Carefree, Arizona
- NOV 1997 Lectures: Peripheral Nerve Stimulation / Epidural Neurolysis. American Society of Regional Anesthesiology (ASRA) Pain Review Course, New Orleans, Louisiana
- DEC 1997 Lecture: Radionics Workshop, San Antonio, Texas
- DEC 1997 Lecture: Current Concepts in Pain, Subhash Jain Conference, New York, New York.
- DEC 1997 Lecture: Radionics Workshop, Fort Lauderdale, Florida
- JAN 1998 Lysis of Adhesions / Direction Depth Direction / Lectures and session chairman and cadaver workshop instructor. Interventional Pain Management Techniques, sponsored by Radionics, Fort Worth, Texas.
- FEB 1998 Panel: Back pain-diagnostic blocks/Workshop: Do neurolytic blocks have a place in chronic non-malignant pain?/Neuroplasty via caudal and cervical catheters. International Meeting on Pain Control and Regional. Anaesthesia, Jaipur, India.
- FEB 1998 Lecture and clinical presentation: Whipps Hospital, Liverpool, England
- FEB 1998 What Is New in Interventional Techniques in Pain Management. Refresher Course, Department of Anesthesiology, Texas Tech University Health Sciences, Lubbock, Texas.
- FEB 1998 Back Pain: Diagnostic blocks/Do Neurolytic Blocks Have a Role in Chronic Non-malignant Pain? International meeting on Pain Control and Regional Anaesthesia, Jaipur, India.
- FEB 1998 Pain Management Neurolytic Procedures. Annual Refresher Course sponsored by Department of Anesthesiology, Texas Tech University Health Sciences Center, Lubbock, Texas.
- MAR 1998 Dinner Panel and lectures: A-Occipital & Atlanto-Axial Injection Technique / Stellate Ganglion Block / Trigeminal Nerve Block / Gloss pharyngeal Nerve Block / Cervical Epidural Nerve Block / Facet Block / Celiac Plexus Block / Lumbar Sympathetic Block / Lumbar Plexus Block / Sciatic Nerve Block. Pain Management Workshop sponsored by Society for Pain Practice Management, Scottsdale, Arizona.
- MAR 1998 Update in Spinal and Other Stimulation Techniques / Newer Interventional Techniques / Lumbar Discography and Dorsal Root Ganglia Block. Fifth Annual Illinois Pain Treatment Institute, Ltd. "Update in Interventional Pain Management, arranged by Dr. John Prunskis, Salt Lake City, Utah.
- MAR 1998 Lecture and Clinical Procedures. Whipps Cross Hospital, hosted by Dr. Charles Gauchi. London, England

- APR 1998 History and clinical overview / Patient Selection / Drug Delivery / Bi-lateral Stimulation / Technological Advances. Interventional Pain Management Techniques Seminar, arranged by Clinical Education Services and Radionics, Atlanta, Georgia.
- MAY 1998 Panel: CON Position: "Do We Overuse Invasive Procedures?" ASRA Annual Meeting, Seattle, Washington.
- MAY 1998 Occipital & Greater Auricular Nerve Blocks, Stellate Ganglion Block / trigeminal Nerve Block Via the Coronoid Approach / Brachial Plexus Block / Cervical Epidural Nerve Block / Thoracic Epidural Block / Lumbar Epidural Block / Lumbar Sympathetic Nerve Block, Lumbar Plexus Block - The Winnie 3-in-1 Technique, Caudal Epidural Block, Epidural Neurolysis of Adhesions. Anesthesia Update - Compliance, Billing & Nerve Block Seminar, A SPPM Review Enhancement Workshop for Anesthesiologists and CRNAs, sponsored by Society for Pain Practice Management, Atlanta, Georgia.
- MAY 1998 Current Trends of Interventional Techniques in the USA. SMART 1998 Congress Centre Milanofiori Anesthesia and Interventional Pain Symposium. Milan, Italy.
- JUN 1998 Spinal Cord and Peripheral Nerve Stimulation / Neuroplasty / Cadaver Workshop and Symposium Director. Fifteenth Annual Pain Symposium, Department of Anesthesiology and Pain Services at Texas Tech University Health Sciences Center, Lubbock, Texas.
- JUN 1998 Fifteenth Annual Pain Symposium. Texas Tech University Department of Anesthesiology, Lubbock, Texas.
- JUN 1998 Radionics, Baltimore, Maryland
- JUN 1998 New Directions of Interventional Pain Management. Indiana Pain Society, Indianapolis, Indiana.
- JUL 1998 Epidural Neurolysis / Ilioinguinal, Lateral Femoral Cutaneous Nerve Block and Blocks of the Lower Extremity. The Principles and Practice of Pain Management, A Keyword Oriented Review of the Specialty, sponsored by Dannemiller Memorial Education, Kansas City, Missouri
- AUG 1998 Complex Regional Pain Syndromes-Diagnosis and Treatment / Role of epidural Neurolysis and Lysis of Adhesions in Chronic Radicular Pain Management / Advances in Pain Pharmacotherapy - Botulism Toxin / Indications, Technique and Mechanism of Spinal Cord Stimulation / Role of the Neurolytic Block of the Sympathetic Axis for Cancer Pain Management / When to Pump and When to Stimulate for Chronic Pain Management / Radiofrequency Techniques in the Management of spinal Pain / Theory and Practice of Implant Techniques. Keynote lecturer. Simposio Internacional sobre Manego del Dolor Agudo y Cronico - Pain in Argentina '98, Buenos Aires. Argentina.
- SEP 1998 Invited member to Education Forum for discussion of Pain Fellows Strategy; Current Pain Management Customers and Their Needs; the Role of Mentorships or Peer-to-Peer Programs; Review of Current Pain Management Programs; and Future Education Ideas. Sponsored by Medtronic Neurological, Minneapolis, Minnesota.
- SEP 1998 Sciatic nerve injection under Anesthesia / Spinal Cord Stimulation and Peripheral Nerve Stimulation. International Pain Congress, Lucerne,

- Switzerland.
- SEP 1998 Sacral Stimulation / Livermore International Memorial Panel Discussion: How Would You Treat These Patients, My Way or No Way? / Course Director and cadaver workshop instructor. Third Annual Advanced Interventional Pain Conference and Cadaver Workshop, sponsored by World Institute of Pain, Budapest, Hungary.
- SEP 1998 Lysis of Adhesions / Site Specific Catheter Placement Techniques. First Annual Interventional Pain Conference and Cadaver Workshop. Athens, Greece.
- OCT 1998 Lysis of Adhesions / complex Regional Pain Syndrome / Electrical Stimulation/Spinal Cord Stimulation / Peripheral Nerve Stimulation / Radiofrequency / Other Nerve Blocks. Interventional Pain Management Workshop, Healthsouth Rehabilitation Hospital, Fort Lauderdale, Florida.
- OCT 1998 Clinical Forum: How to Manage Failed Low Back and RSD. American Society of Anesthesiology annual meeting, Orlando, Florida.
- OCT 1998 Lysis of Adhesions / Session chairman / Cadaver Workshop presenter. Interventional Pain Management Techniques sponsored by Radionics. Kiawah Island, South Carolina.
- OCT 1998 Spinal Column Stimulation / Principles of Adhesiolysis. Pain Management Conference hosted by St. Joseph's Hospital, Tampa, Florida.
- NOV 1998 Panel/lecture. American Academy of Physical Medicine and Rehabilitation Annual Meeting. Seattle, Washington.
- NOV 1998 Advances in Interventional Techniques for Back and Neck Pain / Update on Invasive Approaches. Pain Management Towards 2000, sponsored by World Institute of Pain and hosted by Israel Pain Association. Eilat, Israel.
- NOV 1998 Invasive Pain Treatment, An Overview. 1998 Congress of the Dutch Association of Anesthesiology, Section Pain Control - The Anesthesiologist as Pain Therapist. Maastricht, Netherlands.
- DEC 1998 Site Specific Catheter Techniques and Short Term Stimulation Protocols / RF Lesioning Techniques for Lumbar Sympathectomy in RSD Patients / Session Chairman. Radionics interventional management and cadaver workshop. Phoenix, Arizona
- JAN 1999 Lecture and Cadaver Workshop Leader. Radionics interventional management and cadaver workshop: Injections, Catheters, Radiofrequency. Orlando, Florida.
- FEB 1999 Neuromodulation Techniques / Radiofrequency Lesioning. AAPM Hands-On Cadaver Course/Interventional Pain Management Techniques. Palm Springs, California.
- FEB 1999 Electric Stimulation for Pain Management. Pain Management Forum: A Specialty Update sponsored by Loma Linda University. Palm Springs, California.
- MAR 1999 Organizational meeting National Pain Foundation. Denver Colorado.
- MAR 1999 Epidural neuroplasty / sacral nerve root stimulation for pelvic pain / CRPS-

