

CURRICULUM VITAE

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Foreign languages: Proficient in Spanish

UNDER GRADUATE EDUCATION

University of Missouri
Columbia, Missouri
B.A. – Chemistry
1969-1973

MEDICAL OR GRADUATE EDUCATION

University of Missouri Medical School
Columbia, Missouri
M.D. Degree
1973-1977

Oschner Clinic
New Orleans, Louisiana
Clinical Externship
1974

University of Texas Southwestern Medical School
Dallas, Texas
Externship in Thoracic Surgery
1976

Baylor College of Medicine Affiliated Hospitals
Houston, Texas
Internship in General Surgery
1977-1978

POSTGRADUATE TRAINING

Baylor College of Medicine Affiliated Hospitals
Houston, Texas
Residency in Orthopedic Surgery
1978-1982

Harvard Medical School
Boston, Massachusetts
Teaching Fellowship and Research Fellowship
1981-1982

CURRENT FACULTY POSITIONS

Clinical Associate Professor
Baylor College of Medicine
Department of Orthopedic Surgery
Houston, Texas

INDUSTRY CONSULTING AGREEMENT AND AFFILIATIONS

Aesculap Implant Systems
King Pharmaceuticals
Salient Technologies
Pfizer
Smith and Nephew
Proctor and Gamble
Alpharma Pharmaceuticals
Zimmer

International Speaker, Instructor Proctor and Gamble: Research Agreement

SPECIALIZED TRAINING

NASA Physiologic Training
March 10, 1993

HONORS AND AWARDS

Alpha Chi Sigma Chemistry Honorary- University of Missouri
Dean's List for Academic Excellence- University of Missouri
Fortune Magazine: "Best Doctor" list of 2004
Texas Monthly Magazine: "Super Doctor: list of 2004-2006
First to perform Electromagnetic Computer-assisted Surgery to perform a minimally –invasive Total Knee Replacement on February 14, 2005

AMERICAN BOARD OF ORTHOPAEDIC SURGEONS

Certified 1986
Recertified 1997
Recertified 2006

OTHER NON-ACADEMIC POSITIONS

Team Physician
Gamblers Professional Football Team Consultant
1988-1989 Season

Charter Board Member, Houston Children's Chorus
1991-Present

Charter Member, American Association of Hip and Knee Surgeons
1991- Present

Planning and Development Committee Member Western Orthopedics
1992- Present

Consultant for Space Station Medical Contingency Planning for "Extended Man Orbit Missions", NASA
(Space Station – Freedom)
1992- Present

WORK HISTORY

Southwest Orthopedic Group, L.L.P.
6560 Fannin, Suite 1016
Houston, Texas 77030
2004 – Present

Hopestar Orthopedic Group, L.L.P.
6550 Fannin, Suite 2600
Houston, Texas 77030
1996 - 2004

Scurlock Orthopedic Associates
6560 Fannin, Suite 1900
Houston, Texas 77030
01/1982- 1996

PROFESSIONAL SOCIETIES

American Academy of Orthopedic Surgeons
1987 – Present

American College of Emergency Physicians
1982

Medicus International
1990 – Present

Western Orthopedic Association
1990 – Present

Southern Medical Association
1985 – Present

Association of Arthritis, Hip and Knee Surgery
Charter member
1991 – Present

Harris County Medical Society
Houston, Texas

Orthopedic Association
1986 – Present

PRESENTATIONS

"Treatise on Appendicitis," Junior Scientific
Meeting, St. Louis, Missouri, 1968.

Acetabular Strain Patterns," Grand Rounds for the Massachusetts General Brigham and Women's Orthopedic
Section, 1982.

"Radiation Synovectomy," Annual New England Rheumatology Lectureship, Denham, Massachusetts, 1982.

"Modified Blair Fusion," AAOS Foot Society, 1982.

"Chronic Infections in Total Hips and Knees," Central Orthopedic Society Meeting, 1981.

"Surgical Treatment of Arthritis," Baylor College of Medicine, 1985.

"Total Knee and Total Hip Replacement Concepts," National Medical Congress, San Jose, Costa Rica,
December, 1986.

Diagnosis and Treatment of Low Back Pain, San Jose, Costa Rica, 1986.

