

CURRICULUM VITAE

Charles N. Aprill, MD

Education:

Undergraduate: Bachelor of Science (Biology)
University of Notre Dame
South Bend, IN
June 1963

Graduate: Doctor of Medicine
LSU Health Sciences Center
New Orleans, LA
June 1967

Internship: Mixed Medicine
Charity Hospital of Louisiana
New Orleans, LA
June 1968

Residency: Radiology
Ochsner Medical Foundation
Jefferson, LA
June 1971

Military Service: Staff Radiologist, Naval Hospital
Lieutenant Commander, United States Navy Active Reserve
Stationed in Pensacola, FL
Honorable Discharge
1971 – 1973

Certification: American Board of Radiology
1972

Awards and Honors:

Cardon Award for Excellence in a published Research Article. 2000
The McKenzie Institute International Extension Award. 1997
American Medical Association Physician Recognition Award. Presented by North American Spine Society. 1986-1989
Award for Outstanding Spinal Research. Awarded by Cervical Spine Research Society. 1988
University of Iowa, Visiting Professor of Radiology for August. 1987
American Medical Association Physician Recognition Award. 1983–1986
Owl Club Award for Clinical Instruction. Presented by students of Tulane University Medical School for “Outstanding Clinical Instruction in the radiology rotation”. 1978

Academic, Professional, and Research Appointments:

Clinical Associate Professor, Department of Medicine Section of Physical Medicine and Rehabilitation LSU Health Sciences Center New Orleans, LA 2002 – present

Clinical Associate Professor Department of Radiology LSU Health Sciences Center New Orleans, LA 2002 – present

Clinical Associate Professor Department of Radiology Tulane University Health Sciences Center New Orleans, LA 1999 - present

Clinical Associate Professor Department of Orthopedics Tulane University Health Sciences Center New Orleans, LA 1999 – present

Clinical Assistant Professor Physical Medicine and Rehabilitation LSU Health Sciences Center New Orleans, LA 1996 – present

Clinical Assistant Professor Department of Radiology LSU Health Sciences Center New Orleans, LA 1996 – present

Solo Consultant Practice Magnolia Diagnostics 2718 Cadiz Street New Orleans, LA 70115
Private Practice limited to clinical and radiologic evaluation of adult patients with spine disorders. 1993 – present

Private Practice/Solo Consultant Practice/Diagnostic Conservative Management
3715 Prytania Street, Suite 101 New Orleans, LA 70115
Private Practice consisting of clinical and radiologic evaluation of adult patients with spine disorders. 1987 – 1993

Private Practice/Staff Radiologist St. Charles General Hospital 3700 St. Charles Ave.
New Orleans, LA 70115 *Private practice of general diagnostic radiology, ultrasound, nuclear medicine including nuclear cardiology, non-invasive vascular testing, CT scanning and invasive/interventional special procedures. During this period diagnostic evaluation of spine disorders became the focus of practice activities. Practice affiliation with radiation Consultants of New Orleans.* 1979 – 1986

Private Practice/Staff Radiologist East Jefferson General Hospital 4200 Houma Blvd. Metairie, LA *Private practice of general diagnostic radiology, ultrasound, nuclear medicine including cardiology, diagnostic invasive/ interventional special procedures. Practice affiliation with Drs. William Bean and Mario Calonje.* 1975 – 1978

Private Practice Rosewood General Hospital 9200 Westheimer Houston, TX 70042 *Private practice of radiation oncology, nuclear medicine and invasive/interventional diagnostic and therapeutic special procedures. Practice affiliation with Dr. Vincent Collins.*

Membership in Professional Organizations:

American Medical Association
Jefferson Parish Medical Society
Louisiana State Medical Society
New Orleans Radiology Society
Louisiana State Radiologic Society
American College of Radiology
Roentgen Ray Society
North American Spine Society – Past Board Member
Cervical Spine Research Society
American Back Society – Past Board Member
International Spinal Injection Society – Former President
International Intradiscal Therapy Society
Spine Society of Europe
American Spine Society Radiology

Teaching Experience/Responsibilities:

Undergraduate, Graduate, Resident, Fellow, Post-doctoral Instruction

Lectures to Physical Medicine and Rehabilitation Residents:

- 1) Injection procedure/Neuro Imaging, August 20, 2004.
- 2) Cervical Spine Imaging, February 20, 2004.
- 3) CT/MRI Basic Reading, May 24, 2002.
- 4) C-Spine Imaging, August 11, 2000.
- 5) Introduction to Cervical Spine and Epidural Steroid Injection, April 9, 1999.
- 6) Words & Wisdom from the Guru, February 19, 1999.

Undergraduate, Graduate, Resident, Fellow, Post-doctoral Instruction

Associate Professor of Physical Medicine & Rehabilitation and Radiology – Provide training in spinal injection procedures

1997-1998 PM&R

Doug Cannon, M.D.
Mark Chan, M.D.

1998-1999 PM&R

Thanh Le, M.D.
Erwin Deiparine, M.D.

1999-2000 PM&R

Howard Huang, M.D.
Ashfaq Qureshi, M.D.

1999-2000 Neuro-Radiology

Andrew Varady, M.D.

2000-2001 PM&R

Enrique Umberto, M.D.

2001-2002 PM&R

Scott Woska, M.D.
Amy Haynie Phelan, M.D.
David Kruger, M.D.

2002-2003 PM&R

Renee Melfi, M.D.
David Levi, M.D.
Edward Outlaw, M.D.

2003-2004 PM&R

Rachel Bergang, M.D.
Brenton Wynn, M.D.

2004-2005

Kevin Martinez, M.D.
Walter Ellis, M.D.

Teaching Awards:

Owl Club Award for Clinical Instruction, 1978, Presented by the students at Tulane University Medical School for Outstanding Clinical Instruction in Radiology rotation.

University of Iowa, Visiting Professor of Radiology, August 1987.

APPOINTMENT AS CLINICAL ASSOCIATE PROFESSOR in the DEPARTMENT OF RADIOLOGY and CLINICAL ASSOCIATE PROFESSOR in the DEPARTMENT OF ORTHOPAEDICS on the FACULTY AT TULANE UNIVERSITY 1999 to PRESENT.

Cardon Award for Excellence in a published research article 2000.

OUTSTANDING FACULTY AWARD IN RECOGNITION OF REMARKABLE SERVICE TO THIS SOCIETY AND ITS MEMBERS THROUGH DEVOTION TO EDUCATION 2003
Presented by the International Spinal Injection Society

PRESIDENTIAL CITATION for EXCELLENCE IN TEACHING NOVEMBER 15, 2003. Presented by American Academy of Disability Evaluation Physicians.

Journal Publications:

1. Schuler S, **Aprill CN**. Peripheral Joint Imaging. Variations in Normal Children. Journal of Nuclear Medicine, 13:367, 1972.
2. Schuler S, **Aprill CN**. Peripheral Joint Imaging, Methods of Evaluating Pediatric Bone and Joint Diseases. American Journal of Diseases in Children, 124:673, 1972.
3. Bean W, Geshner J, Calonje M, **Aprill CN**. Ultrasonic Diagnosis of Serous Cystadenocarcinoma of the Ovary. Journal of Louisiana State Medical Society, 129:123, 1977.
4. Bean W, Calonje M, **Aprill CN**, Geshner J. Ultrasound Diagnosis of the Hyperextended Head in Breech Presentation. Journal of Clinical Ultrasound, 5:278, 1977.
5. Bean W, Calonje M, **Aprill CN**, Geshner J. Cholelithiasis Diagnosed by Ultrasound. Journal of the Louisiana State Medical Society, 129:253, 1977.
6. Bean WJ, Geshner J, Calonje MA, **Aprill CN**. Hydronephrosis diagnosed with ultrasound and isotope scans. Journal of the Louisiana State Medical Society, 129(5):123-4, 1977.

7. Bean W, Calonje M, **Aprill CN**. Percutaneous Treatment of Renal Cyst with Ultrasound Guidance: A New Method. Submitted and accepted in American Journal of Roentgenology, December 1977.
8. Bean WJ, Calonje MA, **Aprill CN**, Geshner J. Anal Atresia: A Prenatal Ultrasound Diagnosis. Journal Clinical Ultrasound. 6(2):111-2, Aril 1978.
9. Bean W, Calonje M, **Aprill CN**, Geshner J. Percutaneous Catherization of the Gallbladder with Ultrasound Guidance. Journal of the Southern Medical Society, 72(5):612-4, May 1979.
10. Bean WJ, **Aprill CN**, Calonje MA, Geshner J. The “migrating” placenta: an ultrasound diagnosis. Journal of the Louisiana State Medical Society, 131(1):9-10, 1979.
11. **Aprill CN**. Editorial Letter – on CT Scanning and Metrizamide Myelography. Spine. Vol. 10, No. 8, pp. 691, October 1985.
12. vanHaranta H, Sachs B, Ohnmeiss D, **Aprill CN**, Spivey M, Guyer R, Rashbaum R, Hochschuler S, Terry A, Selby D, Stith W, Mooney V. Disc Deterioration in Low Back Syndromes. A Prospective, Multi-Center CT/Discography Study. Spine, Vol. 13, No. 12, pp. 1349-1351, 1988.
13. Simmons JW, **Aprill CN**, Dwyer AP, Brodsky AE. A Reassessment of Holt’s date on. “The Question of Lumbar Discography”. Clinical Orthopaedic and Related Research, No. 237, pp. 120-123, December 1988.
14. vanHaranta H, Sachs B, Ohnmeiss D, **Aprill CN**, Spivey M, Guyer R, Rashbaum R, Hochschuler S, Terry A, Selby D, Stith W, Mooney V. Pain Provocation and Disc Deterioration by Age; A CT/Discography Study in a Low Back Pain Population. Spine 14(4):420-423, 1989.
15. Dwyer A, **Aprill CN**, Bogduk N. Cervical Zygapophyseal Joint Pain 1: A Study of Normal Volunteers. Spine, Vol. 15, No. 6, pp. 453-457, 1990.
16. Dwyer A, **Aprill CN**, Bogduk N. Cervical Zygapophyseal Joint Pain Pattern 2: A Clinical Evaluation. Spine, Vol. 15, No. 6, pp. 458-461, 1990.
17. Walsh T, Weinstein J, Spratt K, Lehmann T, **Aprill CN**, Sayre H. Lumbar Discography in Normal Subjects. Journal of Bone and Joint Surgery, 72(7), 1990.
18. **Aprill CN**, Bogduk N. The Prevalence of Zygapophyseal Joint Pain. A First Approximation. Spine 17(7): 744-747, 1991.
19. Robertson H, Menonbi R, **Aprill C**, Smith R. CT and MRI Scans in Thoracic Intradural Disc Herniation. In: Neuroradiology, pp. 331-32. Springer-Verlag, 1991.