- peripheral nerve stimulation / Botulinum toxin (Botox) in pain management / Curved needle techniques for reducing radiofrequency related complication—lumbar and thoracic sympathectomy / Case presentation. 8th Bonica Pain Conference, sponsored by The Ohio State University Department of Anesthesiology. Vail, Colorado.
- MAR 1999 Electrical stimulation. Interventional Pain Conference arranged by Winston Parris. Tampa, Florida.
- APR 1999 Trial spinal cord stimulation. Interventional Pain Symposium arranged by Octavio Calvillo. Houston, Texas.
- APR 1999 Sacral nerve / Peripheral nerve stimulation / Lumbar radiation safety / Lumbar blocks / Lumbar radiofrequency / Lysis of Adhesions. Pain Conference arranged by Philip Finch, Perth, Australia.
- APR 1999 Patient selection and physician diagnosis / Lumbar techniques: facet and sympathetic. Radionics sponsored interventional pain and cadaver workshop, arranged by Clinical Education Services. Houston, Texas
- MAY 1999 Lysis of Adhesions and Racz catheter discussion. Interventional Pain Conference. Munich, Germany
- MAY 1999 Cordotomie and Termic Neurolesions: Peripheral Nerve Stimulation/Surgical / Electrical Neurological Stimulation of the Peripheral Nerves. Interventional Pain Treatment Workshop. Capri, Italy.
- JUN 1999 Neuroplasty / Neuroaugmentation for the Treatment of headache / Physiology and Target Sites for Treatment of Facial and Upper Neck Pain. TTUHSC Department of Anesthesiology Annual Pain Symposium. Lubbock, Texas
- JUN 1999 Interventional Pain Management. Annual Pain Symposium, The University of Texas Southwestern, Dallas, Texas.
- JUN 1999 Lysis of Adhesions / Peripheral Nerve Stimulation. 25th Anniversary Meeting of Mexican Society of Anesthesiologists. Mexico City, Mexico.
- JUN 1999 Lysis of Adhesions. Second Annual Pain Conference. Athens, Greece.
- JUL 1999 Lecture and Cadaver Workshop Leader. Radionics interventional management and cadaver workshop: Intermediate/Advanced Course. Boston.
- JUL 1999 Lecture and Cadaver Workshop Leader. Radionics interventional management and cadaver workshop: Intermediate/Advanced Course. Boston.
- JUL 1999 Lecture and Cadaver Workshop Leader. Radionics interventional management and cadaver workshop: Intermediate/Advanced Course. New York, New York.
- AUG 1999 Implantation Techniques for Implantable Drug Delivery Systems / Update on Alternative Drugs for epidural and spinal administration / Management of complications of implantation and infusion techniques. Intervention Pain Management arranged by Dannemiller Education Foundation. Bermuda.
- AUG 1999 Lesion Specific Delivery of Medications Through Injections and Catheter Placements. 9th World Congress on Pain, International Association for the Study of Pain. Vienna, Austria.

- AUG 1999 Therapeutical Aspects of CRPS and SMP. Neuromodulation Conference organized by Michael Stanton-Hicks in Budapest, Hungary.
- SEP 1999 Lecture and Cadaver Workshop Leader. Radionics interventional management and cadaver workshop: Injections, Catheters, Radiofrequency. Denver, Colorado.
- SEP 1999 Use of Botox A for Pain Management / Neuroplasty and Course Director. 4th Annual Advanced Interventional Pain Conference and Cadaver Workshop, Budapest, Hungary.
- SEP 1999 Epidural Steroids / Imaging Techniques in Regional Anesthesia. Scientific Committee of European Society of Regional Anesthesia (ESRA), Istanbul, Turkey.
- SEP 1999 Radiofrequency lesioning in the Treatment of Chronic Pain. 5th National Congress on Pain. Istanbul, Turkey.
- SEP 1999 Lysis of Epidural Adhesions. 7th Congress of the Spanish Pain Society. Malaga, Spain.
- OCT 1999 Epidural Lysis of Adhesions/ Neuroplasty. The Egyptian International Congress on Pain: 5000 Years to the New Millennium, Pyramisa Sharm El-Sheikh, Egypt.
- OCT 1999 Epidural Lysis of Adhesions / Spinal Injection and Radiofrequency Lesioning in Management of Pain. Radionics Interventional Pain and Cadaver Workshop, Boston, Massachusetts..
- DEC 1999 Spinal Endoscopy / Management of Epidural Fibrosis. and Cadaver Workshop Leader. Radionics interventional management and cadaver workshop: Intermediate/Advanced Course. Dallas, Texas
- DEC 1999 Neurolysis for Non-Malignant Pain: Do We Have Indications? Current Concepts in Acute, Chronic and Cancer Pain Management Workshop present by The World Foundation for Pain Relief and Research, Inc. New York City, New York.
- JAN 2000 Lecture. Interventional Pain Conference at Baylor Medical Center. Houston, Texas.
- FEB 2000 Stimulators, pumps, Epiduroscopy, RF/blocks, Discography: Lecture and Cadaver Course Instructor. American Academy of Pain Medicine 2nd Annual Interventional Techniques Workshop and Cadaver course. New Orleans, Louisiana.
- FEB 2000 Lessons Learned, Lessons Taught: Experiences in the practice of Clinical Anesthesia. Refresher Course in Anesthesiology, Texas Tech University Health Sciences Center Department of Anesthesiology.
- MAR 2000 Myofascial and Neuropathic pain. Focus on Pain Conference on CRPS cosponsored by International Society and arranged by Robert Gerwin of Bethesda, Maryland. Conference in Phoenix, Arizona.
- MAR 2000 National Pain Foundation Board of Directors meeting. Denver, Colorado
- MAR 2000 Lecture and cadaver workshop. Radionics interventional management and