Radiation Synovectomy Using Dysprosium, St. Luke's
Rheumatology Conference, 1986.

"Surgical Treatment of Arthritis," Resident's Teaching Conference, 1985.

"New Frontiers," St. John's School, February, 1987.

"Diagnosis and Treatment of Injuries of the Lower Extremity, Texas Children's Emergency Room Lecture, 1986.

Joe King Lectureship, Case Presentation and Panel Discussion on Arthritis of the Knee, 1988.

"Radiation Synovectomy, an Update and Experience with Dysprosium 165," Texas Association of Physicians in Nuclear Medicine, 1988.

Resection Arthroplasty of the Hip, Resident Lecture Series, 1988.

"Arthritis and Sports Medicine," 3 talks, Admirol Bristol Hospital Lecture Series - Turkey, 1989.

"Treatment of Arthritis of the Joint," Symposium - Clinical Issues for Practicing Orthopedists, July, 1989.

"Total Knee Prosthesis," Advance Medical Training Seminar, Methodist Hospital, March 1991.

"Radiation Synovectomy," Western Orthopedic Conference, Monterrey, California, October, 1992.

"Arthroscopic Surgery in the 3rd Millennium," Arthroscopic Surgery Conference, Cuernavaca, Mexico, October 7 - 10, 1992.

"Arthroplasty - Using the Natural Knee," Erfurt, East Germany, October 31, 1992.

Educational Teaching Tour of the West German Region of the Commonwealth of Germany, October 26 - November 5, 1992.

"Diagnosis and Treatment of Problems of the Shoulder," GAB Injury and Rehab Management Division, Houston, Texas, November 19, 1992.

"Current Concepts in Surgical Treatment of Arthritis of the Lower Extremity," February 23, 1993.

"Current Concepts in Surgical Treatment of Arthritis of the Lower Extremity," February 23, 1993.

"Orthopedic Treatment of Common Knee Disorders," The Wyndham Warwick, October 15, 1994

"Evolution of Arthritis Therapy: Cox 2 Inhibition" Sheraton Astrodome, March 6, 1999

"Celebrex Overview," Redwood Grill, August 12, 1999

"Arthritis Artifacts & Afflictions," January 31, 2001

2002 Pfizer Lectures, National Speaker Bureau, Current Concepts in COX-2 Use and Benefits

- Blue Grass Orthopedics, Lexington, Kentucky
- Bronson Methodist Hospital – Grand Rounds, Lansing, Michigan
- Chelsea Orthopedics, Chelsea, Michigan
- Children’s Hospital of Austin, Austin, Texas
- Ft. Wayne Orthopedics, Ft. Wayne, Indiana
- Good Samaritan Hospital – Grand Rounds, Cincinnati, Ohio
- Grand Rapids Hospital – Grand Rounds, Grand Rapids, Michigan
- Indiana Orthopedics, Indianapolis, Indiana
- Ingham Hospital – Grand Rounds, Lansing, Michigan
- ONE Orthopedic Hospital, Ft. Wayne, Indiana, 2002
- Orthopedics Indianapolis, Indianapolis, Indiana
- OSASA, San Antonio, Texas
- University of Kentucky Orthopedic Department, Lexington, Kentucky
- University of Michigan – Ann Arbor, Ann Arbor, Michigan

“Which Functional Activities are Important to Patients after Total Knee Replacement?” PC Noble, PhD; S Roberts, BS; MA Conditt, PhD; and DR Lionberger, MD, AAOS, New Orleans, February 16, 2002

“Effects of Notchplasty Size on Tibiofemoral Contact Area,” MA Conditt, PhD; SK Ismaily, BS; MJ Merves, MS; JW Alexander, BS; R Bartz, MD; DR Lionberger, MD, AAOS, New Orleans, February 16, 2002

