CURRICULUM VITAE Hansen A. Yuan, M.D.

Born:

Yunnan, China October 29, 1943

Education:

Methodist English High School,
Rangoon, Burma
Alma College, Alma, Michigan, B.S.
University of Michigan Medical School
Ann Arbor, Michigan, M.D.
June 1969

Graduate Hospital Clinical Experience:

Intern, Surgery, State University of
New York, Upstate Medical Center,
Syracuse, New York

Assistant Resident, General Surgery,
State University of New York, Upstate
Medical center, Syracuse, New York

Resident, Orthopaedic Surgery, State
University of New York, Upstate
University of New York, Upstate Medical
Center, Syracuse, New York

1971-1974

Post Graduate Training:

Fellowship-Dr. Leon Wiltse
Low Back and Cervical Pain
Long Beach Memorial Hospital, University Hospital, Irvine
Long Beach, California
10/73-12/73

Visiting Professor:

Veterans General Hospital-Taipei
Taipei, Taiwan Republic of China 10/91

University of Rochester University of Nebraska

New Jersey Medical School

Tri-Service General Hospital

Taipei, Taiwan	9/92
University of Tennessee	
Dept. of Neurosurgery	
Memphis, Tennessee	3/26/93

University of Virginia Health Sciences Center, Charlottesville, Virginia

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4/21/93

5/21/99

Visiting Professor - continued:

Spinal Tumors".

Chang Zheng Hospital Shanghai, R.O.C.	4/27-30/1993
Siriraj Hospital, Mahidol University Bangkok, Thailand	10/19/93
Longwood Area Orthopaedic Grand Rounds Boston, Massachusetts	9/14/94
Baptist Hospital Boston, Massachusetts	3/1/95
University of Florida Tampa, Florida	6/30/95
Gallway Visiting Professor Queen's University Kingston, Ontario "Adult Spondylolisthesis - Reduction and Fixati "Laparoscopic and Thoracoscopic Minimally Invas Fusion", and "Advances in Minimally Invasive Di	ive Spinal
Distinguished Professor Lecture for Society of Military Orthopaedic Surgeons	11/22/96
Long Island Spine Club Commack, New York	6/27/98
Rush-Presbyterian-St. Luke's Medical Center Chicago, Illinois	10/7-8/98
Chinese University of Hong Kong Shatin, Hong Kong	12/12-19/98
Grand Rounds, Orthopaedic and Neurosurgical - Oklahoma University Oklahoma City, Oklahoma "History of Spinal Fusion, Clinical Applicat Instrumentation for Difficult Indications, Th	-

(4)

Grand Rounds

Monte Fiore Hospital

Bronx, New York

"Future of Spine/Long Term Results"

11/22/99

Visiting Professor - continued:

Grand Rounds

Wayne State University

Detroit, Michigan

"Degenerative Disc Disease", and "Current Status of

Osteoporotic Fracture Treatments Using Vertebroplasty vs.

Kyphoplasty" 12/15/99

Grand Rounds

Yale University

New Haven, Connecticut

"Degenerative Disc Disease - Current and Future" 12/17/99

Grand Rounds

Barrow Neurological Institute

Phoenix, Arizona

"IDET" May 19,1999

H. Lohman Memorial Orthopaedic Conference -

"Surgical Approaches for Chronic Low Back Pain".

Livingston, New Jersey October 7, 2000

Neurosurgery Conference, Eleanor N. Dana Conference Center, Medical College of Ohio - "Scientific and Historical Basis for Lumbar Spine Surgery", and "Direction for Future Spine Applications".

Toledo, Ohio

January 20, 2001

Altman Hospital Orthopedic Conference - "Surgical Management of Degenerative Disc Disease: Aggressive, Conservative Care to Artificial Disc Replacement. Canton, Ohio March 8, 2001

Dinner Presentation to Orthopaedic Surgeons in the Hershey, Pennsylvania area -

"Spine Care for Degenerative Disc Disease; Past, Present and Future"

Harrisburg, Pennsylvania

May 8, 2001

Journal Club - "Discogenic Low Back Pain: Surgical Treatment Options". Louisville, Kentucky March 1, 2002

Dinner Presentation to Orthopaedic Residents, Alleghany

General Hospital - "Degenerative Disc Disease - The Role of Nucleus Replacement vs. Disc Replacement".

Pittsburgh, Pennsylvania March 11, 2002

Visiting Professor - Continued:

Grand Rounds & Dinner Presentation
University of California, San Diego
"Indications & Rationale for Anterior and Posterior
Thoracolumbar Fracture Treatment", and Spine Osteotomy for
Kyphus Correction".

December 11-12, 2002

Spine Distinguished Lecture
The Hospital for Special Surgery
New York, New York
"Kyphoplasty for Osteoporotic Compression Fractures and
Selective Vertebral Primary or Metastatic Tumors", and
"Management of Degenerative Disc Disease: Current
and Future".
February 20-21, 2003

Neurological and Spinal Surgery - Lincoln, Nebraska
"Disc and Nucleus Replacement for Degenerative Disc
Disease and Annular Repair". October 7-8, 2005

Neuroscience Conference-Texas Back Institute
"Nucleus Replacement". October 6, 2006

VietNam Orthopedic Association & Spine Society of HCMC, VietNam (SSHV) Meeting - "Motion Preservation for Degenerative Spinal Conditions", and Disc and Nucleus Replacement".