- cadaver workshop: Intermediate/Advanced Course. Redondo Beach, California.
- MAY 2000 Lecture and cadaver workshop. Radionics interventional management and cadaver workshop: Intermediate/Advanced Course. Minneapolis, Minnesota.
- MAY 2000 Lysis of Adhesions and Tun-L-Cath Using the Epidural Approach. North Pain Society, member or Spanish Pain Society, Vitoria-Gasteiz, Spain.
- JUN 2000 Lectures and Director. 17th Annual Texas Tech University Health Sciences Center Department of Anesthesiology Pain Symposium. Lubbock, Texas
- JUL 2000 Peripheral Nerve Stimulation for CRPS / Medtronic Symposium / Medtronic Roundtable / Modular Cadaver Course / Bladder and Pelvic Pain Stimulation. 9th World Congress. The Pain Clinic. International and American Neuromodulation Societies and World Institute of Pain. San Francisco, California.
- JUL 2000 Atlanto Occipital and Atlanto-Axial Injection Technique / Stellate Ganglion Block / Trigeminal Nerve Block / Lumbar Plexus Block / Cervical Epidural Nerve Block / Facet Block / Celiac Plexus Block / Lumbar Sympathetic Block / Epidural Lysis Adhesions / What's New in Pain Management / The Racz Procedure – Now We Have a Code...What's Next / Stimulators vs. Pumps - Matching the Modality to the Patient. Dannemiller Memorial Foundation Conference. Boston, Massachusetts.
- AUG 2000 Epidural Neurolysis and Lysis of Adhesions in chronic Radicular Pain / Atlanto-Occipital and Atlanto-Axial Injections in the Treatment of Headache and Neck Pain / Implantation Techniques for Implantable Drug Delivery Systems / Avoiding Technical Difficulties and Troubleshooting Post Implantation Problems / Management of Implantation Complications. Dannemiller Memorial Foundation Conference. San Francisco, California.
- SEP 2000 Lysis of Epidural Adhesions / Epiduroscopy / Lumbar and Caudal Neurolytics B locks. Colombian Society of Anaesthesia and the Colombian Chapter of IASP, Bogota, Columbia.
- SEP 2000 Lysis of Adhesions with the RACZ catheter. 6th International Vienna Pain Symposium, Vienna, Austria.
- SEP 2000 Lysis of Adhesions / Peripheral Nerve Stimulation / Panelist, The Future of Pain Medicine and Course Director Fifth Annual Interventional Pain Conference and Cadaver Workshop, Budapest, Hungary.
- OCT 2000 Forum: Knowing and treating spinal pathology / Post-laminectomy fibrosis: Treatment by epidural adhesiolysis. Lectures: Treating pain: old methods and new ideas / Stim-Cath: Role in patient screening for spinal stimulation in the treatment of acute pain conditions / Knowing new approaches, opening up new possibilities: L4 root block: Therapeutic possibilities. Spanish Chapter of the European Society of Regional Anesthesia (ESRA), Valencia, Spain
- NOV 2000 The role of the anesthesiologist in the treatment of chronic pain syndromes and a workshop: Nerve blocks in the treatment of Complex Regional Pain Syndromes. Joint Congress of the Swiss Anesthesia and Pain Societies, Lugano, Switzerland.
- NOV 2000 Invited consultant. Advanced pain management workshop. Medtronic, Dallas, Texas.

- JAN 2001 Current application of interventional techniques. Baylor Medical Center, Octavio Calvillo, Director. Houston, Texas
- FEB 2001 Lysis of epidural adhesions / epiduroscopy / pulsed EMF for treatment of pelvic pain. Advanced interventional Pain Management. Keith Javery, Director. St. Thomas, Virgin Islands.
- MAR 2001 Lysis of epidural adhesions and cadaver workshop instructor. AAPM cadaver workshop, Miami Beach, Florida.
- MAR 2001 CRPS Workshop sponsored by Medtronic. Dallas, Texas.
- MAR 2001 Nerve Stimulation Revisited: Will it survive in the 21st Century / The Radio Frequency and Pulsed Radio Frequency Story / Lysis of Adhesions: Do we really know what we're doing? / The Curved-Blunt Needle's Role in Reduction of Complications / Neuro-Augmentation in Pelvic Pain and Facial Pain. John Bonica Conference. John McDonald, Director. Hawaii.
- MAR 2001 Radiofrequency. Clinical Education Services Workshop hosted by Radionics. Houston, Texas
- APR 2001 Lysis of adhesions / spinal cord stimulation lectures. American Society of Interventional Pain Physicians semi-annual interventional pain medicine course. Laxmaiah Manchikanti, Director. Las Vegas, Nevada.
- APR 2001 Consultant and Lecture. Complex Regional Pain Syndrome Conference hosted by Medtronic. Dallas, Texas
- ARR 2001 Keynote Speaker: Interventional Pain Management. Pain Workshop. Michael Hammer, Director. Birmingham, Alabama.
- MAY 2001 Epidural Lysis of Adhesions / Spinal Cord Stimulation: Present and Future: Costs-Profits-Risks / Complex Regional Pain Syndrome / Use of Botox in Management of Chronic Pain. International Pain Conference, Buenos, Aires, Argentina.
- MAY 2001 Lecture and Cadaver Workshop. Clinical Education Services Workshop, hosted by Radionics. Philadelphia, Pennsylvania.
- JUN 2001 Complex Regional Pain Syndrome / Lysis of Adhesions. 18th Annual Pain Symposium, Texas Tech University Health Sciences Center, Lubbock, Texas.
- JUN 2001 Practical guidelines for Neuromodulation / epidural Neuroplasty . Pain Management in the 21st Century, 1st World Congress of World Institute of Pain. Istanbul, Turkey.
- AUG 2001 Complex Regional Pain Syndromes Advisory Panel. Hosted by Medtronic. Minneapolis, Minnesota
- AUG 2001 Lecture and Cadaver Workshop. Clinical Education Services Workshop, hosted by Radionics. Boston, Massachusetts
- SEP 2001 Lysis of Adhesions lecture and Course Director. Sixth Annual Advanced Interventional Pain Conference and Cadaver Workshop. Budapest, Hungary.
- OCT 2001 Spinal Cord Stimulation / Lysis of Adhesions. 6th Biennial Congress Asian &

- Oceanic Society of Regional Anesthesia. Seoul, Korea
- OCT 2001 Lectures at annual meeting of American Society of Interventional Pain Physicians. Legislative Day with Senators and Congressmen. Laxmaiah Manchikanti, Director. Washington, D.C.
- DEC 2001 Lecture and Cadaver Workshop. Clinical Education Services Workshop, hosted by Radionics. Miami, Florida
- JAN 2002 Course Chairman, Lecture: *Transforaminal & Cervical Catheter Placement* and Cadaver workshops. Advanced spinal Techniques for Pain Management. HealthStream Education Design (supported by Epimed, Radionics, American Neuromodulation System. Gainesville, Florida
- MAR 2002 Course Chairman, Lecture: *Transforaminal & Cervical Catheter Placement* and Cadaver workshops. Advanced spinal Techniques for Pain Management. HealthStream Education Design (supported by Epimed, Radionics, American Neuromodulation System. Dallas, Texas
- MAR 2002 Lectures: *Atlanto-Occipital & Atlanto-Axial Injection Technique / sphenopalatine Ganglion Block / Celiac Plexus Block / Update on RSD and CRPS / Indications and Contraindications to Spinal Cord Stimulation / Implantation Techniques for the Pain Management Specialist / Cervical Injection Techniques: How to Do it Quickly, Safely and Correctly / and workshops*. Clinical Education Conference and Workshops. Phoenix, Arizona
- MAR 2002 Lectures: *Using Curved Blunt Needles / Splanchnic and Thoracic Sympathetic* at 9th annual Illinois Pain Treatment Institute. John Prunskis, Director. Telluride, Colorado
- APR 2002 Lecture and workshops. Clinical Education Conference and Workshops. Ft. Lauderdale, Florida
- APR 2002 Meeting Pain Program Directors. 27th Annual meeting ASRA. Chicago, Illinois
- MAY 2002 Lecture: *Lysis of Epidural Adhesions and Workshop with Phillip Finch / Other Modalities: Complex Regional Pain Syndrome*. World Society of Pain Clinicians, Guistino Varrassi, chairman; Sardinia, Italy
- MAY 2002 Lecture: *Epidural Lysis of Adhesions and workshop of Neural Blockade*. American Neuromodulation Society annual meeting. Arranged by Dr. Peter Staats. Orlando, Florida
- MAY 2002 Course Chairman, Lecture: *Transforaminal & Cervical Catheter Placement* and Cadaver workshops. Advanced spinal Techniques for Pain Management. HealthStream Education Design (supported by Epimed, Radionics, American Neuromodulation System. Barroughs Neuro – Phoenix, Arizona
- JUN 2002 Cadaver Workshop for residents and pain fellows. Arranged by Steve Loretz, Epimed, with Lawrence Poree at University California San Francisco
- JUN 2002 *Lysis of Adhesions* and workshops. 18th Annual Texas Tech University Health Sciences Pain Symposium, Lubbock, Texas
- JUN 2002 Course Chairman, Lecture: *Transforaminal & Cervical Catheter Placement* and Cadaver workshops. Advanced spinal Techniques for Pain Management. HealthStream Education Design (supported by Epimed, Radionics, American