2003 Pfizer Lectures, National Speaker Bureau, Current Concepts in COX-2 Use and Benefits

- Bay Regional Medical Center – Grand Rounds, Detroit, Michigan
- Beaumont Hospital, Beaumont, Texas
- Blue Grass Orthopedics, Lexington, Kentucky
- Central Indiana Orthopedic Associates, Indianapolis, Indiana
- Methodist Hospital, Indianapolis, Indiana
- Michigan Orthopedic Center, Ann Arbor, Michigan
- Mid Michigan Regional Hospital – Grand Rounds, Midland, Michigan
- Mid State Orthopedics, Alexandria, Louisiana
- Mid State Orthopedics, Albuquerque, New Mexico
- OSMS, Alexandria, Louisiana
- Rheumatology Associates, Indianapolis, Indiana
- Texas Tech Medical Center, Lubbock, Texas
- University of Kentucky Orthopedic Department, Lexington, Kentucky
- University of Michigan – Ann Arbor, Ann Arbor, Michigan
- University of New Mexico Medical School – Grand Rounds, Albuquerque, New Mexico

Nuances of Navigation in “Total Knee Replacement,” Baylor Orthopedic Grand Rounds, August 13, 2003

National Association of Orthopedic of Gulf Coast Nurses Chapter Talk, September 2003

South Texas Speaker on the Development of COX-2 in Orthopedic Surgery Practice, Austin, Texas, October 2003

2003 MIS Quad Sparing Total Knee Arthroplasty Training at The Zimmer Institute, Warsaw, Indiana, November 14-15, 2003

2004 Pfizer Lectures, National Speaker Bureau, Current Concepts in COX-2 Use and Benefits

- Baton Rouge Orthopedic Clinic, Baton Rouge, Louisiana
- Carondelet Orthopedics, Kansas City, Missouri
- Cox Health, Springfield, Missouri
- Fullerton Orthopedic, Fullerton, California
- Health Plus of Michigan, Flint, Michigan
- Hurley Hospital – Grand Rounds, Flint, Michigan
- Kansas University Medical Center – Grand Rounds, Kansas City, Kansas
- McLaren Orthopedic, Flint, Michigan
- Orthopedic Specialty Institute, Orange, California
- St. John’s Hospital, St. Louis, Missouri
- St. Mary Mercy Hospital, Detroit, Michigan
- Tesson Heights Orthopedics, St. Louis, Missouri
- Texas Academy of Family Physicians, Lufkin and Nacogdoches, Texas
- Texas Orthopedic Association, Austin, Texas
- Torrey Pines Orthopedic, San Diego, California

Televised TV interview on Knee Arthritis Diagnosis and Treatment, March 2004

MIS Quad-Sparing TKA Workshop, Singapore General Hospital, April 14, 2004

Introduction to EM-CAS in TKR, April 14, 2004

Lecture on OR Techniques in Total Knee Replacement using Electromagnetic Computer Assisted Surgery, Singapore, April 16, 2004

- Live Surgery EM-CAS MIS-TKR
- EM advantages in TKR

Minimally-invasive Total Knee Replacement Surgery, Center for Performing Arts, Houston, Texas, August 2004

2005 Pfizer Lectures, National Speaker Bureau, Current Concepts in COX-2 Use and Benefits

- Advanced Orthopedic Associates, Wichita, Kansas
- ANG Surgery Center, Nashville, Tennessee
- Bay Regional Medical Center- Grand Rounds, Bay City, Michigan
- Boswell Hospital, Phoenix, Arizona
- Clarkston Medical Group, Clarkson, Michigan
- Columbia Hospital – Grand Rounds, Milwaukee, Wisconsin
- Conway Orthopedic and Sports Medicine Clinic, Conway, Arkansas
- Cookeville Orthopedic Clinic, Cookeville, Tennessee
- Decatur Orthopedic Clinic, Decatur, Alabama
- Lapeer Regional Hospital, Lapeer, Michigan
- Little Rock Internal medicine Clinic, Little Rock, Arkansas
- Pontiac Osteopathic Hospital, Pontiac, Michigan
- Rockford Orthopedic Associates, Rockford, Illinois
- Southwest Ankle and Foot Center, Tucson, Arizona

- St. Joseph Hospital – Grand Rounds, Houston, Texas
- St. Mary’s Hospital, Milwaukee, Wisconsin
- TOI Northwest, Tucson, Arizona
- Tri State Orthopedics, Evansville, Indiana
- Tri State Orthopedics, Newburg, Tennessee
- Tucson Orthopedic Institute, Tucson, Arizona
- Vernon County Medical Center, Viroqua, Wisconsin