20. Amevo B, **Aprill CN**, Bogduk N. Instantaneous Axis of Rotation in Patients with Neck Pain. Spine, Vol. 17(7) 748-756, 1992.
21. **Aprill CN**, Bogduk N. High Intensity Zone: A Diagnostic Sign of Painful Lumbar Disc on MRI. The British Journal of Radiology, 65:362-369, 1992.
22. Bogduk N, **Aprill CN**. On the Nature of Neck Pain, Discography and Cervical Zygapophyseal Joint Blocks. Pain, 54, pp. 2313-217, 1993.
23. Wetzel T, LaRocca H, Lowery G and **Aprill CN**, Derby R, Fortin J, Kine G and Bogduk N. The Treatment of the Lumbar Spinal Pain Syndromes Diagnosed by Discography. Lumbar Arthrodesis. Spine, Vo. 19, No. 7, pp. 792-800, 1994.
25. Fortin J, **Aprill CN**, Ponthieux B, Pier J. Sacroiliac Joint: Pain Referral Maps Upon Applying a New Injection/Arthrography Technique; Part II: Clinical Evaluation. Spine, Vol. 19, No. 13, pp. 1483-1489, 1994.
26. Schwarzer AC, **Aprill CN**, Derby R, Fortin J, Kine G and Bogduk N: The Relative Contributions of the Disc and the Zygapophyseal Joint in Chronic Low Back Pain. Spine, Vol. 19, No. 7, pp. 801-806, 1994.
27. Schwarzer AC, **Aprill CN**, Derby R, Fortin J, Kine G, Bogduk N. The Clinical Features of Patients With Pain Stemming From the Lumbar Zygapophyseal Joints: Is the Lumbar Facet Syndrome a Clinical Entity? Spine, Vol. 19, No. 10, pp. 1132-1137, 1994.
28. Schwarzer AC, Derby R, **Aprill CN**, Fortin J, Kine G, Bogduk N. Pain from the Lumbar Zygapophyseal Joints: A Test of Two Models. J Spinal Disorders, Vol. 7, No. 4, pp. 331-336, 1994.
29. Schwarzer AC, **Aprill CN**, Derby R, Fortin J, Kine G, Bogduk N. The False-Positive Rate of Uncontrolled Diagnostic Blocks of the Lumbar Zygapophyseal Joints. Pain, 58:195-200, 1994.
30. Moneta GB, Videman T, Kaivanto K, **Aprill CN**, Spivey M, vanHaranta H, Sachs BL, Guyer RD, Hochschuler SH, Rashbaum RF, Mooney V. Reported pain during lumbar discography as a function of annular ruptures and disc degeneration: A re-analysis of 833 discograms. Spine, Vol. 19, No. 17, pp. 1968-1974, 1994.
31. Schwarz AC, Derby R, **Aprill CN**, Fortin J, Kine G, Bogduk N. The Value of the Provocation Response in Lumbar Zygapophyseal Joint Injections. Clinical Journal of Pain, Vol. 10, No. 4, pp. 309-313, 1994.
32. Schwarzer AC, **Aprill CN**, Bogduk N. The Sacroiliac Joint in Chronic Low Back Pain. Spine, Vol 20, No. 1, pp. 31-37, 1995.

33. Schwarzer AC, **Aprill CN**, Derby R, Fortin J, Kine G, Bogduk N. The Prevalence and Clinical Features of Internal Disc Disruption in Patients with Chronic Low Back Pain. Spine, Vol. 20, No. 17, pp. 1878-1883, 1995.
34. Donelson R, **Aprill CN**, Medcalf R PT, Dip MDT, Grant W EdD. A Prospective Study of Centralization of Lumbar and Referred Pain. Spine, Vol. 22, No. 10, pp. 1115-1122, 1997.
35. Wetzel FT, Phillips FM, **Aprill CN**, Bernard Jr. TN, LaRocca HS. Extradural Sensory Rhizotomy in the Management of Chronic Lumbar Radiculopathy; A minimum 2-year Follow-Up Study. Spine, Vol. 22, No. 19, pp 2283-2291, 1997.
36. vanHaranta H, Ohnmeiss D, **Aprill CN**. Vibration Pain Provocation Can Improve the Specificity of MRI in the Diagnosis of Symptomatic Lumbar Disc Rupture. The Clinical Journal of Pain, Vol. 14, No. 3, pp. 239-247, 1998.
37. Aprill CN. Epidural/perineural injection. European Spine Journal. 8(1):81-82, 1999.
38. Cannon DT, **Aprill CN**. Focused Review; Lumbosacral Epidural Steroid Injections. Archives of Physical Medicine and Rehabilitation, Vol 81, pp S87-S98, March 2000.
39. Young S, **Aprill CN**. Characteristics of a Mechanical Assessment for Chronic Lumbar Facet Joint Pain. The Journal of Manual & Manipulative Therapy, Vol. 8, No. 2, pp. 78-84, 2002.
40. Le T, Buindo J, **Aprill CN**, Deiparine E. Costovertebral Joint Erosion in Ankylosing Spondylitis. American Journal Physical Medicine Rehabilitation, 2001; 80:62-4.
41. **Aprill CN**, Axinn MJ, Bogduk N: Occipital headaches stemming from the lateral atlanto-axial (C1-2) joint. CEPHALALGIA Vol. 22, pp 15-22. 2002.
42. Laslett M, Young SB, **Aprill CN**, McDonald B: Diagnosing painful sacroiliac joints: A validity study of a McKenzie evaluation and sacroiliac provocation tests. Australian Journal of Physiotherapy 49(2): 89-97. 2003.

Books & Chapters:

1. **Aprill CN**: Myelography. In: The Adult Spine-Principles and Practices. Vol. 1: John Frymoyer, editor; Raven Press, New York, publisher; Chapter 19, pp.311-34, 1991.
2. **Aprill CN**: Diagnostic Disc Injections. In: The Adult Spine-Principles and Practices. Vol. 1: John Frymoyer, editor; Raven Press, New York, publisher; Chapter 21, pp. 403-442, 1991.
3. **Aprill CN**, Bodin R. Magnetic Resonance Imaging in Lumbar Spinal Stenosis. Lumbar Spinal Stenosis; Gunnar B. J. Anderson and Thomas W. McNeill: Mosby yearbook, publisher. Chapter 20, pp. 255-274, Mosby yearbook, 1992.

4. **Aprill CN.** Computed Tomography. Discography in Spinal Stenosis. Lumbar Spinal Stenosis; Gunnar B. J. Anderson and Thomas W. McNeill, editors; Mosby yearbook, publisher, Chapter 21, pp. 255-275, Mosby yearbook, 1992.
5. **Aprill CN.** Radiologic Imaging Techniques of the Spine. Rehabilitation of the Spine; Science and Practice, Stephen H. Hochschuler, Howard B. Cotler and Richard D. Guyer, editors; Mosby-Year Book, Inc., publisher, Chapter 8, pp. 79-112, 1993.
6. Bogduk N, **Aprill CN.** Diagnostic Blocks of Spinal Synovial Joints. Spine Care Operative Treatment Volume One. Arthur H. White, Editor and Jerome A Schofferman, M.D., Associate Editor; Mosby yearbook publisher. Chapter 21, pp. 298-321, 1995.
7. Bogduk N, **Aprill CN**, Derby R. Epidural Steroid Injections. Spine Care Operative Treatment, Volume One; Arthur H. White, editor and Jerome A. Schofferman, M.D., Associate Editor, Mosby-Year Book, Inc., publisher. Chapter 22, pp. 322-343, 1995.
8. Bogduk N, **Aprill CN**, Derby R. Lumbar Zygapophyseal Joint Pain: Diagnostic Blocks and Therapy. Practical Interventional Radiology of the Musculoskeletal System; David J. Wilson, MBBS, B.Sc., MRCP, FRCR, editor; Edward Arnold, London-Boston-Sydney-Auckland, publisher, Chapter 6, pp. 73-86, 1995.
9. Bogduk N, **Aprill CN**, Derby R. Selective Nerve Root Blocks. Practical Interventional Radiology of the Musculoskeletal System. edited by David J. Wilson, MBBS, B.Sc., MRCP, FRCR, Edward Arnold, London-Boston-Sydney-Auckland, Chapter 10, pp. 121132-86, 1995.
10. Bogduk N, Derby R, **Aprill CN**, Lord S, Schwarzer A. Precision Diagnosis of Spinal Pain. Pain 1996 – An Updated Review: Refresher Course Syllabus. International Association for the Study of Pain. James N. Campbell, editor, IASP Press, publisher, pp. 313-322, August 17-22, 1996.
11. **Aprill CN.** Diagnostic Disc Injections I. Cervical Disc Injection. The Adult Spine; Principles and Practice, 2nd Edition; John Frymoyer, editor; Raven Press, New York, publisher, Chapter 28, pp. 523-538, 1997.
12. **Aprill CN.** Diagnostic Disc Injections II. Diagnostic Lumbar Disc Injections. The Adult Spine; Principles and Practice, 2nd Edition; John Frymoyer, editor, Raven Press, New York; publisher, Chapter 28, pp. 539-562, 1997.
13. **Aprill CN:** Use of Discography. In: Controversies in Spine Surgery: Surgical techniques and treatment by Thomas A. Zdeblick, and Edward C. Benzel; editors. Quality Medical Publishing. St. Louis, MO. Chapter 7, pp. 241-255.