- Neuromodulation System. Irvine, California
- JUL 2002 *Minimal Invasive Epidural Neuroplasty Racz Procedure overview – indication – OP - demonstration / and workshop.* Low Back Pain Symposium arranged by Ludger Gerdesmeyer, MD in Munich, Germany
- JUL 2002 *Cervical Injection Techniques: How To do It Quickly, Safely & Correctly / epidural Neurolysis: How to Do It Quickly, Safely & Correctly* and workshops. Dannemiller Memorial Education Foundation. Arranged by Steven Waldman, MD. Boston, Massachusetts
- JUL 2002 Business Presentation with Medtronic Neurological group; discussion of present and future relations with Medtronic. Minneapolis, Minnesota
- AUG 2002 *Lecture and workshops.* Clinical Education Conference and Workshops. Boston, Massachusetts.
- SEP 2002 *Issues of Professional Regulation in Pain Medicine / Rehab for Post OP IDET and Laminectomy / Pain Conference* arranged by Dr. Gregory Flynn. Tampa, Florida
- SEP 2002 *Lysis of Adhesions / Radiation Safety / and workshops* and Course Director. Seventh Annual Pain Conference and Workshop. Budapest, Hungary
- SEP 2002 Registrar First World Institute of Pain Interventional Pain Examination. Budapest, Hungary
- SEP 2002 *Lecture: Stimulation techniques in Low Back Pain / discussant in Back pain Round Table IV / Moderator for Session on Radiofrequency in the Lumbar Region.* ALGOS 2002, International Symposium of the World Institute of Pain, Santorini, Greece
- OCT 2002 National meeting ASRA Pain Program directors called by Dr. Richard Rauck at ASA meeting. Orlando, Florida
- OCT 2002 *Transforaminal Epidural Steroids: Technique / Percutaneous Adhesiolysis Workshop / Discography & Transforaminal epidurals Workshop.* American Society of Interventional Pain Physicians Comprehensive Interventional Cadaver Workshop. Memphis, Tennessee
- NOV 2002 TENTATIVE ASRA annual meeting. Phoenix, Arizona
- JAN 2003 National Pain Foundation annual board meeting. Denver, Colorado
- FEB 2003 AAPM annual meeting. New Orleans, Louisiana
- MAR 2003 *Intrathecal Pumps / Managing Post Lumbar Laminectomy syndrome: Adhesions, Facet or Disc.* Third Semi-Annual Interventional Pain Management/Practice symposium. ASIPP Annual Meeting. San Diego, California
- MAR 2003 *Interventional Pain Management: Yesterday, Today, and Tomorrow.* Pain Conference celebrating retirement of Dr. Winston Parris. St. Lucia, Virgin Islands
- MAY 2003 ASIPP Legislative meetings and Capitol Hill Appointments

- MAY 2003 *Lysis of Adhesions*. 25th National Congress Italian Association for the study of Pain and International Neuromodulation Society. Venice, Italy
- MAY 2003 Lecture and Workshops. A Comprehensive Interventional Cadaver Workshop. Memphis, Tennessee
- JUN 2003 *Epidural Neurolysis / Case Discussions* Live from OR / Instructor for Cadaver Workshops. TTUHSC 20th Annual Pain Symposium. Lubbock, Texas
- JUN 2003 *Cadaver Demonstration Course Lumbar / Peripheral Nerve Stimulation for Pain*. 3003 International Neuromodulation Congress. Hosted by Enrique Reig. Madrid, Spain
- SEP 2003 *Lysis of Adhesions / Course Director* 8th Annual Interventional Pain Conference and Workshop. Budapest, Hungary
- SEP 2003 Registrar Second World Institute of Pain-Pain Practice Interventional Examination. Budapest, Hungary
- SEP 2003 *Radiofrequency / CRPS*. Lecture SIG Sympathetic meeting arranged by Michael Stanton-Hicks. Budapest, Hungary
- OCT 2003 *PRF Trigeminal Neuralgia / International symposium* honoring the 70th birthday of Prof. Menno Sluijter. Luzerne, Switzerland
- OCT 2003 *Head and Neck Region Discography, MBB, Neuroplasty / Pelvic Region Hypogastric, Sacral root Sleeve, Caudal Neuroplasty*. First WIP Interventional Puerto Rico Workshop, San Juan, Puerto Rico
- OCT 2003 lecture and workshop / ASIPP Cervical/Thoracic Workshop. Memphis, Tennessee
- NOV 2003 Minimally Invasive Technique for Back Pain: Epidural Adhesiolysis. Golden Triangle Symposium on Pain organized by Thai Association for the Study of Pain, Chiangrai, Thailand
- NOV 2003 Lysis of Adhesions. Biennial Congress of Asian & Oceanic Society of Regional anesthesia (AOSRA), Bangkok, Thailand
- FEB 2004 Invited lecturer to 6th Annual Pain Symposium organized by Cleveland Clinic, Orlando, Florida
- JUN 2004 *Epidural Neurolysis / Case Discussions* Live from OR / Instructor for Cadaver Workshops. TTUHSC 21th Annual Pain Symposium. Lubbock, Texas
- JUN 2004 *Workshop Leader* – Comprehensive Interventional Cadaver Workshop by American Society of Interventional Pain Physicians, Memphis, Tennessee
- JUN 2004 Consultant to Literature Selection Technical Review Committee (LSTRC) of the U.S. National Library, Washington D.C.
- JUL 2004 *Lysis of Adhesions / Cervical Facet / Lumbar Facet and Workshops* – Comprehensive Hands-On Interventional Pain Management Course, Society for Pain Practice Management, Boston, Massachusetts.
- JUL 2004 *CRPS* – invited lecturer to 2nd Annual Comprehensive Pain Board Review Symposium, Madison, Wisconsin

- SEP 2004 Lecture at 6th Annual Meeting of American Society of Interventional Pain Physicians and Legislative Visits, and receiving Lifetime Achievement Award at Awards Dinner, Washington, D.C.
- SEP 2004 *Efficacy of Interventional Procedures* / symposium organizer / WIP Treasurer. Third WIP World Congress, organized by World Institute of Pain, Barcelona, Spain
- SEP 2004 Registrar and Examiner for WIP Fourth Interventional Pain Physician Examination. Budapest, Hungary
- OCT 2004 *The Latest and the Future of Interventional Pain Management*. Lecture for Covenant Health System Continuing Medical Education for Weekly Noon Physicians Conference
- NOV 2004 *Workshop Leader – The Voice of Interventional Pain Management Comprehensive Interventional Cadaver Workshop – Cervical/Thoracic/Lumbar* by American Society of interventional Pain Physicians, Memphis, Tennessee
- JAN 2005 *Head and Neck Region / Caudal Neuroplasty* / Update on Future Trends of Interventional Management. Lectures for Second Interventional Workshop, hosted by WIP and Puerto Rico Pain Society. San Juan, Puerto Rico
- FEB 2005 *Peripheral Nerve Stimulation / Transforaminal Neuroplasty Techniques / Cervical Transforaminal Technique*. The Seventh Annual Pain Management Symposium, sponsored by the Cleveland Clinic. Orlando, Florida
- MAR 2005 Cadaver Faculty. A comprehensive Interventional Cadaver Workshop: Lumbar, Thoracic, and Cervical, sponsored by ASIPP, Memphis, Tennessee
- APR 2005 *Interventional Pain Management: Preservation thru Accountability, Advocacy, and Research / Percutaneous Adhesiolysis*. Seventh Annual Meeting and Symposium, ASIPP, New Orleans, Louisiana
- MAY 2005 *Neural Modulation by Blocks and Infusions / Radiofrequency Procedures / Interventional procedures in the sacral Region / Hypogastric lesion, caudal neuroplasty and Sacral Sleeve Injections*. International Forum on Pain Medicine, hosted by WIP, The European Federation of IASP Chapters and The Bulgarian Association of Pain Investigation and Treatment. Sofia, Bulgaria
- JUN 2005 *Lysis of Adhesions*. 22nd Annual Pain Symposium at Texas Tech University Health Sciences Center, Lubbock, Texas
- AUG 2005 *Lecture* / 11th World Congress on Pain hosted by International Association for the Study of Pain. Sydney, Australia
- SEP 2005 *Lysis of Adhesions / Head and Neck Region*. 10th Annual Budapest Conference and Practical Workshop and Examiner in 6th WIP FIPP Examination, Budapest, Hungary
- Oct 2005 *Spinal Cord Stimulation in Pain and Sacral Stimulation in Urinary and Gastroenterological Diseases*. 110th Anniversary of the Hungarian Society of Neurology and Psychiatry, Szeged, Hungary
- DEC 2005 *Cervical Neuropathy, Sharp vs. Blunt Needles and Safety Concerns*. 8th Asian & Oceanic Society of Regional Anesthesia and Pain Medicine. Chiba, Japan