The Effect of Vertical Cup Replacement on Dislocation after Total Knee Replacement, Noble PC, Paravic, Ismaily S, Lionberger DR, AAOS, Dallas, Texas, 2005

COX-2 Use in Pre-emptive Pain Management in Total Knee Replacements, Wichita, KS, July 21, 2005

How Does COX-2 Inhibition Help in Reducing Pain in the Orthopedic Setting, Wisconsin, August 17, 2005

New Perspectives in COX-2 Inhibition: Cardiovascular Profile and Pain Implications, Nashville, TN, August 30, 2005

Pre-emptive Pain Control Using Celecoxib in Orthopedic Surgery, Nashville, TN, August 30, 2005

Celebrex and Controlling Post-operative Pain, Arizona/New Mexico, October 25, 2005

Cardiovascular Profile in Celecoxib and Other Non-Steroidals, Arizona/New Mexico, October 25, 2005

2005 Singapore International Orthopedic Meeting

- Electromagnetic Navigation in Total Knee Replacement
- Total Knee Replacement Using EM-CAS in MIS: Meet the Experts Demonstration

2006 Pfizer Lectures, National Speaker Bureau, Current Concepts in COX-2 Use and Benefits

- Amarillo Sports Medicine Clinic, Amarillo, Texas
- Center of Orthopedic Surgery, Lubbock, Texas
- Lubbock Sports Medicine Clinic, Lubbock, Texas
- Northwest Texas Hospital, Amarillo, Texas

2006 Asia Pacific Orthopedic Society Meeting, Sidney, Australia, January 8 – 11

- EM-CAS in MIS-TKR
- Accuracy of EM-CAS in MIS-TKR: a clinical study of 46 patients
- Unedited TKR using EM-CAS in an MIS application
- Knee Nuances, Navigation in MIS-TKR, Grand Rounds, UT Department of Orthopedic Surgery, Lubbock, Texas, February 2006

AAOS/ORS 2006 Annual Meeting, Chicago, IL

- EM-CAS is as Accurate as IR: a validation bench study, Podium Presentation, March 21, 2006
- EM-CAS versus IR-CAS for TKR: A comparison of accuracy, Podium Presentation, March 22, 2006
- Elimination of Common Metallurgical Interference in the OR Environment after using EM-CAS, Poster 612
- Is There Any Attraction to EM Navigation in MIS-TKR?, Poster 183

2006 Western Orthopedic Association Annual Meeting, Santa Fe, New Mexico, October 11-15

- Is There Any Attraction to Electromagnetic Navigation in MIS-TKR? A Report of the First 40 Cases at The Methodist Hospital, podium Presentation, October 13, 2006

AAOS/ORS 2007 Annual Meeting, San Diego, CA

- What Have We Learned After 300 Electromagnetic Guided MIS TKR?, Podium presentation #497
- Interference from Common Surgical Instruments Using Electromagnetic Surgical Navigation, Poster #248

2007 CAOS Asia Pacific Orthopedic Society Annual Meeting, Seoul, Korea

- How Does EM Navigation Stack up against IR Accuracy: A bench study comparison, March 30, 2007
- What Have We Learned after 300 Quad Sparing TKR Using EM CAS?, Special Lecture, Monday 30, 2007
- Session III – CAOS in TKA - Moderator, Monday 30, 2007
- Surgical Technique and Skills Demonstration: Live Surgery with Ye Yeon, M.D., Ajou University, Sawon, South Korea, March 2007.

2010 Aesculap Knee Expert Training Navigation in Vienna/Austria

- “Navigated Procedure with TKA 4.3: Acquisition of data.” And “Revision Surgery”

2010 Aesculap Orthopilot Training in Hamburg/Germany

- “Streamlined Navigation in TKA- the time saving solution”

2010 Aesculap Knee Expert Training in Berlin/Germany

- “Reasons for a Total Knee Arthroplasty Revision and it’s diagnosis”
- “How can navigation support TKA revision?”