Presentations, Continuing Education and Activities:

December - Radiologic Society of North America, 56th Annual Scientific Assembly Meeting, Chicago, IL.

1972

Fourteenth Annual Refresher Course in Radiology, University of Cincinnati, Cincinnati, OH.

1974

October - American Society of Therapeutic Radiologists, Key Biscayne, FL.

1975

June - University of Minnesota, Current Concepts in Radiation Therapy, Minneapolis, MN.

July - Diagnostic Ultrasound Seminar, New Orleans, LA.

1976

January - Xeromammography Seminar, St. Joseph's Hospital, Houston, TX.

May - Los Angeles County Radiology Society, Spring Ultrasound Conference, Los Angeles, CA.

September - Roentgen Ray Society Annual Meeting, Washington, DC.

1977

January - Society of Special Procedure and Cardiovascular Radiologists Annual Meeting, Los Angeles, CA.

May - Harvard Radiology Society, G.I. Radiology Seminar, Boston, MA.

1978

January - University of California Medical School, Computed Tomography, Ultrasound and X-ray: An Integrated Approach, San Francisco, CA.

April - New Orleans Spring Roentgen Conference, New Orleans, LA.

April - Southwest Medical School Clinical Nuclear Imaging 1978, Dallas, TX.

August - Diagnostic Ultrasound and Radiology, Special Procedures, Brown University and Union Truesdale Hospital, Hyannis, MA.

1981

May - Interventional Radiology Course, University of California San Diego, San Diego, CA.

July – Advances in Diagnostic Imaging, Hospital of the University of Pennsylvania, Nantucket Island, MA.

November – Presbyterian Hospital, Dallas Texas, Update: Non-Invasive Vascular Imaging.

1982

January – Chest Radiology 1982, University of California, San Diego, San Diego, CA.

January – Interventional Radiology and Diagnostic Imaging Modalities, University of California, San Francisco, CA.

March – Western Neurological Associates, Complexities of Interpretation of CT Scan; Cervical and Lumbar Disc Disease, Salt Lake City, UT.

July – Hospital of the University of Pennsylvania, Interventional Radiology, Diagnostic Imaging Seminar/ Gastroenterology for Radiologists, Martha's Vineyard, MA.

1983

January – San Diego Imaging Symposium, Nuclear Magnetic Resonance, Interventional Radiology and Diagnostic Imaging, University of California San Diego, San Diego, CA.

April – Neuroradiology Review Course, Loyola University of Chicago, Stritch School of Medicine, Chicago, IL.

June – American Society of Neuroradiology Annual Meeting, Current Perspectives in Computed Tomography of the Postoperative Spine: Review of 100 Cases, Bisset R, Keating J, Aprill CN. Co-authored presentation by Dr. Aprill and Dr. Bisset, San Francisco, CA.

September – Tufts University, Modern Management of the Lumbosacral Spine, Boston, MA.

1984

June – North American Spine Association Inaugural Meeting. In-Depth Radiological Investigation of Lumbar Disorders, Aprill CN, Vail, CO.

November – The Challenge of the Lumbar Spine, Alton Ochsner Medical Foundation, New Orleans, LA. Presentations by Invitation include:

- The Role of Discography in the Management of Lumbar Disorders.
- Enhanced CT Scanning of the Lumbar Spine.

1985

July – The Challenge of the Lumbar Spine, Minneapolis, MN. Presentations by Invitation include:

- Component Exams: Discography, Facet Joint Arthrography and Selective Nerve Sheath Injections.

- Acute Complications of Myelography.

July – Abbott-Northwestern Hospital, North American Lumbar Spine Association, Minneapolis, MN.

1986

February – Federation of Spine Associations. Co-sponsor: American Academy of Orthopaedic Surgeons/ New Orleans, LA.

April – Radiology/ Ochsner Medical Foundation, New Orleans, LA.

May – The International Society for Study of the Lumbar Spine, Annual Meeting/ Lumbar Facet Joint Arthrography and Injection in the Evaluation of Painful/ Disorders of the Low Back, April CN/ Dallas, TX.

June – Nordisk. Ortopedisk Forenings 43. Kongress/ Radiological – Anatomical studies of the Cervical Spine: Correlation with Discography, Facet Joint Injections and Computed Tomography. Raushning W and April CN. Paper presented by Raushning/ Trondheim, Norway.

July – North American Spine Society Annual Meeting/ Bolton Landing, New York. Presentation by Invitation included:

- Detailed Anatomic/ Radiologic Correlation of Internal Structure of the Lumbar Disc. April CN.
- Extradural Sensory Rhizotomy in the Management of Chronic Lumbar Spondylosis with Radiculopathy. Bernard T, Broussard T, LaRocca H, April CN, Dwyer A.

September – Clinical Magnetic Resonance – 1986/ University of California/ San Francisco, CA.

September – American College of Radiology/ Categorical Course on Diagnostic Techniques in Musculoskeletal System/ Baltimore, MD.

November – The Challenge of the Lumbar Spine, 1986, San Francisco, California. Presentation by invitation included:

- CT Discography
- Discography – Technique

December – The Cervical Spine Research Society Second Instructional Course/ Provocative Studies: Discography, Facet Injections, Nerve Blocks/ West Palm Beach, FL. Presentation by invitation.

December – Cervical Spine Research Society Annual Meeting/ Referred Pain Patterns from Stimulation of Cervical Zygapophysial Joints. Co-authored presentations; Dwyer A, April CN. Presentation by invitation/ Palm Beach, FL.

- Extradural Sensory Rhizotomy in the Management of Chronic Lumbar.

- Spondylosis with Radiculopathy. Bernard T, Broussard T, LaRocca H, Aprill CN, Dwyer A.

1987

February – Clinical Radiological Assessment of Chronic Low Back Pain Patients. Aprill CN by invitation/ Monthly Conference Medical Clinic, Pensacola, FL.

March – International Discography Conference Medical Center Clinic/ Sponsor: Spine Magazine/ by Invitation/ Dallas, TX.

- Technique and Interpretation of Discograms.
- Magnetic Resonance Imaging of the Lumbar Spine.

April – MRI of the Lumbar Spine. Aprill CN, by invitation, International Discography Conference, New Orleans, LA.

May – High Resolution Magnetic Resonance Imaging and Detailed Anatomical Correlation of The Degenerated Lumbar Spine. Aprill CN, Rauschnig W, Glenn W. Paper presented by Dr. The International Society for Study of the Lumbar Spine Annual Meeting, Rome, Italy.

June – Magnetic Resonance Imaging. Aprill CN, by invitation. L.S.U. School of Medicine Medical Alumni Association Scientific Session for 1987, New Orleans, LA.

July – Atlanta Joint Motion Study Society/ Clinical Radiologic Evaluation of Cervical Spine Disorders/ by invitation/ Atlanta, GA.

July – North American Spine Society Annual Meeting/ Banff, Ontario, Canada.

August – Detailed Imaging of the Cervical and Lumbar Spine/ The Diagnostic Technique of Facet Joint and Disc Injections in the Cervical and Lumbar Spine.

October – The Challenge of the Lumbar Spine, 1987, Sponsor: Medical School of New Jersey, New York, NY.

October – 49th Annual Assembly of the American Academy of Physical Medicine and Rehabilitation/ Symposium on Lumbar Spine-State-of-the-Art-Review/ Orlando, FL.

November - Fall Imaging Conference/ Sponsor: Center for Diagnostic Imaging/ Minneapolis, MN.

December – Cervical Spine Research Society Annual Meeting/ Washington, D.C.

1988

April – Attended International Society for Study of the Lumbar Spine Annual Meeting/ Poster Session: Low Density Zones in the Disc Annulus – A Reliable Sign of Annular Pathology/ Poster Session: Disc Deterioration in Low Back Syndromes, A Prospective Multicenter CT/ Discography Study (co-author). Paper presented by Dr. vanHaranta/ Miami, FL.

April – L.S.U. School of Medicine/ Family Practice Update in New Orleans, LA/ Guest Lecturer – Magnetic Resonance Imaging – Who Should Have One?

May – Attended Roentgen Ray Society Annual Meeting/ San Francisco, California/ Membership in society approved.

July – Attended North American Spine Society Annual Meeting/ Colorado Springs, CO.

- Poster: Discography and Pain Provocation in Different Age Groups (co-author).
- Paper Presentation: Low Density Zones in the Disc Annulus – A Reliable CT Sign of Annular Pathology (co-author). Paper presented by Dr. Charles April.
- Paper Presentation: Disc Deterioration in Low Back Syndrome – A Prospective Multicenter CT/Discography Study (co-author). Paper presented by Dr. vanHaranta.

November – Attended Challenge of the Lumbar Spine Annual Meeting/ San Antonio, Texas/ Presentation by Invitation:

- Myelography – Complications
- MRI of Lumbar Spine Disorders
- Clinical Radiographic Assessment of Spine Disorders

November – Alex Eisenstadt Clinical Day – Lumbar Spine/ McGill University, Montreal/ Guest Lectures included: Non-Invasive/ Invasive Diagnostic Evaluation of Lumbar Spine Disorders.

December – Attended Cervical Spine Research Society Annual Meeting/ Key Biscayne, Florida.

- Cervical Zygapophysial Joint Pain Patterns 1: A Study of Normal Volunteers. (co-author). Paper presented by Dr. Nikoli Bogduk

1989

January – Dallas Metroplex Spine Society Quarterly Meeting/ Dallas, Texas Guest Lecturer:

- MRI and CT Evaluation of Adult Spine Disorders

March – Attended International Intradiscal Therapy Society Annual Meeting/ Bienna Vista, Florida. Presentations by invitation:

- MRI – Evaluation of Lumbar Disc Disease
- Lumbar Discography – Indications, Technique and Interpretation.