Ho Chi Minh City, Viet Nam November 16-22, 2006

Presidential Guest:

Orthopaedic Department, University of Hong Kong, Queen Mary Hospital, Children's Hospital, Sandy Bay, Hong Kong

11/1/80-11/15/80

Taipei Orthopaedic Association Taipei, Taiwan

10/21 - 10/23/93

1995 Quingdao International Congress on Orthopaedics Quingdao, China 10/8-10/10/95

2nd Military Medical University China

2/97

4/26/97

The Association of Spinal Surgery, Republic of China Annual Meeting
Taipei, Taiwan

Academic Positions:

Assistant Professor, Orthopaedic Surgery State University of New York, Upstate Medical Center, Syracuse, New York

1974-1979

Associate Professor, Orthopaedic Surgery State University of New York, Upstate Medical Center, Syracuse, New York

1980-1983

Professor, Orthopaedic Surgery State University of New York, Upstate Medical Center, Syracuse, New York

1984-1987

Professor and Chairman, Orthopaedic Surgery SUNY Health Science Center at Syracuse, (Upstate Medical Center) Syracuse, New York

1987-1989

Professor of Orthopaedic and Neurological Surgery SUNY Health Science Center at Syracuse, Syracuse, New York

1990-Feb. 2007

Academic Positions (continued):

Professor Emeritus, Department of Orthopaedic and Neurological Surgery
SUNY Health Science Center at Syracuse
Syracuse, New York
March 2007-

Hospital Appointments:

State University of New York,	
Upstate Medical Center,	
Syracuse, New York	1974-2012
Crouse-Irving Memorial Hospital,	
Syracuse, New York	1974-2008
Veterans Administration Hospital,	
Syracuse, New York	1974-2008
St. Joseph's Hospital Health Center	
Syracuse, New York	1996-Jan.31, 2000
St. Elizabeth Medical Center	
Utica, NY	2007-2008

Licensure:

New York (118107)	1973
California (C 35444)	1973
Michigan (31654)	1973

Certification:

American Board of Orthopaedic Surgery 1975

Military Service:

Active Reserves - Army	6/28/70-1978
United States Army	1970-1976

Membership in Societies:

California Medical Association	1974-
Onondaga County Medical Society	1974-
Medical Society of State of New York	1974-
American Medical Association	1974-2000
Orthopaedic Research Society	1975
Active Fellow, American Academy of Orthopedic Surgeons	1977-2006
Emeritus Fellow, American Academy of Orthopaedic Surgeons	2007-
Fellow, American College of Surgeons	1978-2008
The Marquis Who's Who Publications Board	1978-2000
Association for Academic Surgery	1978-1988
Eastern Orthopaedic Association	1978-1989
New York Chapter, American College of Surgeons, Inc.	1978-
Fellow, International College of Surgeons, Inc.	1982-88
New York State Society of Orthopaedic Surgeons	1982-
Bioelectrical Repair and Growth Society	1982
Chemonucleolysis Advisory Faculty	1984
The International Society for the Study of the Lumbar Spine	1984-
North American Spine Society	1985-

American College of Spinal Surg	reons 1	985
International Back Pain Society	, 1	986
American Spinal Injury Associat	ion 1	987

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Membership in Societies (continued):

Orthopaedic Trauma Association	1987
Upstate New York Federation of Physicians and Dentists	1987
American Orthopaedic Association	1988-2008
Scoliosis Research Society	1989
International Society for Minimal Intervention in Spinal Surgery	1993
Societe Internationale De Chirurgie Orthopedique Et De Traumatology (SICOT)	1994-2000
Chinese Speaking Orthopaedic Society	1994
Chinese Speaking Orthopaedic Society	2004-2006
International Intradiscal Therapy Society, Inc.	1998
Spine Arthroplasty Society, Charter Member	Aug.20, 2001-

Honorary Degrees, Awards:

Phi Beta Kappa

Phi Sigma Pi

Beta Beta-Biological Honorary

American Medical Association, Physician's Recognition Award

May 1981-1984

Certificate of Merit for Scientific Exhibit entitled: "Computed Tomography in Degenerative Spinal Stenosis: The Value of Multiplanar Reconstruction" The American Roentgen Ray Society

March 1981

Young Surgeon Representative for Upstate New York Chapter, American College of Surgeons

1983

Orthopaedic Research and Education Foundation - The Order of Merit -Cum Laude

1986 & 1990

North American Spine Society Travelling Fellowship Award -\$15,000

1991

North American Spine Society Award for Research - Research assigned to Dr.E. Thomas Edwards Dr. Kao Han Chung - \$35,000

1991

North American Spine Society AcroMed Manuscript Award
Bayley, J.C.; Yoo, J.U.; Zou, D.; Kruger, D.M.; Edwards,
W.T.; Yuan, H.A.: "The Role of Distraction in Improving
the Space Available for the Cord and Nerve Roots in
Cervical Spondylosis"

AcroMed Research Award - \$25,000

1991

Volvo Award for Low Back Research (Basic Science Award), International Society for the Study of the Lumbar Spine-AcroMed Corporation - "Vertebral burst fractures: An

1992

experimental Disc in Flexion-Compression and in Pure Compression".