NEWS RELEASES

“Perfect Alignment” Computer-Assisted Surgery in Total Knee Replacement, [Houston Chronicle](#), August 5, 2003

First Total Knee Replacement Performed in the World Using Electromagnetic CAS for Guidance at The Methodist Hospital, Houston, Texas, February 14, 2005

“EM Navigation is as accurate as IR in TKR, [AAOS Academy News](#), March 24, 2006 Edition

PUBLICATIONS

“The modified Blair fusion.” Lionberger DR, Bishop JO, Tullos HS. [Foot Ankle](#). 1982 Jul-Aug;3(1):60-2.

“Bilateral fracture of the transverse process of the atlas.” Clyburn TA, Lionberger DR, Tullos HS. [J Bone Joint Surg Am](#). 1982 Jul;64(6):948.

“Failed total knee Arthroplasty: Revision and arthrodesis for infection and noninfectious complications.” Woods GW, Lionberger DR, Tullos HS. [Clin Orthop Relat Res](#). 1983 Mar;(173):184-90.

“Prosthetic Acetabular Strains on the Pelvis,” Poster Session AAOC, 1984, Lionberger DR, Walker PS.

"Effects of prosthetic acetabular replacement on strains in the pelvis." Lionberger D, Walker PS, Granholm J. J Orthop Res. 1985;3(3):372-9.

"Treatment of rheumatoid synovitis of the knee with intraarticular injection of dysprosium 165-ferric hydroxide macroaggregates." Sledge CB, Zuckerman JD, Zalutsky MR, Atcher RW, Shortkroff S, Lionberger DR, Rose HA, Hurson BJ, Lankenar PA Jr, Anderson RJ, Bloomer WA. Arthritis Rheum. 1986 Feb;29(2):153-9.

"Newer Isotope Shows Promise in Radiation Synovectomy," Lionberger DR, *Clinical Perspectives*, Volume 5, No. 1. January 1992, 7.

"A knowledge-based computer-aided design and manufacturing system for total hip replacement." Reuben JD, Chang CH, Akin JE, Lionberger DR. Clin Orthop Relat Res. 1992 Dec;(285):48-56.

"Outcome Assessment in Total Knee Replacements," Noble PC, Lionberger DR, Weiss JM. *Association of Hip and Knee Surgeons*, 2002.

"Celecoxib does not affect osteointegration of cementless total hip stems." Lionberger DR, Noble PC. J Arthroplasty. 2005 Oct;20(7 Suppl 3):115-22.

"What Have We Learned After 300 Electromagnetic Guided by MIS TKR?," Lionberger DR, Ho DM, Law L, Nguyen NA, Guerra R, *AAOS* 2006.

"Balancing the Flexion and Extension Gap: No Longer Adequate when Aiming for Ideal Postoperative Performance in MIS-TKR", Lionberger DR, Nguyen NA, Guerra R, *AAOS* 2006. Manuscript in Progress.

"Chronic Infections in Total Hip Arthroplasties: An End Result Study". Revision in progress.

"Biochemical Variations in Osteo and Rheumatoid Arthritis - An In Vitro Study. Manuscript in progress.

"Computer-Assisted Navigations in Total Knee Replacement: Cost Convenience and Capabilities," Lionberger DR, Noble PC, Thompson M, Ding B, Manuscript in process.

"Alternative Waypoint to Determine Hip Center Reference for Computer-Assisted Orientation Surgery." Lionberger DR. Manuscript in process.

"How Does Electromagnetic Navigation Stack Up Against Infrared Navigation in Minimally-Invasive Total Knee Replacement?" Lionberger DR, Weise J, Ho DM, Haddad JL. *J Arthroplasty*. 2008 Jun;23(4):573-80. Epub 2008 Feb 13.

"Elimination of Interference from Common Surgical Instruments during Electromagnetic Surgical Navigation," Lionberger DR, Stevens F, Conditt, MA, Kulkarni, N, Ismaily, SK, Noble, PC, Baylor College of Medicine: Institute of Orthopedic Research and Education, Houston, TX. Pending Publication, 2007.

"Is Electromagnetic Navigation in Total Knee Replacement Reliable? A comparison of Accuracy." Lionberger DR, Noble PC. Submitted to *CORR* Dec 2008, Revision in progress.