March – The Cervical Spine: Diagnostic and Management Issues/ American Academy of Orthopaedic Surgeons instructional course/ Boston, Massachusetts. Faculty Presentations:

- Imaging the Pediatric Spine
- Practical Imaging of the Cervical Spine – Trauma 2. Advanced Studies (Conventional Tomography – Computed Tomography).
- Advanced Imaging Techniques: Basic Facts for the Spine Surgeon

- Diagnostic and Provocation Techniques (Discography, Facet Arthrography, Selective Nerve Sheath Injection).

April – Medicine for Lawyers – Medicolegal Symposium. Tulane Law School/ New Orleans, LA/ Faculty/ Presentation by invitation:

- MRI, CT and Discography in Evaluation of Lumbar Disorders.

May – Attended International Society for Study of the Lumbar Spine Annual Meeting/ Kyoto, Japan.

June-July – Attended North American Spine Society Annual Meeting/ Quebec, Canada.

Presentation by invitation:

- Lumbar Discography Debates – Affirmative Position

September – Louisiana Physical Therapy Association Annual Meeting/ New Orleans, LA/ Guest Lecturer:

- Diagnostic Testing of Lumbar Spine Disorders

December – Attended Cervical Spine Research Society Annual Meeting/ New Orleans, LA/ *Symposium* on Cervical Imaging/ Faculty / Presentation:

- Enhanced Cervical CT Scanning

1990

January – International Spine Disorders Symposium, Update 1990/ First Annual Meeting/ Boca Raton, Florida/ Presentation by invitation:

- Provocation/ Analgesic Studies of the Cervical Motion Segment

January – Symposium on the Role of the Lumbar Spine Imaging in the Diagnosis of Low Back Pain. Quebec Orthopaedic Association Annual Meeting/ Montreal, Canada/ Guest Lecturer:

- An Integrated Approach to the Diagnosis of Lumbar Spine Disorders (Imaging and Invasive Diagnostic Procedures)

February – Symposium on Imaging of the Cervical Spine/ Federation of Spine Associations/ Specialty Day, A.A.O.S. Annual Meeting/ New Orleans, LA/ Faculty Presentation:

- Routine Radiographs and Enhanced CT of the Cervical Spine

March – Keystone Spine Meeting/ First Annual Meeting/ Sponsors: Dallas Spine Group, Texas Back Institute, Keystone, CO/ Faculty Presentation:

- Computed Tomography and MRI in the Evaluation of Lumbar Spine Disorders
- Lumbar Discography – Indications, Technique and Interpretation

1991

February – The Longshore and Harbor Worker's Compensation Act. Presented by the Institute for Continuing Legal Education of Loyola Law School/ New Orleans/ Lecture:

- Frequently Used Medical Techniques for Diagnosing and Treating Common Worker Injuries with an Emphasis on Spinal Problems

May – Lumbar Spine: Instructional Course/ Presented by the International Society for the Study of the Lumbar Spine/ Zurich, Switzerland/ Lecture.

- Facet Joint Syndromes

May – International Society for the Study of the Lumbar Spine, 18th Annual Meeting/ Heidelberg, Germany.

December – Cervical Spine Research Society Instructional Course/ Philadelphia, PA/ Lecture:

- Introduction to Cervical Discography, Facet Joint Arthrography and Nerve Blocks.

1992

March – Radiologic Seminar on Automated Percutaneous Lumbar Discectomy/ Sundance Resort/ Provo, UT/ Sponsor: Surgical Dynamics Corporation/ Guest Lecturer:

- Discography

March – Symposium on Low Back Pain: The Present and the Future/ University of Arizona Health Sciences Center.

May – American Society of Neuroradiology 30th Annual Meeting/ St. Louis, MO/ Special Symposium – Invited Speaker:

- Lumbar Discography

July – North American Spine Society, 7th Annual Meeting/ Boston, MA/ Guest Lecturer/ Mini Symposium: Imaging-panelist (disc/annulus, good/bad imaging)

- Paper Presentation: Selective Epidural Pain Localization: Part I (co-author). Paper presented by Dr. Richard Derby.
- Paper Presentation: Sacroiliac Joint Pain Referral Maps Part I: Asymptomatic Volunteers (co-author). Paper presented by Dr. Joseph Fortin.

November – The Role of Anatomically Specific Injections into the Sacroiliac Joint. First Interdisciplinary World Congress of Low Back Pain and Its Relation to the Sacroiliac Joint/ San Diego, CA/ Faculty.

October – The Second Annual East Coast Back Symposium: Peri-Operative Evaluation, Treatment and Rehabilitation/ Boston, MA.

December – American Back Society and St. Francis Memorial Hospital/ The Industrial Back/ San Francisco, CA/ Faculty.

1993

January – Current Concepts of Spine Evaluation and Treatment/ Joe W. King Orthopaedic Institute/ Houston, TX.

March – Spine Seminars/ Wayne State University School of Medicine, Detroit, MI and North American Spine Society. Faculty

- “The Difficult Back”

June – Spine Seminars/ Well Northshore Hospital/ Sidney, University of New Castle, New Castle/ Australia/ Guest Lecturer:

- Imaging – Invasive Procedures

June – Spine Society of Australia Annual Scientific Meeting/ Coolum New South Wales, Australia.

- Provocation and Ablation Tests and Their Role in the Diagnosis of Spinal Pain (An Instructional Lecture) Co-author. Anthony Schwarzer: Presenter.

August – International Association for the Study of Pain/ 7th World Congress on Pain/ Paris France/ Tropical Seminar: Neck Pain/ Panelist.

September – The Third McKenzie Institute International Conference/ Toronto, Canada/ Guest Lecture.

- Pain Provocation Testing: The Assessment of Neck Pain

October – International Spine Injection Society/ San Diego, CA/ Faculty.

- Precise Localization of Low Back Pain and Sciatica

October – North American Spine Society 8th Annual Meeting/ San Diego, CA/ Board of Directors – Director at Large, 1993.

- Symposium – Recent Advances in Non-Operative Spine Care, panelist
- Symposium – Spinal Cortisone Injections: Do They Have a Place in the Armamentarium?

November – Neurosurgical Applications of the KTP/532 Surgical Laser System/ Sponsor: Laserscope Surgical System/ New Orleans, LA/ Guest Lecturer:

- Radiological Considerations in Spinal Surgery

November – Kenton D. Leatherman Spine Symposium/ Louisville, KY/ Continuing Medical Education, 15 hours, Category 1. Guest Lecturer:

- Radiological Evaluation of Lumbar Spine Disorders
- The Role of CT, MRFI and Discograms in Evaluating Lumbar Spine Disorders

1994

January – Comprehensive Pain Medicine/ Management Certification Exam Review Course/ Sponsor: Pain Net Education, Inc., Dallas, TX/ Continuing Medical Education, 27-hours Category 1/ Ohio State Medical Association. Invited Faculty:

- Anatomy and Diagnostic Imaging for the Spine

January – Current Concepts of Spine Evaluation and Treatment/ Sponsor: Fondren Orthopedic Group/ Houston, TX/ Invited Lecturer:

- Orthopedic Imaging Studies
- Pain Provocation Studies and Evaluation of Lumbar Spine and Sacroiliac Joint Pain.

April – “Spine Across the Sea”, North American Spine Society/ Maui, Hawaii.

August – Hands-On Anatomical Workshop on Discography/ Injection Treatments using cadavers/ International Spine Injection Society/ San Francisco, CA. Faculty/ 9.5 hrs, Category I Credit/ Seton Medical Center.

October – Localizing Cervical and Thoracic Pain. Presented by International Spine Injection Society/ Minneapolis, MN/ 7.5 hours, Category 1/ CME. Faculty-Presentations:

- Neck Pain: Imaging Anatomy
- Cervical Disc Injection
- Thoracic Spine: Imaging

October – 9th Annual Meeting, North American Spine Society/ Minneapolis, MN/ 20 hours, Category I, CME/ Presentations:

- Panelist in Symposium – Lumbar Degenerative Disc Disease

1995

January – Pain Net Meeting/ Dallas, TX

February – American Equilibrium Society Meeting/ Chicago, IL

March – International Therapy Workshop/ The International Intradiscal Therapy Society/ La Jolla, CA.

April – E. C. Pain Course/ Atlantic City.

April – A.O. Course/ Mexico

May – Interventional Spinal Diagnostic Injections and Interventional Spine Management Conference/ Oklahoma City, OK:

- The Role of Zygapophyseal and Sacroiliac Joint Injections in the Diagnosis of Cervical and Lumbar Pain.
- The Role of Lumbar Discography in the Diagnosis of Lumbar Spinal Pain, Indications and Interpretation

June – AO/ ASIF Spine Course for Surgeons/ Nottingham, England

June – McKenzie/ ISSLS/ Helsinki

July – “Diagnostic Assessment of Spinal Injury: What You Always Wanted to Know But Were Afraid To Ask.”/ The Academy of New Orleans Trial Lawyers/ New Orleans, LA.

September – American Osteopathic College of Anesthesiologists/ Naples, FL.

September – International Spine Injection Society/ 3rd Annual Scientific Meeting/ New Orleans, LA

September – 4th McKenzie Institute International Conference/ Cambridge, England.

September – Annual American Osteopathic College of Anesthesiologists Convention/ Naples, FL.

September – Annual Meeting for The Quebec Physiatrist Association/ Quebec, Canada.

October – A.O./ A.S.I.F. Advanced Spinal Techniques Course/ South Hampton, Bermuda.

November – Second Interdisciplinary World Congress on Low Back Pain: The Integrated Function of the Lumbar Spine and the Sacroiliac Joints/ San Diego, CA.

November – Instrumented Fusion of the Lumbar Spine: State-of-the-Art and Questions/ Brussels, Belgium.

November – Second Interdisciplinary Congress of Low Back Pain.

1996

January – Interactive Pain Management/ Diagnostic and Interventional Program/ Sponsored by Pain Net, Inc./ Invited Lectures/ Dallas, TX.

- Clinical Radiological Assessment of Cervical Pain
- Cervical Disc Injection: Complications
- Thoracic Spine: Imaging

January 16, 1996 – District Meeting for Louisiana Physical Therapy Association of McKenzie Study Group – 1996 Continuing Education. Tulane Physical Therapy Department: Guest Lecturer:

- Discographic Outcomes Predicted by the Centralization of Pain and “Directional Preference”. A Prospective Blind Study.