Fredrickson, B.E.; Edwards, W.T.; Rauschning, W.; Bayley, J.C.; Yuan, H.A.: "Vertebral Burst Fractures: An Experimental Morphologic and Radiographic Analysis"

Honorary Degrees, Awards:

North American Spine Society AcroMed Manuscript Award - P. Vazquez-Seone; J. Yoo; D. Zou, L.A. Fay; B.E. Fredrickson; J.C. Handal; H.A. Yuan; W.T. Edwards: "Interference Screw Fixation of Cervical Grafts: A Combined In Vitro Biomechanical and In Vivo Animal Study". Boston, Mass. 1992

Chinese Institute for Space Science and Medical Engineering - Granted Lifetime Honorary Professor. 1996

North American Spine Society Outstanding Poster Award Patrick Connolly, M.D.; Nat Ordway, M.S.; Kenneth Mann,
Ph.D.; Todd Sacks, B.S.; V. Vamjanij, M.D.; and Eric Wall,
M.D.: "Video Assisted Thoracic Diskectomy and Anterior
Release: A Biomechanical Analysis of Open vs. Endoscopic
Technique". VanCouver, B.S., Canada 1996

International Intradiscal Therapy Society Meeting - 7th Annual - Lyman Smith, M.D. Award for Best Presentation - Nathaniel R. Ordway, M.S.; V. Vamvanij, M.D.; J. Zhao, M.D.; O.B. Bao, M.D. H A. Yuan, M.D.; K.A. Mann, Ph.D. "The Effect of a Hydrogel Nucleus on the Failure Properties of the Intervertebral Disc". Naples, Florida 1997

North American Spine Society's 1998 Leon Wiltse Award for leadership in the field of spine surgery. Annual North American Spine Meeting, San Francisco, CA. 1998

North American Spine Society David Selby Award Seattle, Washington September 29, 2006

Spine Arthroplasty Society Leon L. Wiltse Award for Best Overall Paper - "An Investigational Study of Nucleus Pulposus Replacement Using an Incurable Polyurethane - An In Vivo Non Human Primate Model
SAS7, Berlin, Germany May 2007

Spine Arthroplasty Society, The International Society for the Advancement of Spine Surgery, 2008 Best Clinical Paper Award "Two Year Interim European Clinical Results of Nucleus Replacement Using an In Situ Cured, Balloon Contained, Injectable Polyurethane Device" - J. Sherman, P. Donkersloot,

F. Martens, M. Ahrens, H. Halm, A. Tsantrizos, H. Yuan, J.C. LeHuec

May 2008

Committees, Boards:

Silverman Public Health Hospital,	
Executive Committee	1976-1977
Medical Staff Executive Committee	1977
Governing Board	1981
Emergency Health and Medical Services Committee of the Onondaga County Medical Society	July 1983
A O Spine Study Group	1985
International Spinal Fixation Advisory Committee	1985
Editorial Staff of "Complications in Orthopaedics"	1986-1989
Joint Labor/Management Committee of United University Professions	1986
Ad Hoc Committee for Review of Undergraduate & Graduate Medical Education Curricula at SUNY Health Science Center at Syracuse	1986
United University Professions Academic Delegate	1987
Advisory Editor - Journal of Spine	1988-1990
Editorial Board - Journal of Spine Disorders	1989
Ad Hoc Committee to develop a classification of thoracic and lumbar spine for Scoliosis Research Society	1989
Executive Committee - North American Spine Association	1989
Chairman, Committee for Spinal Research - North American Spine Association	1990

Program Chairman - North American Spine Association Annual Meeting

1990

Committees, Boards - Continued:

Resolutions Committee - American Academy of Orthopaedic Surgeons	1990-1996
Board of Associate Editors - Journal of Spine	1991-2006
Board of Editors - Journal of Spinal Research	1991
American Academy of Orthopaedic Surgeons Regional Membership Committee	1991-1993
CPT Committee of the American Academy of Orthopaedic Surgeons	1991-1996
North American Spine Society, Chairman, Committee on CPT	1991-1995
North American Spine Society, Chairman, Committee on Committees	1992-1993
North American Spine Society, Committee on Long Range Planning	1992-1994
North American Spine Society, Second Vice-President	1993-1994
Consultant - Bioelectron, Inc.	1993
Advisory Panel - Journal of Spine	1993-2006
Ad Hoc Committee, Agency on Health Related Affairs	1993
Socio-Economic Governmental Agency - Chair, Scientific Committee on Retrospective Study of Pedicle Screw Fixation	1993
Negotiator for American Academy of Orthopaedic Surgeons and American Association of Neurological Surgeons Liaison Task Force re: Fellowship, Resid Training for Spine Care	

Chairman, Scientific Committee For "A Historical Cohort Study of Pedicle Screw Fixation in Thorac	ic,
Lumbar, and Sacral Fusions"	1994
North American Spine Society, Committee on Committees	1994
Committees, Boards - Continued:	
North American Spine Society, Vice-President	1994
North American Spine Society, Director, Council on Administration	1994-1995
Editorial Board, Spine Letter	1994
Department of Health and Human Services Orthopedic and Rehabilitation Devices Panel	1994-
North American Spine Society, Chair, Traveling Fellowship Committee	1994
North American Spine Society, Representative to COMSS	1994-1996
North American Spine Society, President	1995
International Society for the Study of the Lumbar Spine - Executive Committee	1995-
Board of Directors - Nuvasive	Sept.1995-
Z-KAT, Inc. Advisory Board	1998
Editorial Board - Spine Universe	July 2000
Advisory Board - Medical Economics Magazine	July 2000
Editorial Board - The Spine Journal(TSJ) Jul	y 2000-2001
Editorial Advisory Board - Advances in Osteoporoti Fracture Management Journal	c 2001-