“Recalibrating CAS to Improve Accuracy.” Lionberger DR, Catherine Crocker, Mohammad Hossein Rahbar. Submitted to *J Arthroplasty* 2010, Submission in progress.

“Improved Knee Flexion Following Gender-Specific, High Flexion Total Knee Arthroplasty.” Lionberger DR, Eggers MD, Brewer KE, submitted to *Journal of Orthopedic Surgery and Research*, March 2010, in progress

“Haemostasis Enhancement with Bipolar and Monopolar Electrocautery:A Comparative In vivo Study.” Eggers MD, Lionberger DR, submitted to *CORR*, Minor revisions requested

“Rapid, Reliable and Cost-Effective Wound Closure for Total Knee Arthroplasty”, M.Eggers, K. Brewer, D.Lionberger DR. Submitted to *Journal of Arthroplasty*, in progress

“The Effects of Notchplasty on Joint Reactive Forces of the Knee” Bartz R, Noble PC, Lionberger DR. Manuscript Currently being revised for submission to *CORR*, 2010

“Delayed Risedronate Use After Total Hip Arthroplasty Does Not Restore Bone Loss.” Lionberger DR, Brewer KE, Eggers MD, submitted to *Journal of Orthopedic Surgery and Research*, 2010, in progress

“Minimizing Electromagnetic Interference from Surgical Instruments on Electromagnetic Surgical Navigation” Faustin Stevens, Michael A. Conditt, Nikhil Kulkarni, Sabir K. Ismaily, Philip Noble, David R. Lionberger DR Accepted for Publication in *Clinical Orthopedics and Related Research*, April 2010, Volume 468, Issue 8(2010), Page 2244

“Relationship between patient-reported disease severity in osteoarthritis and self-reported pain, function and work productivity” Alesia Sadosky, Andrew G. Bushmakin, Joseph Cappelleri, David Lionberger DR, *Arthritis Research and Therapy*, Sept 2010, 12:R162

“Topical nonsteroidal anti-inflammatory drugs for the treatment of pain due to soft tissue injury: diclofenac epolamine topical patch” David R. Lionberger, MD and Michael J. Brennan, MD, *Journal of Pain Research*, Nov 10;3:223-33

“Avulsed Patellar Tendon Repair”(A Technical Note), pending submission to *JOA* 2010.

Analgesic Efficacy and Safety of Diclofenac Epolamine Topical Patch (Flector Patch) by Location of Injury in Trials of Acute Pain: A pooled Analysis of Five Trials, David R. Lionberger, MD, Arturo Lanzarotti, Lisa Pierchala, Wei Zhao, Jillmarie Yanchick, Vol.10, No.3, 2010 *The Journal of Applied Research*.

Diclofenac epolamine topical patch relieves pain associated with ankle sprain, D.Lionberger, E.Joussellin, A. Lanzarotti, J. Yanchick, M. Magelli. In progress *Journal of Pain Research*

BOOK CHAPTERS

Insall and Scott. Surgery of the Knee 4th edition. Churchill Livingstone Elsevier Publishing 2007. chpt 98

“Chapter 9: The Attraction of EM in CAS-TKR.” Navigation and MIS in Orthopedic Surgery. Lionberger DR, Stiehl, Konermann, Oaecher. Springer Medizin Verlag Publishing, 2007.

CONTINUING MEDICAL EDUCATION

Trauma to Major Joints and Extremities Meeting, Richmond, Virginia, AAOS, 1974.

Schriner's Hospital Lectureship, Houston, Texas, 1979 - 1980.

Edward R. Smith Lectureship, Houston, Texas, 1979 - 1980.

External Fixation of Fractures, San Antonio, Texas, 1979.

Trauma to the Foot and Ankle Meeting, San Diego, California, AAOS, 1980.

St. Luke's Symposium of Children's Orthopedics, Houston, Texas 1979 - 1981.

Joe King Lectureship Series, Houston, Texas 1979 - 1981.

Bone and Soft Tissue Tumors - St. Luke's Hospital July, 1989.

Wilhelmina Barnhart Lectureship, Houston, Texas 1979 - 1981.

Baylor Symposium - Bone and Soft Tissue Tumors, 1986 (6 hours).