January 18-19, 1996 – “Current Concepts of Spine Evaluation and Treatment: A team Approach”/ Sponsored by Joe W. King Orthopedic Institute/ Houston, TX/ Invited Lectures:

- Orthopedic Imaging Studies and Spine Evaluation
- Pain Provocation Studies

March 10, 1996 – PASSOR Meeting/ Round Table with Multiple Physicians/ New Orleans, LA.

March 19-22, 1996 – 12th Annual Comprehensive Review Course for Orthopedic Surgeons/ Chicago, IL.

March 22-24, 1996 – International Spine Injection Society/ Advanced Lumbar Session/ Daly City, CA/ Instructor.

April 26-28, 1996 – Expanding Your Pain Practice, New Orleans, LA. Presentations:

- Neck Pain: The Role of Cervical Joints in Chronic Pain Syndromes.
- Back/Leg Pain: Selective / Regional Neural Blockade and Steroid Injections; The Role in Acute and Chronic Pain Syndromes.

May 8-12, 1996 – 9th Annual International Intradiscal Therapy Society/ Amsterdam, the Netherlands/ Instructional Course/ Faculty – Invited Speaker.

May 27-31, 1996 – A. O. Lecture/ Sienna, Italy/ Invited Speaker.

- “Investigation of Lumbar Spine Instability”

June 21-27, 1996 – American Society of Neuroradiology, 34th Annual Meeting, Seattle, WA. Invited Speaker.

- “Interventional Spine”

June 25-29, 1996 – International Society for the Study of the Lumbar Spine Annual Meeting/ Burlington, VT/ Invited Speaker.

- “Centralization and Peripheralization of Lumbar Referred Pain: A Predictor of Symptomatic Discs and Annular Competency”.

June 28-30, 1996 – Advanced Spinal Techniques Course.

July 9-14, 1996 – A.O. Spine Course/ Bangkok, Thailand/ Invited Speaker.

- Imaging of the Upper Cervical Spine
- Imaging and Work-up
- Diagnostic Imaging – Degenerative Lumbar Spine
- Imaging Failed Lumbar Surgery

July 22-24, 1996 – Diagnosis and Non-Operative Therapy of the Spine. The American Association of Physician Specialists/ Santa Fe, New Mexico/ Invited Speaker:

- Diagnostic and Treatment Algorithms for Spinal Injections
- Cervical and Lumbar Discography and Provocative Testing
- Intradiscal and Epidural Steroid Injections
- Facet Joint Injections and Medial Bundle Branch Blocks

August 17-22, 1996 – 8th World Congress on Pain. International Association for the Study of Pain, Vancouver, Canada. Pain, 1996. An Updated Review Refresher Course. “Precision Diagnosis of Spinal Pain”.

September 2-5, 1996 – 4th North European Spine Courses for Surgeons: Basic Course. A.O. STRATEC Medical. University Hospital, Queens Medical Centre, Nottingham, England, Faculty Lecturers:

- Cervical Spine Trauma: Radiological Assessment
- Thoracolumbar Spinal Trauma: Radiological Assessment
- Cervical Degenerative Conditions of the Spine: Pain Provocation Tests

September 2-6, 1996 – 4th North European Spine Courses for Surgeons: Advanced Course. A.O. STRATEC Medical, University Hospital, Queens Medical Centre, Nottingham, England, Faculty Lecturers:

- Management of the Degenerative Cervical Spine: Radiological Investigation
- The Rheumatoid Neck: Radiological Assessment
- The Degenerative Spine: Identification of Pain Sources
- The Sacroiliac Joint: Identifying Sacroiliac Pain
- Failed Back Surgery: Assessment of Surgery

September 15-16, 1996. 17th Annual Occupational Spinal Disorders Conference. Return to Work with Pain: Crossing the Barrier. Lecture:

- The Barrier of Diagnosis: Image Base Diagnosis

October 25-27, 1996 – Stichting Opleiding Manuele Therapie Spine Review Course, 1996, Amsterdam, Holland, Lecturers:

- Cervicogenic Headache: Studies on the Anatomy of Occiput/C1, C1/2 and C2/3. Articulations
- Neck Pain: Study of the Subaxial Discs and Zygapophyseal Joints
- Low Back Pain: What are the Pain Generators? What is the Value of Modern Imaging?
- The Sacroiliac Joints: Imaging Anatomy. The Confounding Role of SI Dysfunction in Back Pain.

November 9, 1996 – Mechanical Low Back Pain Symposium. Charles Aprill and Robert Medcalf. Sponsored by the McKenzie Institute, Denmark, the Danish Society of Musculoskeletal Medicine and the Danish Manipulative Physiotherapist Association, Copenhagen. Guest Lecturer Lectures:

- Lumbar Anatomy
- Prevalence of Lumbar Pain Sources: Disc, Z Joints, and SI Joints
- Spine Injections Procedures

1997

January 11-12, 1997 – International Spinal Injection Society. Novice Lumbar Cadaver Workshop, Orlando, FL, Faculty and Lecturer. Lectures included:

- Spinal Imaging
- Anatomy for Spine Injection Procedures

March 11, 1997 – American Academy of Orthopaedic Surgeons, Thirteenth Annual Comprehensive Review Course for Orthopaedic Surgeons, Invited Speaker, Lecture:

- Imaging Studies of the Spine

March 16-20, 1997 – North American Spine Society. Spine Across the Sea 1997, jointly sponsored by the North American Spine Society and the Japanese Spine Research Society. Invited Speaker/Session Moderator.

- Symposia “Herniated Disc”
- Session Moderator: Imaging/Diagnostics

March 9-14, 1997 – American Academy of Orthopaedic Surgeons. Invited Speaker, Lecture:

- Imaging Studies of the Spine

April 21-22, 1997 – McKenzie Physician Course, Germany

April 25-26, 1997 – McKenzie Physician Course, Amersfort. Lectures:

- Spinal Anatomy
- Discography

May 28 – June 1, 1997 – Intradiscal Therapy Workshop, Naples, FL.

- Radiologic Anatomy and Imaging of Soft Disc Herniation

July 19-20, 1997 – Advanced Intra-Spinal Injection Course. Stanford University Medical Center, Guest Faculty.

August 2-3, 1977 – AO/ASIF Basic Spine Course for Operating Room Personnel, Houston, TX. Lectures:

- Spinal Anatomy and Imaging
- Spinal x-ray conference

September 19, 1997 – Cleveland Clinic Foundation. Spinal Medicine: An Interdisciplinary Approach, Cleveland, OH. Lecture:

- Diagnostic Injection of the Cervical Spine

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September 26-28, 1997 – AO/ASIF Spine Course, Hong Kong. Lecture:

- Radiographic Evaluation of Occipital – Cervical and C1 and C2 Region
- Radiographic Assessment of Lower Cervical Spine

October 4-6, 1997 – International Spinal Injection Society. Fifth Annual Meeting, Denver, CO. Faculty and Lecturer: Lectures:

- History of Diagnostic and Therapeutic Injection
- Basic Nociception II (Neuroanatomy)

October 9-12, 1997 – AO/ASIF Spinal Techniques, Bermuda/ Lectures:

- Radiographic Evaluation of Occipital – Cervical and C1 and C2 Region
- Radiographic Assessment of Lower Cervical Spine
- Radiographic Assessment of Lower Cervical Spine
- Radiographic Assessment of Thoracolumbar Trauma
- Radiographic Evaluation of Lumbar Degenerative Disease

October 17, 1997 – Industrial Safety and Rehabilitation Institute/ Key Concepts for Successful Return-to-Work. Lecture:

- Interpreting Advanced Imaging Techniques

November 13-15, 1997 – The Third Annual Research Institute International Symposium, Anterior column Support of the Spine: Traditional and Minimally Invasive Prospective.

Lecture:

- Spinal Imaging: Practical Applications in Evaluation of Bony and Neural Elements
- Spinal Imaging: Thoracolumbar Fractures
- Spinal Imaging: Cervical and Thoracolumbar Tumors
- Infections: Spinal Imaging
- Spinal Stenosis: Imaging Modalities
- Spinal Imaging of Upper Cervical Spine Pathologies
- Applied Imaging of the Degenerative Subaxial Spine

November 20, 1997 – The American Society of Regional Anesthesia. Comprehensive Review of Pain Management, New Orleans, LA. Lectures:

- Lumbar Spine Injections: Facets, Root Blocks, Discography
- Cervical Spine Injections: Atlanto-Occipital and Atlanto-Axial, Facets, Root Blocks, Discography

December 14-19, 1997 – AO/ASIF Course/ Spine Basic Course, Davos, Switzerland. Lectures:

- Imaging of the degenerative lumbar spine
- Invasive imaging evaluations in degenerative lumbar spine
- Imaging the degenerative cervical spine
- Invasive imaging evaluation of degenerative cervical spine
- Imaging Evaluation

1998

January 17-18, 1998 – International Spinal Injection Society. Entry Level Lumbar Workshop, Houston, TX. Invited instructor and lecturer.

March 12-15, 1998 – The University of Texas Health Science Center at San Antonio and The International Myopain Society presents “Focus on Pain 98”. Invited Speaker. Lectures include:

- Zygapophyseal Joint Pain
- Discogenic and Facet Joint Syndromes as Cause of Cervical Pain

March 27-28, 1998 – American Physical Therapy Association of New Jersey 1998 Annual Conference, Brunswick, NJ. Presented with Robert Medcalf, PT:

- Innovations in Spinal Care, Lower Spinal Diagnostics, Mechanical Assessment, Imaging and Injection Procedures

May 8-9, 1998 – The McKenzie Institute Benelux. Tilsberg, Holland. McKenzie Physicians Course. Invited Speaker. Lecturers include:

- Anatomy of the Lumbar Spine Motion Segment
- Discography
- “Dynamic Disc Model” and the support for it

May 15-16, 1998. The McKenzie Institute Denmark, Amsterdam, The Netherlands. McKenzie Physicians Course. Invited Speaker. Lectures include:

- Anatomy of the Lumbar Spine Motion Segment
- Discography
- “Dynamic Disc Model” and the support for it

May 21-23, 1998. Southern Society of Physical Medicine & Rehabilitation 1998 Annual Meeting – State-of-the-Art Update of Physical Medicine and Rehabilitation. New Orleans, LA. Invited Faculty. Lecture includes:

- Invasive Diagnostic Radiology of the Spine

June 5, 1998 – VAX-D Physicians Network – VAX-D Summit. New Orleans, LA. Invited Speaker. Lecture includes:

- High Intensity Zones as pathognomonic markers for Grade III and IV annular tears.