Associate Editorial Board - The Spine Journal	(TSJ)
	2002-2006
Kyphon Scientific Advisory Board	March 2002-
Board of Directors, Spine Arthroplasty Society	May 2002-
Editorial Advisory Board - Orthopedics Today	2003-2004
The Council of Healthcare Advisors -	July 2003-
Archus Orthopedics Scientific Advisory Board	2003-

2007

Committee

Committees, Boards - Continued:

Editorial Staff - Textbook - Emer	rging Spine Surgery	
Technologies - Published 2006		

Editorial Staff - The Chinese Speaking Orthopaedic Society Journal of Orthopaedic Surgery and Research	ety 2006
Editor-in-Chief, The Spine Arthroplasty Society Online Journal	2006-
Applied Spine Clinical Events Committee, Principal Investigator, Stabilmax NX IDE Clinical Study	2006
President, The Spine Arthroplasty Society	2007
North American Spine Society Recognition Awards	

Scientific Presentations...

29th Annual Conference for Engineering in Medicine and Biology-SESSION-"Bioelectricity and Orthopaedics:, "Treatment of Osteomyelitis with Electrically Injected Silver Ions in Rabbits". Boston, Mass	1976
Annual Meeting of Orthopaedic Research Society - "Electrically Generated Silver Ions as a Bacteriocidal Agent in Acute and Chronic Enterobacter Cloacae Osteomyelitis in Rabbits". Las Vegas, Nevada.	1977
Annual Meeting of Orthopaedic Research Society - "Silver-PMAA Antibacterial Bone Cement". Dallas, Texas.	1978
Annual Meeting of Orthopaedic Research Society - "Hematogenous Vertebral Osteomyelitis in the Adult". Dallas Texas.	1978
Eastern Orthopaedic Association 9th Annual Meeting - "Computerized Tomography in the Evaluation of Thoraco-Lumbar Spinal Injuries". Acapulco, Mexico.1978	
Eastern Orthopaedic Association 9th Annual Meeting - "Computerized Axial Tomography about the Hip". Acapulco, Mexico.	1978
American Roentgen Ray Society Annual Meeting - "Computed Tomography of the Spine: Sagittal and Coronal Reconstruction".	1979
Eastern Orthopaedic Association 9th Annual Meeting - "Surgical Management inn the Symptomatic Cervical Spine in Rheumatoid Arthritis". Dorado Beach, Puerto Rico.	1980
49th Annual Meeting of Orthopaedic Surgeons - "Computed Tomography in Spondylolisthesis". New Orleans, Louisiana.	1982
New York State Society of Orthopaedic Surgeons, Inc.,	

Annual Meeting - "Reclassification of Lumbar Fractures

Using the CT Scan". Cancun, Mexico.

1982

50th Annual Meeting of Orthopedic Surgeons - "Computed Tomography in Thoracolumbar Fractures - An Analysis of 100 Consecutive Cases".

Anaheim, California.

1983

Scientific Presentations...Continued:

New York State Society of Orthopaedic Surgeons - Annual Meeting - "Burst Fractures of the Thoracic and Lumbar Spine, Surgery vs. Conservative Treatment".

May 20,1983

Scoliosis Research Society, Annual Meeting - "Scintered Fibermetal Spinal Implants: An Experimental Evaluation". New Orleans, Louisiana. Sept. 1983

Scoliosis Research Society, Annual Meeting "Spondylolisthesis: Slipping When Does It Occur?"
New Orleans, Louisiana. Sept. 1983

Eastern Orthopaedic Research Society "Non-Scoliotic Management with segmental
instrumentation; animal and cadaver biomechanical
analysis with clinical experience".
Palm Beach, Florida.

Oct. 1983

51st Annual Meeting of Orthopaedic Surgeons "Anterior Decompression of Thoracolumbar Fractures
through Retroperitoneal Approach".
Atlanta, Georgia.

Feb. 1984

Annual Meeting of Orthopaedic Research Society - "Dermatome-Stimulated Cortical Evoked Potentials (DCEPs) in the Diagnosis of Lumbosacral Root Lesions". Atlanta, Georgia.

Feb. 1984

Annual Meeting of Western Trauma Association "Luque Segmental Spinal Instrumentation in
Non-Scoliotic Conditions - A Biomechanical and
Clinical Analysis". Steamboat Springs, Colorado. Feb. 1984

New York State Society of Orthopaedic Surgeons - "Luque Segmental Spinal Instrumentation in Non-Scoliotic Conditions - A Biomechanical and Clinical Analysis". Tarpan Springs, Florida.

May 1984

International Society for the Study of the Lumbar Spine - "Burst Fractures of the Fifth Lumbar Vertebra". Montreal, Canada.

June 1984

International Society for the Study of the Lumbar Spine - "Scintered Fibermetal Spinal Implants: An Experimental Evaluation in Primates". Montreal, Canada.