- JAN 2006 *Safety and Efficacy of Cervical and Caudal Neuroplasty / Ethical Issues in Treating Pain and Suffering.* Update in Pain Management-Cadaver Workshop. Southwestern Medical Center, Dallas, Texas
- FEB 2006 Quarterly meeting National Library Committee Meeting – Washington D.C.
- MAY 2006 Lysis of Adhesions / CRPS and workshop instructor. 1st Pain Management Conference and workshop of Argentina. Juan Carlos Flores, director, WIP sponsor. Buenos Aires, Argentina.
- MAY 2006 *Hypo gastric lesions, caudal Neuroplasty and sacral sleeve injections / International procedures in the sacral region* and workshop instruction. PAIN, 2nd International Forum of Pain Medicine, Association of Pain Medicine Treatment, Federation of Latin American and World Institute of Pain, Guadalajara, Mexico
- JUNE 2006 *The Future of Interventional Pain Management -/ politics Shape Our Future.* Lectures and ASIPP Legislative visit at ASIPP annual meeting - Washington D.C.
- JUNE 2006 Quarterly meeting National Library Committee Meeting – Washington D.C.
- JULY 2006 *Patterns of Injury / Other Spinal Injections and therapeutic Intervention (Lectures / Panel Discussion.* International Spine Intervention Society annual meeting. Salt Lake City, Utah.
- SEP 2006 *Indication for Use of Interventional Procedures in the Treatment of Cancer Pain.* Spartanburg Regional Healthcare System. Spartanburg, South Carolina.
- SEP 2006 *Lysis of Adhesions*.and workshop. Budapest 11th Annual Interventional Conference-Workshop and FIPP Examination. Hosted by WIP. Gabor Racz is President of World Institute of Pain (WIP) and will preside at the conference. Budapest, Hungary.
- OCT 2006 *Lectures and Live Procedures.* Singapore Medical Council and Singapore General Hospital- Oct. 10-11, 2006.
- OCT 2006 *Lecture* at conference at Korean Institution of the Korean Pain Society Seoul, Korea
- OCT 2006 Quarterly meeting National Library Committee Meeting – Washington D.C.
- JAN 2007 *Lectures* at 2nd Annual Meeting of Illinois Society of interventional Pain Physicians, Chicago, Illinois, January 19, 2007
- Interventional therapies for spinal stenosis and failed back syndrome.* Interventional Therapies for Chronic Pain, 5th International Symposium of the Catalan Pain Society, College of Metges de Barcelona. Jan 25, 2007.
- FEB 2007 *Trends in Interventional Pain Management / Epidural Neurolysis and spinal Stenosis.* Update in Pain Management with Cadaver Workshop, UT Southwestern, Dallas Texas Feb 17-18, 2007
- Lectures* at The 9th Annual Pain Management Symposium, by Cleveland Clinic Department of Pain Management. Orlando, Florida Feb 10-14, 2007

- FEB 2007 Quarterly meeting National Library Committee Meeting – Washington D.C.
- MAR 2007 Lectures in Review Course/workshop and Examiner at 10th FIPP Examination by WIP-ASIPP in Memphis, Tennessee, March 9-11, 2007
- JUN 2007 *Epidural Adhesiolysis: the evidence at symposium on Evidence in Interventional Pain Management*, arranged by Dr. Charles Gauci, London, England June 21-24, 2007
- JUNE 2007 *Outcomes of Interventional Procedures in the Sacral Region* at 3rd Interventional Forum on Pain Medicine. Montreal, Canada June 28-July 1, 2007
- JUN 2007 Quarterly meeting National Library Committee Meeting – Washington D.C.
- SEPT 2007 *Lectures Pain Symposium* organized by Austrian Foundation of the American Austrian Foundation. Belgrade, Serbia September 20-22, 2007
- OCT 2007 *Epidural Injections and Adhesiolysis and Workshop* – American Society of Anesthesiologists, San Francisco, CA
- OCT 2007 *Lecture/Workshop – Pain Symposium* – organized by Dr. Ira Fox. Fort Lauderdale, FL
- OCT 2007 Quarterly meeting National Library Committee Meeting – Washington D.C.
- SEPT 2007 *Lectures/workshop and examiner at FIPP Examination*. Will serve as President of WIP and Course Director. WIP 4th World Congress, Budapest, Hungary September 25-28, 2007 11th FIPP Examination September 29, 2007
- JAN 2008 *Lysis of Adhesions*. Nottwil Switzerland Conference with Schleizer Wolfgang
- FEB 2008 *Advances in Epidural Lysis of Adhesions Procedure / Mechanisms of Injury from Injection Procedures: How to Avoid Them “Rimum Non Nocere” and workshops*. The Southwestern Medical Center Pain Symposium Dallas, Texas
- FEB 2008 *Lectures and Workshop*. Workshop Decompressive Neuroplasty and RF of Cervical/Lumbar Facet - World Anaesthetic Association meeting in Cape Town, South Africa
- FEB 2008 *Keynote Speaker* at 4th Annual Pain Symposium, Pain Management for the Practicing Physician. Oklahoma City, Oklahoma
- MAR 2008 *Epidural Lysis of Adhesions and Workshop Review Course and FIPP Examination* – Memphis, Tennessee
- APR 2008 Speaker Celebration of Death, Samuel Hassenbusch. The University of Texas MD Anderson, Houston, Texas.
- MAY 2008 *TENTATIVE* Week in Budapest, Hungary workshop, lectures
- MAY 2008 Lectures, workshops and live procedures in KUALA LAMPUR,
- MAY 2008 Lectures and live procedures. 13th International Pain Clinic Congress – Seoul, Korea
- JUN 2008 *Epidural Lysis of Adhesions* - First World Congress of Minimally Invasive

	Spine Surgery & Techniques, Honolulu, Hawaii
JUNE 2008	<i>Lysis of Adhesions and Workshop</i> - 25 th Annual TTUSC Pain Symposium – Lubbock, Texas Faculty Association
JUN 2008	Quarterly meeting National Library Committee Meeting – Washington D.C.
OCT 2008	<i>Epidural Injections and Adhesiolysis</i> . ASA annual meeting – Orlando, Florida
OCT 2008	Quarterly meeting National Library Committee Meeting – Washington DC
OCT 2008	Lecture and Legislative visits – ASIPP Annual Meeting. Washington DC

SCIENTIFIC PRESENTATIONS - USA:

1966-1976	Annual Refresher Course in Anesthesiology, Syracuse, New York International Anesthesia Research Society, Miami, Florida.
1968	Postgraduate Assembly of the NYSSA, New York, New York.
DEC 1980	Pan-Pacific Association Eleventh Congress, Honolulu, Hawaii 1969 Postgraduate Assembly in Anesthesiology, New York.
MAR 1982	A New Type of Epidural Catheter. G. Racz, J. Gintautas, G. Havasi. Scientific Exhibit, International Anesthesia Research Society Meeting, Reno, Nevada.
OCT 1982	Experimental Aspiration Pneumonitis. G. Dal Santo, N. Lawson, J. Gintautas, G. Racz, Scientific Exhibit, American Society of Anesthesiologists, New Orleans, Louisiana.
OCT 1983	Repeat Epidural Injections of Phenol for Pain and Spasticity Therapy in Non Terminal as well as Terminal Patients. American Society of Anesthesiologists.
DEC 1983	Repeat Epidural Injections of Phenol for Pain and Spasticity Therapy in Non Terminal as well as Terminal Patients. 37th Postgraduate Assembly of New York State society of Anesthesiologists, Awarded Best Instructional Exhibit.
MAY 1984	Repeat Epidural Injections of Phenol for Pain and Spasticity Therapy in Nonterminal as well as Terminal Patients. International Anesthesia Research Society, Awarded Best Instructional Exhibit.
OCT 1984	Capnography in the Operating Room (Scientific Display), American Society of Anesthesiologists, Awarded Blue Ribbon for Best Exhibit.
OCT 1984	Therapeutic Approaches to Reflex Sympathetic Dystrophies of the Upper Extremity (Scientific Display). Awarded Exceptional Merit.
DEC 1984	Capnography in the Operating Room (Scientific Display) and A New Improved Catheter for Epidural Anesthesia Continuous Plexus Block and CSF Drainage (Scientific Display). 38th Postgraduate Assembly of New York State Society of

- Anesthesiologists.
- MAR 1985 Therapeutic Approaches to Reflex Sympathetic Dystrophy. International Anesthesia Research Society, Awarded 2nd Place.
- OCT 1985 A New Improved Catheter for Epidural Anesthesia Continuous Plexus Block and CSF Drainage (Scientific Display). American Society of Anesthesiologists.
- MAR 1986 A New Improved Catheter for Epidural Anesthesia Continuous Plexus Block and CSF Drainage (Scientific Display). International Anesthesia Research Society.
- OCT 1986 Percutaneous dorsal column stimulation implantation for chronic pain control. (Scientific Display), American Society of Anesthesiologists.
- MAR 1987 Percutaneous dorsal column stimulator implantation for chronic pain control. (Scientific Display). International Anesthesia Research Society, Awarded 2nd Place.
- DEC 1987 Epidural Injection of Hypertonic Saline and Corticosteroid for Lysis of Adhesions and Pain Control. New York PGA, Awarded 1st Place Best Instructional Exhibit.
- MAR 1989 Peripheral Nerve Stimulator Implantation in the Treatment of Causalgia and Reflex Sympathetic Dystrophy (Scientific Exhibit). International Research Society.
- MAY 1990 Diagnostic and Neurolytic Hypogastric Plexus Blockade for Pelvic Pain (Scientific Exhibit). Texas Medical Association Annual Meeting, Second Award, Group II, Corpus Christi, Texas.
- OCT 1990 Panel on Intraoperative Techniques for Management of Acute and Chronic Pain, Conducted Clinical Forum on Pain Therapy and moderator for the Local Anesthesia and Pain III Scientific paper presentations. Experimental Evaluation of an Epidural Balloon Catheter System For Lysing Epidural Adhesions. (Scientific Exhibit), American Society of Anesthesiologists Annual Meeting, Las Vegas, Nevada.
- DEC 1990 Spinal Cord Stimulation: Use of a Dual Purpose Catheter in Screening and Therapy for Benign and Malignant Pain (Scientific Exhibit). NYPGA, New York, New York.
- MAR 1991 Spinal Cord Stimulation: Use of a Dual Purpose Catheter in Screening and Therapy for Benign and Malignant Pain (Scientific Exhibit). IARS 65th Congress.
- OCT 1991 Spinal Cord Stimulation: Use of a Dual Purpose Catheter in Screening and Therapy for Benign and Malignant Pain (Scientific Exhibit). ASA, San Francisco, California.
- MAR 1992 Spinal Cord Stimulation: Indications and Results (Scientific Exhibit). Seventeenth Annual Meeting, American Society of Regional Anesthesia, Tampa, Florida.
- OCT 1992 Epidural Space: Identification of Filling Defects and Lysis of Adhesions in the Treatment of Chronic. Painful Conditions, New Orleans, Louisiana.

- DEC 1994 A comparison of two techniques for stellate ganglion block. Postgraduate Assembly, The New York State Society of Anesthesiologists, Inc., New York City, New York, 1994.
- MAR 1995 A new technique for lumbar sympatholysis using radiofrequency thermal coagulation and somatic nerve blocks. Video produced at Texas Tech University Health Sciences Center in Lubbock. Presented at ASRA annual meeting, Orlando, Florida.
A comparison of two techniques for stellate ganglion blockade. Poster by William Ackerman, M.D. and Gabor B. Racz, M.D. produced at Texas Tech University Health Sciences Center in Lubbock. Presented at ASRA annual meeting, Orlando, Florida.
- OCT 1995 A new technique for lumbar sympatholysis using radiofrequency thermal coagulation and somatic nerve block. Video produced at Texas Tech University Health Sciences Center in Lubbock. Presented at 1995 Annual Meeting American Society of Anesthesiologists, Atlanta, Georgia.
PUBLICATION: News coverage of exhibit: Anesthesiology News, January, 1996.
- MAR 1996 Video presentation: A new technique for lumbar sympatholysis using radiofrequency thermal coagulation and somatic nerve block. Video produced at Texas Tech University Health Sciences Center in Lubbock, Texas. Presented at 1996 IARS meeting, Washington DC.
- MAR 1996 ASRA meeting. San Diego, California.
- MAY 1996 Combined lumbar RFTC sympatholysis and somatic nerve block: A new technique for treating SMP+SIP. 5th Annual AUA Satellite Symposium, Chatham, Massachusetts.
- JUN 1996 Radionics, Philadelphia, Pennsylvania
- OCT 1996 Two video presentations: The 3-D Technique for Cervical Epidural Catheterization of Treating Cervical Pain / Double Epidural Catheter Technique for Pain Management. Video produced at Texas Tech University Health Sciences Center in Lubbock. Presented at American Society of Anesthesiology, New Orleans, Louisiana.
- MAR 1997 The 3-D Technique for Cervical Epidural Catheterization in Treating Cervical Pain - Gabor Racz, M.D., James H. Diede, M.D., Christopher Wenger, M.D., Joel Hoffman, M.D., James E. Heavner, D.V.M., Ph.D. Scientific Exhibit at 71st Clinical and Scientific Congress sponsored by International Anesthesia Research Society in San Francisco, California.
- APR 1997 Two Scientific Exhibits:
• The 3-D Technique for Cervical Epidural Catheterization in Treating Cervical Pain - Gabor Racz, M.D., James H. Diede, M.D., Christopher Wenger, M.D., Joel Hoffman, M.D., James E. Heavner, D.V.M., Ph.D. and Double Epidural Catheter Techniques for Pain Management - Gabor B. Racz, M.D., Mike Hammer, M.D., James H. Diede, M.D., James E. Heavner, D.V.M., Ph.D. displayed at the 22nd Annual Meeting and Workshops of American Society of Regional Anesthesia in Atlanta, Georgia.
- OCT 1997 THIRD PLACE POSTER - Posterior sacral approach to the sciatic nerve for continuous lidocaine infusion: a new technique. Exhibit at American Society of Anesthesiologists annual meeting, San Diego, California.