July 11-12, 1998 – International Spinal Injection Society. Advanced Lumbar Workshop – Chicago, IL. Invited instructor and lecturer. Lecture includes:

- Anatomy for Lumbar Injectionist
- Imaging for Lumbar Techniques

August 7-8, 1998 – University of Sao Paulo. Spinal Disorders Course – Sao Paulo, Brazil. Invited lecturer.

Lecture includes:

- Imaging of the degenerative lumbar spine
- Invasive imaging evaluations in degenerative lumbar spine
- Imaging in degenerative cervical spine
- Invasive imaging evaluations of degenerative cervical spine
- Imaging Evaluation

September 26-27, 1998 – International Spinal Injection Society & Australasian Faculty of Musculoskeletal Medicine – Sydney, Australia. Faculty and invited lecturer. Lecture included:

- MRI of the lumbar spine: visualizing the problem

October 8-10, 1998 – AO, ASIF Spine Course – International Spinal Development & Research Foundation, Johannesburg, South Africa. Invited speaker. Lectures include:

- Radiographic Evaluation of Occipital – Cervical and C1-C2 region

- Radiographic Assessment of Lower Posterior Cervical Spine
- Radiographic Evaluation of the Anterior Cervical Spine
- Radiographic Anatomical Assessment of Thoracolumbar Trauma
- Radiographic Evaluation of Lumbar Degenerative Disease

October 28-31, 1998 – North American Spine Society – 13th Annual Meeting – San Francisco, CA. Moderator of Imaging Session and Invited speaker. Lecture included:

- Therapeutic Spine Injection Procedures; The Precise and Appropriate Treatment for Spinal Pain Syndromes

November 3-4, 1998 – PASSOR Hands-On Cadaver Course – Seattle, WA. Continuing Medical Education Certificate Awarded by Maricopy Health System, Department of Academic Affairs, Continuing Medical Education. Guest Faculty. Lecture included:

- Lumbar Imaging

1999

January 16-17, 1999 – International Spinal Injection Society, Advanced Cervical-Thoracic Workshop, Miami, FL. Invited instructor and lecturer. Lecture included:

- Anatomy & Radiographic Imaging

February 4-7, 1999 – Oregon State Health & Science Center, Portland, Oregon. Invited Speaker.

February 27-18, 1999 – Medtronics, Newport Beach, CA. Invited Speaker – Lectures included:

- Functional & Radiological Evaluation of Lumbar Pathology

March 14-19, 1999 – American Academy of Orthopaedic Surgeons, 15th Annual Comprehensive Review Course, Chicago, IL. Invited Speaker – Lecture included:

- Imaging Studies of the Spine

March 20-21, 1999 – International Spinal Injection Society. Entry level Lumbar Spinal Injection Workshop using Cadavers, Daly City, CA. Lectures included:

- Anatomy of the Lumbar spine for the Spinal Injectionist
- Choosing the appropriate Block for the Patient – The Evaluation

April 9-11, 1999 – Intradiscal Electro Thermal (IDETTM) Therapy Workshop, Memphis, TN.

April 24-25, 1999 – American Association of Neurological Surgeons Meeting, New Orleans, LA. AANS Practical Clinic “Minimally Invasive Procedures for Spinal Pain Syndromes” with Drs. North, Belzberg, Campbell, Feler and Oakley. Lectures included:

- Selective Epidural Injections
- Discography and Intradiscal Therapy

April 23-30, 1999 – American College of Occupational and Environmental Medicine. American Occupational Health Conference, New Orleans, LA. Invited Seminar Director, Seminar #11 Spine Imaging: Objectives from session:

- To become familiar with the various spine imaging techniques available
- To be able to describe the validity of each technique
- To learn when and how to select each imaging technique

April 29-May 2, 1999 – AO International 2nd Latin American AO Advance Course, Cartagena, Columbia. Invited Speaker. Lectures included:

- “Radiologic Investigation: Degenerative Cervical Spine”
- “Radiologic Investigation: Degenerative Lumbar Spine”

July 17-18, 1999 – International Spinal Injection Society Advanced Cervical, Thoracic Spinal Injection Workshop Using Cadavers, Philadelphia, PA. Hand-on session. Invited Speaker:
Topic:

- Anatomy & Radiographic Imaging

August 13-15, 1999 – International Spinal Injection Society, 7th Annual Meeting, Las Vegas, NV, Lectures included:

- Lumbar Radicular Pain – Diagnosis: Imaging
- Cervical Radicular Pain – Diagnosis: Imaging

August 26-27, 1999 – Physicians Course, Maastricht, the Netherlands, Along with Ron Donelson, M.D.

August 27-29, 1999 – Sixth McKenzie International Conference. “McKenzie after the Millennium”, Maastricht, the Netherlands. Presentations included:

- “Cervical Spine Pain: Imaging Pathoanatomy correlation with injection procedures” together with Dr. Wolfgang Rauschnig
- “Lumbar Spine Pain: Imaging Pathoanatomy correlation with injection procedures” together with Mark Laslett, P.T.

September 3-5, 1999 – 7th Nordic Congress on Manual Therapy, McKenzie Approach and Musculoskeletal Medicine, Lower Back Pain, Clinical and Scientific Update. Copenhagen, Denmark. Presentation included:

- Diagnosing SI – dysfunction

September 17-19, 1999 – California Society of Anesthesiologist in cooperation with the International Spinal Injection Society Hands-On Spinal Injection Workshop, Santa Monica, CA. Presentation included:

- “Imaging for the Spinal Injection – Lumbar”

October 1, 1999 – Industrial Safety and Rehabilitation Institute, New Orleans, LA. Key Concepts for Successful Return to Work. Lecture included:

- Spinal Imaging – Facts and Myths

October 8-10, 1999 – American Academy of Spine Surgery – Spine Surgery Review Course. San Antonio, TX. Keynote Speaker. Topic:

- Provocative Radiology: Where's The Pain?

October 21-23, 1999 – American Academy of Orthopaedic and Manual Physical Therapist and the Orthopaedic Section, APTA, Inc. The Fifth Annual Academy '99 “Bringing Manual Physical Therapy into the Next Millennium”. Keynote Speaker. Topic:

- Modern Imaging in Spinal Pain – “Clinical Correlation is Recommended”

November 9-10, 1999 – PASSOR Hands-On Cadaver Course, Arlington, VA. Invited Speaker. Topic:

- Imaging

November 18, 1999 – The American Society of Regional Anesthesiologist. 6th Annual Comprehensive Review of Pain Management, New Orleans, LA. Invited Speaker: Topic:

- Diagnostic Blocks of the Cervical Spine; Discography, Root Blocks, Facet Joint Injections and Sacroiliac Injections
- Diagnostic Blocks of the Lumbar Spine; Discography, Root Blocks, Facet Joint Injections and Sacroiliac Injections.

November 20-21, 1999 – International Spinal Injection Society. Discography Course, Memphis, TN. Instructor at Hands on Session, Faculty. Topic:

- Introduction to Discography

December 12-17, 1999 – AO International Comprehensive, Advanced Spine Courses, Davos, Switzerland. Invited speaker and instructor. Lectures and courses included:

- Degenerative Spine I “Non invasive and invasive radiological techniques
- Challenging Problems in the cervical spine “How to make a diagnosis: Imaging and invasive test” and “How to measure decompression”
- Degenerative Lumbar Spine I “Is there a role for provocative tests?”
- Thoracolumbar Trauma I “Imaging, what is the best technique?”

2000

January 23-23, 2000 – International Spinal Injection Society. Commencement Lumbar, Spinal Injection Workshop Using Cadavers, Daly City, CA. Invited instructor and lecturer. Lecture topic:

- Anatomy and Imaging for the Lumbar Spine

March 10-12, 2000 – Focus on Pain, Phoenix, AZ. Invited lecturer. Lecture topic:

- SI Joint dysfunction; Evaluation and Treatment

March 25-26, 2000 – PASSOR, Scottsdale, AZ. Invited lecturer. Lecture topic

- Imaging

April 1-2, 2000 – International Spinal Injection Society/ Salt Lake City, Utah. Advanced Lumbar and Thoracic Technique Workshop. Instructor and lecture topic:

- Medial Branch Block Technique

- Transforaminal Selective Epidural Technique
- Sympathetic Block Technique
- Diagnostic Selective Nerve Block Technique
- Thoracic Translaminar Epidural Technique
- Anatomy and Imaging of Lumbar & Thoracic Spine; Lecture

April 27, 2000 – Louisiana State University Health Sciences Center, New Orleans, Competency Forum, Physical Therapist Dissection and Anatomy Course.

- Cervical Anatomy
- Lumbar Anatomy

April 30, 2000 – May 5, 2000 – American Academy of Orthopaedic Surgeons, Chicago, IL. 16th Annual Comprehensive Review Course for Orthopaedic Surgeons. Lecture topic:

- Imaging Studies of the Spine

May 13-14, 2000 – McKenzie North America Conference, Orlando, FL. Panel Discussion along with Drs. Milette, Mooney, Wetzel and invited lecturer:

- Panel Discussion: Spinal Imaging – A blessing or a curse?
- Lecture Topic: Cervicogenic Headache

June 9-11, 2000 – Medtronic Workshop: “Treatment of the Spine: A Multi-Disciplinary Approach” with Drs. Thalgott and Johnson, Las Vegas, NV. Lecture topics:

- Pain patterns of the occipital and cervical spine; functional and radiographic evaluations
- Pain patterns of the lower cervical spine; functional and radiographic evaluations
- Pain patterns of the lumbar spine; functional radiographic evaluations

June 17-18, 2000 – International Spinal Injection Society, Cambridge, MA. Discography; An Advanced Cadaveric Workshop. Faculty. Lecture Topics:

- Anatomy – Imaging – Technique – Indications for Discography

July 14, 2000 – Medtronic, Inc. Occipital Neuralgia, Cervicogenic Headache, Physician Advisory Meeting.