June 1984

Scientific Presentations...Continued:

International Society for the Study of the Lumbar Spine - "CT Discography and Scanning in the Post-Chymodiactin Patient; Correlation with Clinical Results". Montreal, Canada.

June 1984

Lubicky, J.P.; Fredrickson, Bruce E.; Yuan, H.A.; Froehling, A: Scintered Fibermetal Spinal Implants. An Experimental Evaluation, Scoliosis Research Society Meeting.

1984

North American Lumbar Spine Association -Static Biomechanical Evaluation of Six Internal Fixation Devices for the Lumbar Sacral Junction". Laguna Niguel, California.

July 1985

Eastern Orthopaedic Association, Annual Meeting - "Low Back Disorders; Non-Surgical Management - Non-Surgical Treatment including Chemonucleolysis "Low Back Disorders: Surgical Treatment", Boca Raton, Florida.

Oct. 1985

International Society for the Study of the
Lumbar Spine - "Non-Surgical Management of
Thoracic and Lumbar Fractures in Neurological
Intact Patients: CAT Scan Evidence of Reabsorption
of Bony Canal Syndrome". Australia. April 1985

International Society for the Study of the
Lumbar Spine - Static Biomechanical Evaluation of
Six Internal Fixation Devices for the Lumbar Sacral
Junction. Australia. April 1985

American Spinal Injury Association, Annual Meeting - "Biomechanical Comparison of Seven Internal Fixation Devices for the Lumbosacral Junction". San Francisco, California.

March 1986

International Society for the Study of the Lumbar Spine - "McKenzie Treatment of Low Back Pain: A Correlation of Significant Factors in Determining Prognosis". Dallas, Texas.

May-June 1986

Scientific Presentations...Continued:

Scoliosis Research Society Meeting -"Biomechanical Comparison of Seven Internal Fixation Devices for the Lumbosacral Junction", "A Biomechanical Analysis of the Effectiveness of Posterior & Anterior Fusions with Facet Fixation in Beagle Lumbar Spine", "I-Plate System for Stabilization of Anterior and Thoracolumbar Interbody Fusion".

AO-ASIF Spine Course - "Non-Operative Treatment of Thoraco-Lumbar Injuries". Davos, Switzerland. Dec. 1986

American Spinal Injury Association "Anterior Decompression of Burst Fractures with
I-Plate Fixation". Boston, Mass. March 1987

Surgical Grand Rounds, SUNY Health Science Center - "Thoracolumbar Spine Fractures and Their Management". Syracuse, New York. April 1987

Fitness and Wellness Lecture Series, SUNY Health Science Center - "Back Problems, Conditioning and Rehabilitation". Syracuse, New York.

April 1987

New Jersey Medical Center - "Thoracic and Lumbar Spine Fractures; Conventional Fixation Devices and Projection into future investigation".

New Jersey.

June 1987

North American Spine Society Meeting - "Clinical and Biomechanical Evaluation of an I-Plate System for Anterior Spinal Surgery".

Banff, AP, Canada

June 1987

International Association for the Study of Pain
Vth World Congress on Pain-"Posterior Ramus Block
for Treatment of the Facet Syndrome".
Hamburg, West Germany
Augu

August 1987

AO Spine Course-"Non-Operative Treatment of Spinal Injury", "Patient Selection for Lumbosacral Surgery for Degenerative Disc Disease". Clearwater Beach, Florida October 1987

Scientific Presentations...Continued:

Orthopaedic Trauma Association Annual Meeting-"Treatment of Thoracic and Lumbar Burst Fractures using Anterior Stabilization: A Clinical and Experimental Study", "Reduction of the Intraspinal Fragment in Burst Fractures".

Baltimore, Maryland

November 1987

Western Trauma Association-"Treatment of Thoracic and Lumbar Burst Fractures Using Anterior Stabilization: A Clinical and Experimental Study".

Steamboat Springs, Colorado

Feb.-Mar. 1988

Scoliosis Research Society Annual Meeting - "A Three Phase Biomechanical Evaluation of Short Segment

Anterior and Posterior Fixation Systems".

Baltimore, Maryland. Sept.-Oct. 1988

AO Spine Course - 1.) "Non-Operative Treatment of Spinal Injury";2.) "Approach to the Surgical Management (Including Plate Fixation)".

Davos, Switzerland.

Dec. 1988

American Orthopaedic Association Residents Conference - "Epidural Steroids in the Conservative Management of Low Back and Leg Pain". Rochester, NY.

March 1989

Symposium on Lumbar Internal Fusion with Internal Fixation - "Lumbar Internal Fixation without weight sharing". Quebec, Canada.

July 1989

AO\ASIF SPINE Course - "Biomechanics of Intra spinal Fragment Reduction", "Non-Operative Treatment of Spinal Injury", "Approach to the Surgical Management of the degenerative Spine". Vail, Colorado.

Sept. 1989

Challenge of Lumbar Spine - "Biomechanical Analysis of various internal fixation systems and clinical significances".
San Francisco, California.

Nov. 1989

Orthopaedic Research Society - "Evaluating SCEP's during Orthopedic Procedures on the Spine". New Orleans, Louisiana.

Feb. 1990

Keystone Spine Meeting - "Biomechanics of Fusion and Fixation", "Big Anterior Surgery". Keystone, Colorado.