- DEC 1997
a Posterior sacral approach to the sciatic nerve for continuous lidocaine infusion: new technique. Exhibit at Postgraduate Assembly of the New York State Society of Anesthesiologists, Inc. New York City, New York.
- 1997 Double Epidural Catheter Technique for Pain Management (Scientific Exhibit). ASRA, Atlanta, Georgia.
- 1997 Posterior Sacral Approach to the Sciatic Nerve for Continuous Lidocaine Infusion - A New Technique. (Scientific Exhibit). American Society of Anesthesiologists, San Diego, California.
- 1997 Posterior Sacral Approach to the Sciatic Nerve for Continuous Lidocaine Infusion - A New Technique. (Scientific Exhibit). New York PGA, New York, NY.
- 1997 The 3-D Technique for Cervical Epidural Catheterization in Treating Cervical Pain (Scientific Exhibit). IARS annual meeting, San Francisco, California
- 1997 The 3-D Technique for Cervical Epidural Catheterization in Treating Cervical Pain (Scientific Exhibit). (Scientific Exhibit). ASRA, Atlanta, Georgia.
- 1997 Double Epidural Catheter Technique for Pain Management (Scientific Exhibit). ASRA, Atlanta, Georgia.
- 1997 Posterior Sacral Approach to the Sciatic Nerve for Continuous Lidocaine Infusion - A New Technique. (Scientific Exhibit). American Society of Anesthesiologists, San Diego, California.
- 1997 Posterior Sacral Approach to the Sciatic Nerve for Continuous Lidocaine Infusion - A New Technique. (Scientific Exhibit). New York PGA, New York, NY.

SCIENTIFIC PRESENTATIONS - INTERNATIONAL:

- SEP 1984 Repeat Epidural Phenol Injections in Chronic Pain and Spasticity Using a New Epidural Catheter (Scientific Display). Postgraduate Course: Pain Mechanisms and Evaluations, Budapest, Hungary.
- OCT 1985 Monitoring Respiratory Physiology and Anesthetic Gas Delivery in the Operating Room Using Mass Spectrometry Based Medical Gas Analysis (Moderator for session on Management of Pain in Research Animals). Second International Congress of Veterinary Anesthesia, Sacramento, California.
- JUL 1986 Inhibition of MAO A and MAO B Activity by Tetracaine vs. a Tetracaine Homologue (Poster Presentation). III World Conference on Clinical Pharmacology and Therapeutics, Stockholm, Sweden.
- SEP 1986 Local Anesthetic Inhibitory Action Against Monoamine Oxidase May Play a Role in Spinal Anesthesia. European Society of Regional Anesthesia, Malmo, Sweden.
- JUN 1987 Plasma Catecholamine Levels During Acute Migraine Attacks (Accepted, could not attend). Jerusalem, Israel.
- AUG 1987 Epidural Injection of Hypertonic Saline and Corticosteroid for Pain Control (Poster Presentation). Fifth World Congress on Pain of the International

- Association for the Study of Pain, Hamburg, West Germany.
- MAY 1988 Lysis of Epidural Adhesions in Pain Patients (Scientific exhibit and 2 poster presentations). Ninth World Congress of Anesthesiologists, Washington, DC.
- MAR 1989 Peripheral Nerve Stimulator Implantation in the Treatment of Causalgia and Reflex Sympathetic Dystrophy. International Anesthesia Research Society.
- MAY 1992 Chronic Intrathecal Narcotic Administration: Technique and Indications / Spinal Cord Stimulation Update: Patient Selection and Modalities. 2nd International Symposium on the Management of Acute and Cancer Pain, Paris, France.
- AUG 1992 Safety Evaluation of a Catheter Introducer and Balloon Catheter for Lysing Epidural Adhesions (Poster Presentation). Sixth World Congress on Pain, Adelaide, Australia.
- AUG 1993 Epidural Space: Identification of Filling Defects and Lysis of Adhesions in the Treatment of Chronic Painful Conditions. International Association for the Study of Pain, Seventh World Congress on Pain, Paris, France.
- AUG 1993 Racz GB, Lewis R, Bradley WD, Moss WM and Heavenner JE: Follow-up of 117 patients with peripheral nerve stimulation implants for RSD. International Association for the Study of Pain, Seventh World Congress on Pain, Paris, France.
- JUL 1995
Pain Interventional Therapy. The Second East-West International Conference on Management, Beijing, China.
- AUG 1995 Electrical Stimulation analgesia/Techniques of spinal cord stimulation. 29th Annual Meeting of the Japan Society of Pain Clinicians, Sapporo, Japan.
- JUN 1995 Consultant: Botulinum toxin: Basic Science and Clinical Therapeutics Conference hosted by Allergan. Munich, Germany.
- OCT 1996 Epidural lysis / The paradigms of low back pain / Rationale for the non surgical invasive techniques in low back pain. Seventh International Symposium The Pain Clinic, sponsored by World Society of Pain Clinicians, Organized by Turkish Society of Algology (IASP Chapter), Istanbul, Turkey.
- JUN 1995 Consultant/lecturer (pain management): Physicians in university and private groups. Budapest, Hungary.
- JUL 1995 Electrical stimulation analgesia (lecture) / Techniques of spinal cord stimulation (workshop): 29th Annual Meeting of the Japan Society of Pain Clinicians, Sapporo, Japan.
- OCT 1996 Director and Lecturer. First Budapest Interventional Pain Workshop on Pain Procedures for Chronic Pain, Budapest, Hungary.
- NOV 1996 Lysis of Epidural Adhesions Utilizing the epidural Approach / Interventional Techniques for Complex Regional Pain Syndromes. First Hellenic Pain Congress sponsored by Hellenic Pain Society, Athens Greece.
- JAN 1997 Clinical Applications of Botulinum Toxin in Pain Management. Pain Intervention Interest Group of the Pain Society of Great Britain and Ireland, Whipps Cross Hospital, London, England.

- MAY 1997 Lecture at Hungarian Society of Anesthesia, Budapest, Hungary.
- SEP 1997 Lecture: Lysis of Spinal Adhesions and Hypotonic Saline Neurolysis / Botox Therapy: Use for Dystonia and Muscle Spasm and Applicability to Pain Management. Elliot Krames, Course Director. Viadollid Spain
- SEP 1997 Lecture: Advances in Interventional Techniques in the USA at World Institute for Pain, Barcelona, Spain
- SEP 1997 Lecture: Advances in Interventional Techniques in the USA at World Institute for Pain, Villadolid, Spain
- SEP 1997 Lecture and Course Director: Second Annual Budapest Conference, Budapest, Hungary
- FEB 1998 Panel: Back pain-diagnostic blocks/Workshop: Do neurolytic blocks have a place in chronic non-malignant pain?/Neuroplasty via caudal and cervical catheters. International Meeting on Pain Control and Regional. Anaesthesia, Jaipur, India.
- MAR 1998 Lecture and Clinical Procedures. Whipps Cross Hospital, hosted by Dr. Charles Gauchi. London, England
- MAY 1998 Current Trends of Interventional Techniques in the USA. SMART 1998 Congress Centre Milanofiori Anesthesia and Interventional Pain Symposium. Milan, Italy.
- AUG 1998 Complex Regional Pain Syndromes-Diagnosis and Treatment / Role of epidural Neurolysis and Lysis of Adhesions in Chronic Radicular Pain Management / Advances in Pain Pharmacotherapy - Botulism Toxin / Indications, Technique and Mechanism of Spinal Cord Stimulation / Role of the Neurolytic Block of the Sympathetic Axis for Cancer Pain Management / When to Pump and When to Stimulate for Chronic Pain Management / Radiofrequency Techniques in the Management of spinal Pain / Theory and Practice of Implant Techniques. Keynote lecturer. Simposio Internacional sobre Manego del Dolor Agudo y Cronico - Pain in Argentina '98, Buenos Aires. Argentina.
- AUG 1998 Complex Regional Pain Syndromes-Diagnosis and Treatment / Role of epidural
- SEP 1998 Sciatic nerve injection under Anesthesia / Spinal Cord Stimulation and Peripheral Nerve Stimulation. International Pain Congress, Lucerne, Switzerland.
- SEP 1998 Sacral Stimulation / Livermore International Memorial Panel Discussion: How Would You Treat These Patients, My Way or No Way?" / Course Director and cadaver workshop instructor. Third Annual Advanced Interventional Pain Conference and Cadaver Workshop, sponsored by World Institute of Pain, Budapest, Hungary.
- SEP 1998 Lysis of Adhesions / Site Specific Catheter Placement Techniques. First Annual Interventional Pain Conference and Cadaver Workshop. Athens, Greece.
- NOV 1998 Advances in Interventional Techniques for Back and Neck Pain / Update on Invasive Approaches. Pain Management Towards 2000, sponsored by World Institute of Pain and hosted by Israel Pain Association. Eilat, Israel.