September 22, 2000 – Louisiana State University Health Sciences Center, New Orleans, LA. 22nd Annual LSU New Orleans Fall Radiology. Invited Speaker. Lecture:

- Back Pain: Modern Imaging & Spine Injection Procedures

2001

January 12, 2001 – Dupuy Acromed – a Johnson & Johnson Company, New Orleans, LA. Invited lecturer. Lectures included:

- Radiological Evaluation of the Lumbar Painful Segment
- Observations of Complications with respect to approach instrumentation & implants in anterior lumbar surgery: Does a radiologist help?

January 13, 2001 – International Spinal Injection Society, Phase I Lumbar, Burlingame, CA.
Faculty and lecturer: Lecture included:

- Anatomy & Imaging of the Lumbar Spine

February 10, 2001 – International Spinal Injection Society – Phase II Lumbar and Thoracic / Tampa, Florida. Faculty and lecturer: Lecture included:

- Anatomy & Imaging of the Lumbar and Thoracic Spine

February 17, 2001 – American Physical Therapy Association / Orthopaedic Section / 2001 Combined Sections Meeting / San Antonio, Texas / Invited presenter. Topic included:

- Modern Imaging In Spinal pain: Clinical correlation is recommended

March 10-11, 2001 – International Spinal Injection Society – Phase III Cervical / Rosemont, IL
Faculty and lecturer: Lecture included:

- Anatomy & Imaging of the Cervical Spine

March 27, 2001 – American Academy of Orthopaedic Surgeons / Chicago, Illinois / 17th Annual Comprehensive Review Course for Orthopaedic Surgeons. Invited to speak at SPINE DAY.

Lecture topic:

- Imaging Studies of the Spine

April 17-19, 2001 - Department of Neuroscience and Locomotion: Physiotherapy, Linköping Universitet / Linköping Sweden / Lecture:

- State of the Art (together with Mark Laslett, PT)
- Practical demonstration on discography

April 30-May 3, 2001 – Department of Orthopaedics, / Belo Horizonte Brazil / Lectures included:

- Non invasive and invasive radiological techniques in spine
- Thoracolumbar trauma. What's the best imaging technique
- Degenerative Disease; How to measure decompression?
- Degenerative cervical and lumbar spine imaging and invasive techniques?

May 5-6, 2001 / International Spinal Injection Society – Phase I Lumbar / New Orleans, Louisiana Faculty and lecturer: Lecture included:

- Anatomy & Imaging of the Lumbar Spine

May 25, 2001 / Southern Society of Physical Medicine and Rehabilitation Annual Meeting / New Orleans, Louisiana. Lecture included:

- The Role of Spinal Injection in Treatment of Lumbar and Cervical Spine Pain

June 9-10, 2001 / International Spinal Injection Society – Discography Workshop / Memphis, Tennessee. Faculty and lecturer: Lecture included:

- Anatomy & Imaging for the Discographer; Lumbar, Thoracic and Cervical

July 19-21, 2001 / Montreal Canada

- Lumbar Discography – procedure and technique

August 11-12, 2001 / International Spinal Injection Society – Phase II Lumbar and Thoracic Workshop / Kansas City, Missouri. Faculty and lecturer: Lecture included:

- Anatomy and Radiological Imaging of the Lumbar & Thoracic Spine

October 13-14, 2001 / International Spinal Injection Society – Discography Workshop / Memphis, Tennessee. Faculty and lecturer: Lecture included:

- Anatomy & Imaging for the Discographer; Lumbar, Thoracic and Cervical

October 27-28, 2001 / International Spinal Injection Society – Phase III Cervical Workshop / Memphis, Tennessee. Faculty and Lecture included

- Anatomy & Imaging of the Cervical Spine

November 9-10, 2001 / International Spinal Injection Society – Phase V Radiofrequency and IDET / Austin Texas. Faculty and lecturer. Lecture included:

December 10-16, 2001 / AO International Comprehensive / Advanced Spine Courses / Davos Switzerland / Invited speaker and instructor. Lectures and courses included:

- SPINE I – Imaging Update
- SPINE II - Update on Imaging and Invasive Investigation

2002

January 5-6 2002 / International Spinal Injection Society – Phase I Lumbar / Burlingame, California. Faculty and lecturer: Lecture included:

- Anatomy & Imaging of the Lumbar Spine

February 21-23, 2002 / Acromed Dupuy / Controversies in Lumbar Spine Surgery Symposium / Newport Beach, California

- Radiological Evaluation of Lumbar Painful Segment
- Panel Discussion: Where is the pain coming from?
- Radiological Determination of Fusion/Pseudarthrosis in the Lumbar Spine
- When and how to revise an interbody device

March 1-2, 2002 / Dutch Manual Therapy / The Spine and all its aspect / Veldhoven, the Netherlands. Keynote Speaker and Lectures included:

- Keynote Speech - SPINAL IMAGING: The truth, the whole truth and nothing but the truth Radiological Determination of Fusion/Pseudarthrosis in the Lumbar Spine
- Lecture - Analysis of patient loading strategies, using the McKenzie protocol, and the correlation with MRI/Discography findings with Hans van Helvoirt, PT.

March 9-10, 2002 / International Spinal Injection Society – Phase I Lumbar / Burlingame, California. Faculty and lecturer: Lecture included:

- Anatomy of the Cervical spine for Injectionist

- Radiological Imaging for the Cervical Spine

March 27, 2002 / American Academy of Orthopaedic Surgeons / Chicago, Illinois / 17th Annual Comprehensive Review Course for Orthopaedic Surgeons. Invited to speak at SPINE DAY.

Lecture topic:

- Imaging Studies of the Spine

April 6-7, 2002 / International Spinal Injection Society – Discography Workshop / Phoenix, Arizona. Faculty and lecturer: Lecture included:

- Anatomy & Imaging for the Discographer; Lumbar, Thoracic and Cervical

May 4-5 2002 / International Spinal Injection Society – Phase I Lumbar / Kenner, Louisiana. Faculty and lecturer: Lecture included:

- Anatomy & Imaging of the Lumbar Spine

May 9-11, 2002 / Ogden Surgical Medical Society – 57th Annual Meeting / Ogden, Utah. Lecture included:

- Diagnostic Spinal Injections Compared to Normal Radiologic Studies

May 18-19, 2002 / HealthStream Education Design and Radionics – Lumber Basics in Pain Management / Phoenix, Arizona. Lecture included:

- Discography

May 24, 2002 / Louisiana State University Health and Science Center / New Orleans, Louisiana. Resident Program Lecture:

- MRI, CT and Spine Injection Procedures – What you need to know.

May 31, 2002 / Workers Compensation Board – Manitoba Public Insurance / The Role of Imaging in Pain Management – Get the Picture? / Manitoba, Winnipeg Canada:

- Imaging the lumbar spine in the context of the clinical presentation.
- Imaging the cervical spine in the context of the clinical presentation.

June 29-30, 2002 / International Spinal Injection Society – Lumbar & Cervical Diagnostic Injections with Discography / Anchorage, Alaska / Faculty and lecturer: Lecture included:

- Anatomy for the Advanced Injectionist
- Radiological Imaging for Advanced Injectionist

July 13-14, 2002 / International Spinal Injection Society – Phase 5 IDET, Radiofrequency, Nucleoplasty et al, Burlingame, California / Faculty and lecturer: Lecture included:

- Anatomy for the Advanced Injectionist
- Radiological Imaging for Advanced Injectionist

July 27, 2002 / Oratec Interventions / Intradiscal ElectroThermal (IDETTM) Therapy Course / Louisiana State University Health and Science Center / New Orleans, LA

- Pathoanatomy of the Lumbar Disc

- Clinical Results
- Post Operative recovery patterns and rehabilitation program
- Catheter Technique and Procedure Overview

August 02-03, 2002 / International Spinal Injection Society – Phase 3 Advanced Cervical / Rosemont, Illinois / Faculty and lecturer. Lecture included

- Anatomy of the cervical spine for injections
- Radiological imaging of the cervical spine

August 10-11, 2002 / McKenzie Institute North America / Tucson Arizona / Lectures included:

- Improving your mechanical assessment: Applying the lessons learned from the New Orleans Collaboration.

August 24, 2002 – Spinal Diagnostics and Treatment Center in association with The American Association of Orthopaedic Medicine and Arthrocare Spine / A seminar of Spinal Disc Disease / Daly City, California. Lectures presented:

- Diagnostic Considerations in the assessment of Back Pain

September 5 – 8, 2002 – International Spinal Injection Society 10th Annual Scientific Meeting / Austin, Texas / Presentations include:

- Anatomy of the disc – basic anatomy

September 22, 2002 – Congress of Neurological Surgeons / 52nd Annual Meeting / Philadelphia, PA. All day practical course with Course Directors: Jaime Henderson, M.D. and Richard North, M.D. Faculty: John Oakley, MD, James Campbell, MD Claudio A. Feler, MD Allan J. Belzberg, MD and Charles Aprill, MD. The indications and techniques of minimally invasive, percutaneous techniques for the diagnosis and treatment of spinal pain syndromes will be taught through lectures and hands-on cadaver laboratory.

- Selective epidural Injection and Root blocks. Hands-on session.