March 1990

Scientific Presentations...Continued:

Challenge of Cervical Spine - The New Challenge - "Anterior Plating for Cervical Fractures and Dislocations".

San Antonio, Texas. April 1990

International Society for the Study of the Lumbar Spine - "Degenerative Spondylolisthesis Treated with a Reduction-

Fixation Instrumentation System".
Boston, Massachusetts

June 1990

North American Spine Society Annual Meeting - "Spondylolisthesis: The Natural History Age 5-40". Monterey, California.

Aug. 1990

North American Spine Society Annual Meeting - "Update on Anterior Spinal Fixation Systems". Monterey, California.

Aug. 1990

Orthopaedic Trauma Association - "Contribution of the Posterior Annular Attachments in the Reduction of Vertebral Burst Fractures", "Anterior Interbody Fixation Devices".

Toronto, Ontario, Canada.

Nov. 1990

The International Conference on Spinal Surgery 1990 (ICSS'90) - "Cervical and Lumbar Discography", Surgical Treatment of Cervical Spine Injury", Anterior Thoracic and Lumbar Spine Fixation", Surgical Treatment of Thoracolumbar Spine Injury". Taipei, Taiwan.

Nov. 1990

Orthopaedic Trauma Association, American Academy of
Orthopaedic Surgeons Specialty Day - "Timing of Operative
Intervention in the Management of Acute Spinal Injuries".

J. Schlegel, H. Yuan, B. Fredrickson, J. Bayley.
Anaheim, California.

March 1991

International Society for the Study of the Lumbar Spine - "Mechanics of Anatomic Reduction of Thoracolumbar Burst Fractures". Zou, D., Chang, K., Donovan, D., Edwards, T., Fredrickson, B., Yuan, H. Heidelberg, Germany

March 1991

International Society for the Study of the Lumbar Spine "Orientation of Transpedicular Vertebral Screws in Human
Vertebrae: Effect on Screw Vertebrae Interface Stiffness.
A Biomechanical Study of the Transpedicular Screw Fixation
in Different Direction". Wu, S., Liang, P., Edwards, T.,
Zou, D., Yuan, H. Heidelberg, Germany March 1991

Scientific Presentations...Continued:

German Speaking Association and Orthopedic Trauma Association
"Timing of Operative Intervention in the Management of Acute
Spinal Injuries". J. Schlegel, H.Yuan, B. Fredrickson,
J. Bayley. Vienna, Austria. May 1991

American Orthopaedic Association Meeting "Alteration of neuroforaminal size secondary to cervical
motion". Palm Beach, Florida

June 1991

Scoliosis Research Society - Wu, S.; Albanese, S.: Edwards. W.T.; Zou, D.; Fay, L.; Ordway, N.R.; Liang, L.; Yuan, H.: Orientation of Transpedicular Vertebral Screws: Effect of Screw-Vertebra Interface. Sept. 1991

59th Annual Meeting American Academy of Orthopaedic Surgeons - Instructional Course - "Thoracolumbar Spine Fractures and Treatment" and "Indications for Surgery in Conservative Care". Washington, D.C. 1992

59th Annual American Academy of Orthopaedic Surgeons "Interference Screw Fixation of Anterior Cervical
Grafts: An in vitro Biomechanical and in vivo Sheep Cervical
Spine Study of a New Method of Cervical Fixation.
Washington, D.C.

Pedicle Fixation of the Lumbar Spine Course - "R.F. System",
"Overview of the Available Pedicle Screw Systems: A
Biomechanics and Indications Classification".
Lab and Demo Session - 1) Wiltse System; Fixation of
Degenerative Scoliosis; 2) Options and Indications for
Interbody Fusion and Spacers, including Autograft, Allograft,
and Synthetic Spacers, Round Table Discussion - Fracture
Table. Phoenix, Arizona. April 30-May2,1992

International Society for the Study of the Lumbar Spine Annual Meeting-"The Effect of Lumbar Distraction and Decompression in Reducing Intervertebral Canal Stenosis", "Viscoelastic Response of Intact and Discectomized Intervertebral Disc in Flexion-Compression and in Pure Compression", "Vertebral Burst Fractures: An Experimental morphologic and Radiographic Analysis".

Chicago, Illinois

May 20-24, 1992

American Orthopaedic Association 106th Annual Meeting "The Assessment of Computed Tomography of Neuroforaminal
Stenosis". Coronado, California June 6-9, 1993

Scientific Presentations...Continued:

AME Symposium - "Anterior Cervical Instrumentation" Boston, Massachusetts

1992

North American Spine Society 7th Annual Meeting "Time Dependent Response the Intervertebal Disc in FlexionCompression Following Discectcomy".

Boston, Mass.