American Academy of Orthopedic Surgery Continuing Education, 1986 (65 hours).

Wilhelmina Barnhart Lectureship, 1986 (6 hours).

9th International Congress of Medicine, Central America, 1986.

Compliment Design of Fixation Methodology in Total Joint Arthroplasty, 1987 (6 hours).

AAOS, Annual Meeting, 1987 (36 hours).

Component Design and Methodology in Total Joints, Vail, Colorado, 1987.

Cardiopulmonary Resuscitation Course, 1986 to present, annual (2 hours).

Texas Association of Physicians in Nuclear Medicine, October, 1988 (8 hours).

Physician's Recognition Award of AMA, 1987, Category I, (24 hours).

AAOS "Advanced Concepts in ACL Deficient Knee," 1988 (18 hours).

Continuing Medical Education - Baylor, 1988 Category I, (36 hours).

Management of Orthopedic Trauma, May 1989 (10.5 hours)

"Current Concepts in Total Knee Replacement," Matagorda County Hospital, 1989.

Symposium - Clinical Issues for Practicing Orthopedists, Baylor College - Methodist Hospital July, 1989.

Controversies in Total Knee Replacements, September, 1989, University of Texas at Houston.

Continuing Medical Education - Baylor, 1989 (27 hours)

University of Utah, "Arthritic Hips, Knees, and Shoulders, January, 1990 (17.5 hours)

Symposium Orthopedics, New Orleans, Louisiana February, 1990 (43 hours)

Wilhelmina Barnhart Lectureship, "Controversies in Hip Surgery," March, 1990.

St. Luke's Hospital, "Surgical Management of Arthritic Knees," April, 1990 (12 hours).

Current Concepts in Revision Total Hip Replacement June, 1990

Baylor College of Medicine - "Current Concepts in ACL Reconstruction," September, 1990 (6 hours)

Continuing Medical Education - Baylor, 1990 (23 hours).

Surgical Concepts in Sports Medicine, University of Texas at Houston, October, 1990.

E.T. Smith Orthopedic Lectureship, October 4-5, 1990 (10 hours).

North American Hip/Knee Symposium, Canada January, 1991 (17 Hours)

1991 Adult Spine Self-Assessment Examination American Academy of Orthopedic Surgeons (10 hours).

American Academy of Orthopaedic Surgeons, 55th Annual Meeting, Tucson, Arizona, October, 1991.

"Hydroxyapatite (HA) Science Technology and Clinical Application, 1992 (5 hours).

Arthritis, Hip, Knee and Shoulder, January 11-18, 1992 (11 hours).

"From Deposition to Courtroom" - Medical Legal Seminar, Houston, Texas, July, 1992.

"Self-Assessment Examination," American Academy of Orthopedic Surgeons, 1993 (10 hours).

1991 Adult Spine Self Assessment Exam, December 31-January 1, 1993 (10 hours)

Western Orthopaedic Association 57th Annual Meeting, Seattle, Washington, August 29 - September 1, 1993 (15 hours)

Total Joint Seminar, San Antonio, Texas, April 8-9, 1994 (8 hours)

State of the Art in Hip and Knee Replacement 1995: Seminar, Banff, Canada, March 12-17, 1995 (24 hours)

Western Orthopedic Association 59th Annual Meeting, Santa Fe, New Mexico, 1995 (15 hours)

American Academy of Orthopaedic Surgeons 1995:

Perspectives on Small Joint Arthroscopy Rosemond, Illinois, April 20-22, 1995 (22 hours)

Mimi Barnhart Lectureship in Pediatric Orthopedics: The Multiply Injured Child Houston, Texas, November 17, 1995 (6 hours)

MAOA 14th Annual Meeting, San Antonio, Texas April 24-28, 1996 (25 hours)

Western Orthopedic Association 60th Annual Meeting, Kauai, Hawaii, August 3-7, 1996 (14.5 hours)

State-of-the-Art in Hip and Knee Replacement 1997 Banff, Canada, March 17-21, 1997 (21 hours)

The Survival Guide for Impairment Evaluators Austin, Texas, October 24-25, 1997 (16 hours)