- NOV 1998 Invasive Pain Treatment, An Overview. 1998 Congress of the Dutch Association of Anesthesiology, Section Pain Control - The Anesthesiologist as Pain Therapist. Maastricht, Netherlands.
- MAY 1999 Lysis of Adhesions and Racz catheter discussion. Interventional Pain Conference. Munich, Germany
- MAY 1999 Cordotomie and Thermic Neurolesions: Peripheral Nerve Stimulation/Surgical / Electrical Neurological Stimulation of the Peripheral Nerves. Interventional Pain Treatment Workshop. Capri, Italy.
- JUN 1999 Lysis of Adhesions / Peripheral Nerve Stimulation. 25th Anniversary Meeting of Mexican Society of Anesthesiologists. Mexico City, Mexico.
- JUN 1999 Lysis of Adhesions. Second Annual Pain Conference. Athens, Greece.
- AUG 1999 Implantation Techniques for Implantable Drug Delivery Systems / Update on Alternative Drugs for epidural and spinal administration / Management of complications of implantation and infusion techniques. Interventional Pain Management arranged by Dannemiller Education Foundation. Bermuda.
- AUG 1999 Lesion Specific Delivery of Medications Through Injections and Catheter Placements and Poster Exhibit. 9th World Congress on Pain, International Association for the Study of Pain. Vienna, Austria.
- AUG 1999 Therapeutical Aspects of CRPS and SMP. Neuromodulation Conference organized by Michael Stanton-Hicks in Budapest, Hungary.
- SEP 1999 Use of Botox A for Pain Management / Neuroplasty and Course Director. 4th Annual Advanced Interventional Pain Conference and Cadaver Workshop, Budapest, Hungary.
- SEP 1999 Epidural Steroids / Imaging Techniques in Regional Anesthesia. Scientific Committee of European Society of Regional Anesthesia (ESRA), Istanbul, Turkey.
- SEP 1999 Radiofrequency lesioning in the Treatment of Chronic Pain. 5th National Congress on Pain. Istanbul, Turkey.
- SEP 1999 Lysis of Epidural Adhesions. 7th Congress of the Spanish Pain Society. Malaga, Spain.
- OCT 1999 Epidural Lysis of Adhesions/ Neuroplasty. The Egyptian International Congress on Pain: 5000 Years to the New Millennium, Pyramisa Sharm El-Sheikh, Egypt.
- MAY 2000 Lysis of Adhesions and Tun-L-Cath. North Pain Society, member or Spanish Pain Society, Vitoria-Gasteiz, Spain.
- SEP 2000 Lysis of Epidural Adhesions / epiduroscopy / Lumbar and Caudal Neurolytics B locks. Colombian Society of Anaesthesia and the Colombian Chapter of IASP, Bogota, Columbia.
- SEP 2000 Lysis of Adhesions with the RACZ catheter. 6th International Vienna Pain Symposium, Vienna, Austria.
- SEP 2000 Lectures and course Director. Fifth Annual Interventional Pain Conference and

Cadaver Workshop, Budapest, Hungary.

- OCT 2000 Forum: Knowing and treating spinal pathology / Post-laminectomy fibrosis: Treatment by epidural adhesiolysis. Lectures: Treating pain: old methods and new ideas / Stim-Cath: Role in patient screening for spinal stimulation in the treatment of acute pain conditions / Knowing new approaches, opening up new possibilities: L4 root block: Therapeutic possibilities. Spanish Chapter of the European Society of Regional Anesthesia (ESRA), Valencia, Spain
- NOV 2000 *The role of the anesthesiologist in the treatment of chronic pain syndromes and a workshop: Nerve blocks in the treatment of Complex Regional Pain Syndromes.* Joint Congress of the Swiss Anesthesia and Pain Societies, Lugano, Switzerland.
- JAN 2001 *Interventional Pain Management: Update.* Baylor Medical Center. Octavio Calvillo, director. Houston, Texas.
- FEB 2001 *Lysis of epidural adhesions / epiduroscopy / pulsed EMF for treatment of pelvic pain.* Advanced Interventional Pain Management. Keith Javery, Director. St. Thomas, Virgin Islands.
- MAR 2001 *Lysis of epidural adhesions* and cadaver workshop instructor. AAPM cadaver workshop, Miami Beach, Florida.
- MAR 2001 CRPS Workshop sponsored by Medtronic. Dallas, Texas.
- MAR 2001 Lectures. John Bonica Conference. John McDonald, Director. Hawaii.
- MAR 2001 Epidural Lysis of Adhesions / Spinal Cord Stimulation. Lectures and Cadaver Workshop – Radionics Workshop and Cadaver Course – Houston, Texas.
- APR 2001 National Pain Foundation Board Meeting. Denver, Colorado
- APR 2001 Lysis of adhesions / spinal cord stimulation lectures. American Society of interventional Pain Physicians semi-annual interventional pain medicine course. Laxmaiah Manchikanti, Director. Las Vegas, Nevada.
- ARR 2001 Keynote speaker: *Interventional Pain Management.* Pain Workshop: 2001 A Pain Odyssey. St. Vincent's Hospital. Michael Hammer, Director. Birmingham, Alabama.
- MAY 2001 *Epidural Lysis of Adhesions / Spinal Cord Stimulation: Present and Future: Costs-Profits-Risks / Complex Regional Pain Syndrome / Use of Botox in Management of Chronic Pain.* International Pain Conference. Buenos Aires, Argentina.
- MAY 2001 Epidural Lysis of Adhesions / Spinal Cord Stimulation. Lectures and Cadaver Workshop – Radionics Workshop and Cadaver Course – Philadelphia, Pennsylvania.
- JUN 2001 Lectures. 18th Annual Pain Symposium. Texas Tech University Health Sciences Center. Lubbock, Texas.
- JUN 2001 Interventional Treatment: neuromodulation: Practical Guidelines for Neuromodulation / epidural Neuroplasty. Pain Management in the 21st Century, 1st World Congress of World Institute of Pain. Istanbul, Turkey.

- JUL 2001 Lecture: summary of PNS applications and Experience. Lecture and exchange in Peripheral Nerve Stimulation Panel Meeting arranged by Medtronic. University of Washington, Seattle, Washington.
- AUG 2001 CRPS Advisory Board organizational meeting by invitation. Hosted by Medtronic. Minneapolis, Minnesota.
- AUG 2001 Lysis of Adhesions. Lecture and Skills-Cadaver Workshop hosted by Clinical Education. Boston, Massachusetts.
- SEP 2001 Lectures and Course Director. Sixth Annual Advanced interventional Pain Conference and Cadaver Workshop. Budapest. Hungary
- FEB 2002 Lysis of Adhesions. Racz Catheter Conference, Munich, Germany
- FEB 2002 Lecture. Brussels, Belgium

LABORATORY RESEARCH IN PROGRESS:

Selective Nerve Fiber Blocks in In Vivo and In Vitro Preparations

Heavner JE, Racz GB, Diede J, Scherlis M: Measurement of Acetaminophen Blood Levels in Chronic/Persistent Pain Patients-Protocol

Racz GB, Diede JH, Heavner JE: Clinical trial of BOTOX (Botulinum Toxin Type A) Purified Neurotoxin Complex for the Treatment of Chronic Low Back Pain (BOTOX-145-8051)-Protocol

CLINICAL RESEARCH IN PROGRESS:

Selective Nerve Blockade Using Different Neurolytic Agents
Reflex Sympathetic Dystrophy - Therapeutic Approaches
Cerebrospinal Fluid Drainage
Continuous Brachial Plexus Block
In Vivo Recordings in Causalgia

RESIDENT ROTATIONS IN PAIN FROM UNIVERSITY OF WASHINGTON

David Goodman, M.D. – July 3 – August 31, 2000
Alfredo Schavz – January 1 – February 28, 2001
Jeremy Katz, M.D. – May 1 to June 30, 2001