July 1992

AO Spine Course, CHAIRMAN - "Thoracolumbar Trauma", "Spine Trauma on New Horizons". Taichung, Taiwan Sept. 3-6, 1992

Controversies in the Diagnosis and Treatment of Lumbar Instability - "RF System", "Analysis and Result using the Long Beach System". Lake George, NY Oct. 1992

Spinal Symposium - "Design Principles and Instrumentation Techniques for the Lumbar Spine". New York, NY Oct. 1992

The 17th Annual New Jersey Orthopaedic Symposium in conjunction with The 25th Annual Northeastern-Mid-Atlantic orthopaedic Residents Conference - "Treatment of Spine Fractures". Somerset, New Jersey Oct.23-24, 1992

Round Table Symposium at North American Spine Society
Meeting - "Fusion Controversies" 1992

15th Singapore Orthopaedic Meeting - "Choice of Spinal Instrumentation Based on Biomechanical Assessment",
"Cervical Cord Injury-The Place for Steroid Therapy and Cord Decompression", "Management of Thoraco Lumbar Burst Fracture". Singapore Nov. 12-15, 1992

Techniques in Spinal Instrumentation - "Posterior Spinal Fixation for Thoracolumbar Trauma: A Spectrum of Treatment"

New York, New York

Dec. 11-12, 1992

Disorders of the Spine, presented by the Spine Center/Florida Orthopaedic Institute, University of South Florida - "Indirect Fracture Reduction". Snowbird, Utah

Jan.10-15, 1993

American Medical Electronics National Sales Meeting "Thoracolumbar Fractures", "Comparison of Current Systems".
Cliff Lodge, Snowbird, Utah Jan. 23-27, 1993

Scientific Presentations...Continued:

RF System Workshop - "Biomechanics of the RF Systems", Hands-on Session: Fractures.

Kansas City, Missouri Feb. 6, 1993

Disorders of the Spine and Peripheral Nerve Annual Meeting - "Collaborative Practice: Neurosurgery with/vs. Orthopaedics". Tucson, Arizona Feb. 19, 1993

Federation of Spine Associations Annual Meeting "Interference Screw Fixation of Cervical Grafts: A Combined
In Vitro Biomechanical and In Vivo Animal Study", MODERATOR,
North American Spine Society Session.
San Francisco, California Feb. 21, 1993

University of Virginia Health Sciences Center "Thoracolumbar Fractures, Diagnosis, Management and
Biomechanics", "Anterior Spinal Fusion using BAK Cage".
Charlottesville, Virginia April 21, 1993

Diagnosis and Treatment of Diseases of the Cervical Spine "Anterior Cervical Fusion, Autograft vs. Allograft", "Indirect
Reduction Techniques of Burst Fractures in the Thoracolumbar
Spine", "Cervical Anterior Decompression, Distraction for
Foramenal Decompression", and "Anterior Cervical Plate
Fixation". St. Luke's Episcopal Hospital
Houston, Texas

April 23-24, 1993

SICOT International Symposium on Spine - "Pulse

Electromagnetic Field in the Assistance of Osteosynthesis used in Lumbar and Cervical Spine Fusion" and "Cervical Posterolateral mass plate Fixation for Spinal Instability".

Seoul, Korea April 27, 1993

SICOT China Spine Session - "Anterior and Posterior Interbody Fusion with BAK System of Cervical and Lumbar Spine", and "Spinal Stim. Blinded Controlled Prospective study for Interbody Fusion". Hangzhou, R.O.C. May 1993

Chung Gun University Spinal Symposium - "Indirect Reduction and experience with RF System for Thoracolumbar Fracture Treatment", "Halifax Clamp for Posterior Cervical Fusion", and "UB Plate for Cervical Posterolateral Mass Fixation".

Kaoshiung, R.O.C. May 1993

Scientific Presentations...Continued:

Pedicle Fixation of the Lumbar Spine and Other Advanced Techniques - "Overview of the Available Pedicle Screw Systems: A Biomechanical Classification", Round Table Discussion - "The Current Status and Future of Artificial Disc Replacements", "General Pedicle Fixation Issues", Panel Discussion - The L4-5 Degenerative Disc Needing a Fusion: Do You Need Pedicle Screws? When Do you Need to Restore the Disc Height? Does the Isolated Floating L4-L5 Fusion Work as Well as the L4-S1 Fusion? How Do You Rehabilitate the Patient After Surgery?", Slide Demonstration - "RF System".

Orlando, Florida May 13-15, 1993

International Society for the Study of the Lumbar Spine "A biomechanical assessment of the Isola spine construct and
the Harrington rod system with and without Drummond wiring",
"Determination of the ideal strain for Lumbar Fusions Biomechanical evaluation of a finite element model of the
sheep spine". Marseilles, France June 15-19, 1993

Spinal Course (Smith & Nephew Richards) - "Indirect Reduction Techniques of Burst Fractures in the Thoracolumbar Spine" and "Spondylo Reduction".

Amelia Island, Florida

June 25-26, 1993

Spine Workshop, Thoracolumbar Course - "Anterior Thoracolumbar Fixation". Bethesda, Maryland June 27-July 2, 1993

Spinal Instrumentation Course - "Indications, Contraindications, results and complications of Lumbosacral Stabilization". Orlando, Florida August 1-5, 1993

AME Course - "The Use of PEMF and the role it plays in Spinal Stim clinical data and review pertinent Cases".

Atlanta, Georgia August 7, 1993

SICOT Meeting - "Biomechanics of Fractures", and "Preliminary Report on Laparoscopic L5-S1 Anterior Discectomy and Fusion Using BAK Cage". Korea Sept.2-3,1993

SICOT Meeting - Chairperson for lecture session: "Spine Trauma--Conservative vs. Internal Fixation".