Genzyme Tissue Repair for Carticel, comprehensive training program, May 16, 1998

Arthritic Hip, Knee and Shoulder, South Florida College of Medicine, February 18-21, 1998 (15 hours)

Houston Orthopedic Society, "What Would Hippocrates Think of Managed Care Today" March 25, 1999 (1 hour)

AAHKS Ninth Fall Meeting, November 12-14, 1999, Dallas, Texas, (13.5 hours)

AAHKS 2001 Annual Meeting, Dallas, Texas, November 9-11, (14 hours)

Arthroscopy Association of North America, Shoulder Arthroscopy, San Antonio, Texas, December 1, 2001 (7 hours)

Arthroscopy Association of North America, Electronic Presentation using PowerPoint, San Antonio, Texas December 2, 2001, (2 hours)

American Academy of Orthopedic Surgeons Annual Meeting, February 11, 2002, Dallas, Texas

American Academy of Orthopedic Surgeons Annual Meeting, February 10, 2003, New Orleans, Louisiana

"Surgical Management of Fractures and Degenerative Conditions of the Hip and Knee," 2002, Los Cabos, Mexico.

AAHKS Meeting, Dallas, TX, November 12, 2005.

Current Concepts in Total Joint Replacements, Florida, December 14, 2005.

AAOS Annual Meeting, Chicago, IL, March 21-26, 2006.

Western Orthopedic Association 70th Annual Meeting, Santa Fe, New Mexico, October 11-15, 2006.

AAOS Annual Meeting, San Diego, CA, February 14-18, 2007.

AAHKS Annual Meeting, Dallas, Texas, November 10, 2006.

2007 CAOS Asia Pacific Annual Meeting, Korea, March 30-31, 2007.

2007 CAOS Annual Meeting, Heidelberg, Germany, June 20-26, 2007.

American Association of Hip and Knee Surgeons 18th Annual Meeting November 7-9 2008, Dallas, Texas

Medical Education Resources 2008, Merging the Future of Orthopedics & Thrombosis Prevention: Pearls & Pitfalls in Total Joint Reconstruction & DVT Prevention, 2hrs

2009 AAOS Annual Meeting February 25-28-Las Vegas, NV 18 Credits

2010 Vindico Medical Education: The Maisonneuve Injury: A Comprehensive Review, March 1, 2010, 1hr

American Academy of Orthopedic Surgeons Annual Meeting, March 9-13 2010, New Orleans, Louisiana.

2010 Aesculap Knee Expert Training Navigation in Vienna/Austria June 17-18, 2010

- “Navigated Procedure with TKA 4.3: Acquisition of data.” And “Revision Surgery”
- “Revision Surgery”

2010 Aesculap Orthopilot Training in Hamburg/Germany October 7-8, 2010

- “Streamlined Navigation in TKA- the time saving solution”

2010 Aesculap Knee Expert Training in Berlin/Germany September 17-18, 2010

- “Reasons for a Total Knee Arthroplasty Revision and it’s diagnosis”
- “How can navigation support TKA revision?”

INVENTIONS AND PATENTS PENDING

Cutting Guide Apparatus and Surgical Method for use in Knee Arthroplasty; SN 10/465,515 Patent#: 7,104,997
September 12, 2006.

Simplified Surgical Preparation Jig for Total Knee Replacement: Femoral Blitz Block and Tibial Speed Block.
Provides shorter operative time with improved precision.

Pelvic Stabilization Waypoint Clamp. Establishes alternate waypoint.

CURRENT RESEARCH

Tissue Link’s Aquamantys Bipolar Sealer in Total Knee (as of January 1, 2007) Replacements, Chart review; In Progress

“Actonel Effects on Periprosthetic Bone Resorption in Total Hip Replacement,” PAC #: 6-0053-05; In Progress

“A Multicenter, Double-Blind Randomized, Placebo Controlled Study of the Efficacy and Safety of pregabalin in the Treatment of Subjects with Post-Operative Pain Following Total Knee Arthroplasty (TKA), Pfizer, Inc., Protocol #: A0081133; In Progress

“Post-Operative Performance of “Gender” Total Knee Replacement Compared to Traditional Knee Replacement in Women,” Protocol #: 1006-0151; In Progress