October 5-6, 2002 – International Spinal Injection Society Phase 5 / Radiofrequency Neurotomy Workshop /Medical Education & Research Institute / Memphis, Tennessee / Two hour lecture on:

- Interpretation-Provocation / Radiological

October 17-19, 2002 – HealthStream Education Design / Emerging Technologies in Spinal Surgery / Washington, DC. 15 minute presentation includes:

- Lumbar Disc; Basic Science, Anatomy and Biomechanics
- Invasive Diagnostics

October 29, - November 2, 2002 – North American Spine Society / 17th Annual Meeting / Montreal Canada. Wednesday 1:26-3:26 (for the entire group) symposium; Whiplash and whiplash related disorders Part 1: Mechanics, Pathology, Diagnosis and Controversies. Director: Jerome Schofferman, MD. Faculty: S. Weinstein, C Aprill, E Covington, MD, J. David Cassidy, DC

- Whiplash and Whiplash-Related. Disorders, Part I. Mechanics, Pathology, Diagnosis, and Controversies.
- Structural causes of chronic neck pain. Radiology / Diagnostic Injections

November 9-10, 2002 – International Spinal Injection Society Phase 3 / Cervical Workshop / Barrows Neurological Institute / Phoenix, Arizona / 2 hour lecture includes:

- Cervical Anatomy, Radiological Imaging as well as instructing didactic station.

November 21-22, 2002 – The Society Pain Practice Management course / New Orleans, LA

- Radiologic Anatomy
- Radiology Station

November 23-24, 2002 – HealthStream Education Design Contemporary Pain Management Techniques; Methods for Diagnosis and Treatment / Phoenix, Arizona. Course Chairman. Lecture Includes.

- Overview of Lumbar Discography

2003

January 11-12 2003 – International Spinal Injection Society – Phase I Lumbar and Cadaver Workshop / Burlingame, California. Faculty and lecturer: Lecture included:

- Anatomy of the Lumbar Spine
- Imaging of the Lumbar Spine
- Patient Selection for Lumbar Injections

February 1-2, 2003 – International Spinal Injection Society – Phase II Advanced Lumbar and Thoracic Workshop using Cadaver / Phoenix, Arizona. Faculty and lecturer: Lecture included:

- Anatomy of the Thoracic/Lumbar Spine
- Imaging of the Thoracic/Lumbar Spine
- Patient Selection for Thoracic/Lumbar Injections

February 8, 2003 / 14th Annual Federation of Spine Association 2003 / Morial Convention Center – New Orleans, LA / North American Spine Society / Whiplash and Whiplash Related Disorders / Lecture:

- Structural Causes of Chronic Neck Pain

March 13-16, 2003 / German Pain Conference / Frankfurt, Germany

- Imaging techniques during diagnosis and treatment of Back Pain. Fluoroscopy, CT, MRI - when to use what? With special reference to discogenic pain.

April 5-6, 2003 / International Spinal Injection Society – Intensive Training Workshop using Cadaver / Memphis, Tennessee. Faculty. Lecture included:

- Anatomy and Imaging

April 29-May 3, 2003 / New Orleans Radiology Society Presents the 24th Annual Spring Roentgen Conference / New Orleans, LA. Lectures include:

- Spinal CT/MRI in Back & Neck Patients

- “A Pain in the Neck” – Radiological Interventions
- Discography – Science or Science Fiction
- Diagnostic / Therapeutic Epidural Injection Techniques in Patients with Back Pain and “Sciatica”

May 3-4, 2003 / International Spinal Injection Society / Phase 4 Discography Advanced Workshop using Cadavers / Memphis, TN / Lectures Include:

- Anatomy for the Discographer
- Radiological Imaging for the Discographer

May 14, 2003 / American Academy of Orthopedic Surgeons / Chicago, Illinois / 18th Annual Comprehensive Review Course for Orthopedic Surgeons. Invited to speak at SPINE DAY. Lecture topic:

- Imaging Studies of the Spine

June 28-29, 2003 / International Spinal Injection Society / Phase 3 Cervical Workshop using Cadavers / Memphis, TN / Lectures Include:

- Anatomy for the Discographer
- Radiological Imaging for the Discographer
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July 12-13, 2003 / International Spinal Injection Society – Phase II Advanced Lumbar and Thoracic Workshop using Cadaver / Philadelphia, Pennsylvania. Faculty and lecturer: Lecture included:

- Anatomy of the Thoracic/Lumbar Spine
- Imaging of the Thoracic/Lumbar Spine

- Patient Selection for Thoracic/Lumbar Injections

August 8-10 / ISIS 11th Annual Scientific Meeting / Orlando, Florida / Presentations include:

- Anatomy & Imaging: Imaging of the thoracic spine
- Diagnostic Procedures: Thoracic Discography
- Radiology of Failed Back Syndrome
- Inadequate Pre-Op Imaging
- Imaging Studies leading to FBS Repair

August 19, 2003 / Physiatrist Summer School / Helsinki Finland. Lectures included:

- Pain generators in low back pain
- Alternative blockades in the diagnostics and therapy

October 3-4, 2003 / International Spinal Injection Society / Phase 4 Discography Advanced Workshop using Cadavers / Memphis, TN / Lectures Include:

- Anatomy for the Discographer
- Radiological Imaging for the Discographer

October 14, 2003 / American Osteopathic Association 108th Annual Convention / New Orleans Convention Center

- Patient selection for Intra Discal Electrothermal Therapy
- Spinal Imaging

November 14, 2003 / American Academy of Disability Evaluation Physicians Meeting / New Orleans / Intercontinental Hotel / Point - Counterpoint presentation with Eugene Caragee, M.D. Topic:

- Discography

November 15, 2003 / International Spinal Injection Society / Advanced Seminar / Clinical Anatomic Imaging of the Spine. Faculty included Charles N. Aprill, M.D. and John D. Fisk, M.D. Lectures included:

- Normal Radiographic Imaging Cervical I - Plain Film /Fluoroscopic Anatomy/Video Fluoroscopy
- Normal Radiographic Imaging Cervical II - Magnetic Resonance Imaging – Craniocervical/Cervical
- Normal Radiographic Anatomy Cervical III - CT & Myelography/Nuclear Medicine/Method of Analysis
- Normal Radiographic Anatomy Cervicothoracic & Thoracic - Plain Film/Fluoroscopic/Anatomy/CT & Myelography/MRI/Nuclear Medicine
- Normal Radiographic Anatomy Lumbar I - Plain Film/Fluoroscopic Anatomy
- Normal Radiographic Anatomy Lumbar II - MRI
- Normal Radiographic Anatomy Lumbar III -CT & Myelography/Nuclear Medicine/Method of Analysis

December 10-16, 2003 / AO International Comprehensive / Advanced Spine Courses / Davos Switzerland / Invited speaker and instructor. Lectures and courses included:

- SPINE I – Spine Anatomy
- SPINE I – Radiographic Imaging
- SPINE II – Spine Anatomy

2004

February 7-8, 2004 / International Spinal Injection Society / Phase 4 Discography Workshop using Cadavers / Orlando, FL / Lectures Include:

- Anatomy for the Discographer
- Radiological Imaging for the Discographer

February 27, 2004 / International Spinal Injection Society / Semi-annual Board Meeting / San Francisco, California.

March 13, 2004 / Smith & Nephew / Intradiscal ElectroThermal (IDET) THERAPY & Disc Decompression Course Agenda / LSU Medical School, Medical Education Building.

- Pathoanatomy of the Lumbar

- ElectroThermal Therapy Overview

April 3-4, 2004 / International Spinal Injection Society / Phase 3 Cervical Workshop using Cadavers / Dallas, TX / Lectures Include:

- Anatomy for the Discographer
- Radiological Imaging for the Discographer

April 22, 2004 / North American Spine Society / Spring Conference / Boca Raton, FL. Presentation included:

- Debate I: Cervical Spine Transforaminal vs. Interlaminar vs. Interlaminar with Catheter

April 24-25, 2004 / International Spinal Injection Society / 1st Annual European Scientific Conference

- The Zygapophyseal Joint: Anatomy and Radiology
- Lumbar intervertebral disc: Discography
- Neck Pain: Imaging
- Neck Pain: Discography

April 28, 2004 / New Orleans Radiology Society / Spring Roentgen Meeting / New Orleans, LA. Lectures Included:

- Spinal Imaging for low back pain
- Intradiscal Interventions: Diagnostic and Therapeutic
- Neck Pain “Whiplash Disorder”

May 1-2, 2004 / International Spinal Injection Society / Phase 3 Cervical Workshop using Cadavers / New Orleans, LA / Lectures Include:

- Anatomy for the Discographer
- Radiological Imaging for the Discographer

June 5-6, 2004 / International Spinal Injection Society / ISIS Cervical Intensive Workshop using Cadavers / Memphis, TN / Lectures Include:

- Anatomy and Imaging.

June 24-25, 2004 / International Spinal Injection Society / Imaging Course. Boston, MA / Lectures Included:

- Lumbar Normal Radiographic Anatomy
- Lumbar Axial Pain
- Cervical Axial Pain

July 29-30, 2004 / Acromed Dupuy / Emerging Technologies in Spine Surgery / New Orleans, LA. Lecture included:

- Radiological Evaluation of the lumbar Painful Segment

August 7-8, 2004 / International Spinal Injection Society / Advanced Lumbar and Thoracic Workshop with cadavers / Boston, Massachusetts / Lectures included.

- Anatomy of the Lumbar and Thoracic Spine
- Fluoroscopic Imaging

Clinical Service:

Clinics – Interventional Spine Procedure at the Medical Center of Louisiana @ New Orleans

Dr. Charles N Aprill is a doctor primarily located in New Orleans, LA. They have 53 years of experience. Their specialties include Radiology. Charles N Aprill has been rated by 6 patients. From those 6 patients 2 of those left a comment along with their rating. The overall rating for Charles N Aprill is 4.8 of 5.0 stars. read reviews Write a Review. Location. Get Directions Dr. Charles N Aprill 2700 Cadiz St New Orleans, LA 70115. (504) 891-1979. Specialties. Dr. Charles N Aprill has the following 1 SPECIALTIES. Radiology. Reviews. Showing 6 of 6. Four Stars. Self-verified patient of Dr. Charles N Aprill - Posted on August 1st, 2016. Five Stars. Self-verified patient of Dr. Charles N Aprill - Posted on December 28th, 2015. Great docto