Korea Sept. 2, 1993

Mahidol University, Dept. of Orthopaedic Surgery "Thoracolumbar Spine Fractures and Indirect Reduction and its
Treatment", Degenerative Lumbar Spine", Cervical Spine
Fractures and It's Management".
Bangkok, Thailand Oct. 19, 1993

Orthopaedic Association of Republic of China - **GUEST SPEAKER**"Internal Disc Derangement, Diagnosis, Treatment and Prognosis", "The Natural History of Spondylolysis and Spondylolisthesis Isthmic and Degenerative, Indications for Reduction with Review of Literature and Discussion of Techniques of Reduction and Stabilization".

Taipei, Taiwan Oct. 21-23, 1993

Arthroscopic Microdiscectomy of the Lumbar Spine Minimal Intervention in Spinal Surgery- "Posteromedial, Posterolateral and Anterior Approaches to the Lumbar Spine, When and Why"?

Philadelphia, Pennsylvania Nov. 5-6, 1993

SSAF State of the Spine from A to Z - "Posterior Thoracolumbar Instrumentation for Trauma".

Puerto Rico Nov. 12-15, 1993

International Society for the Study of the Lumbar Spine Instructional Course - "Lumbar Spine Anatomy", "Lumbar Disc Herniation" "Infection".

Buenos Aires, Argentina

Nov. 18-20, 1993

Disorders of the Spine; 6th Annual Ski Snowbird With The Spine Center-"Indications for Reduction of Low Grade Degenerative or Isthmic Spondylolisthesis Combined with Instrumentation and Spinal Fusion".

Snowbird, Utah

Jan. 9-14, 1994

Controversy and Changing Trends in Spine Care - "Minimally Invasive Techniques". Chicago, Illinois January 26, 1994

Joint Section on Disorders of the Spine and Peripheral Nerves-INSTRUCTOR - "Anterior Cervical Stabilization course". Fort Lauderdale, Florida February 9, 1994

Joint Section on Disorders of the Spine and Peripheral Nerves-"Diagnostic Signs of Painful Lumbar Discs on MRI and Discography". Fort Lauderdale, Florida February 12, 1994

Current Concepts in Management of Spinal Trauma - "Anterior Instrumentation for Thoracolumbar Injuries",

"Biomechanics of Implants, A Surgeons View", "Posterior Thoracolumbar Instrumentation for Trauma".

Houston, Texas March 25-26,1994

Smith & Nephew Richards Annual Winter Meeting "Minimally Invasive Procedures for the Lumbar Spine Present and Future (AMD, BAK & Artificial Disc),
"Secure Strand and C1-2 Odontoid Fixation with C1-2
Transarticular Fixation", Posterior Cervical Wiring
Techniques and Plating Techniques".
Queensland, Australia April 23-30, 1994

The Combined Meeting of Spinal and Paediatric Sections of W.P.O.A. - "Spondylolisthesis with Isthmic and Degenerative Spondylo: Indications for Reduction", "Spinal Stenosis", "Minimal Invasive Surgery, Laser, Percutaneous Suction Discectomy, Arthroscopic MicroDiscectomy, Percutaneous Laparasopic and Posterolateral Approach for Intradiscal Fusion". Taiwan April 28-30, 1994

European Spine Meeting - "Cervical System: Design Rationale",
"SecureStrand Cable: Cervical Cable", "Interbody Fusion
Implant Rationale of BAK", "Endoscopic BAK".

Dept. of Anatomy, Leiden University, Leiden, Holland

May 5-7, 1994

Third Conference on Controversies In the Treatment of
Lumbar Spine Disease - "Prospective Study using AME Bone
Stimulation in Spinal Fusions", " Long Beach System", and
"Laparoscopic Approach to Anterior Interbody Fusion at L5-S1
Using the BAK Cage Distraction; Post Operative Immobilization.
Orthopaedic Institute of Central New York,
Bolton's Landing, Lake George, NY June 3-5, 1994

American-European Meeting on Pedicle Fixation of the Spine and Other Advanced Techniques - BAK Workshop

Munich, Germany

Spine Challenge Meeting - "Cervical Spine Injury: Techniques of Fixation; Old and New

July 7-9, 1994

Anterior Surgical Approaches to the Spine - "Caspar Anterior Cervical System". Memphis, Tennessee July 30-31, 1994

Practical Techniques in Spinal Instrumentation - "Anatomy and Instrumentation - Posterior Cervical Spine".
Orlando, Florida August 28-Sept.1, 1994

European Spine Society - "

Sept. 7-10, 1994

Cleveland Orthopaedic Society Symposium on Spinal Implants and Pedicle Screw Fixation - "Historical Cohort Study of Degenerative Spondylolisthesis and Fracture Fixation with Pedicle Screws October 1, 1994

AME Spine Symposium - "Minimally Invasive Spine Surgery and the Use of PEMF for Fusion Enhancement"

Boston, Massachusetts October 28, 1994

State of the Spine A to Z Course - "The Use of Screws in the Pedicle - A Regulatory Update", "Posterior Surgical Treatment of Thoracolumbar Burst Fractures"

Phoenix Arizona Nevember 2 6 1994

Phoenix, Arizona November 3-6, 1994

6th Annual Barrow Neurological Institute Spine Workshop "Minimal Invasive Technique for Disc Surgery and Interbody
Fusions", "Techniques for Thoracic and Lumbar Fractures:
Indirect Reduction and Fixation"
Puerto Rico

November 10-12, 1994

San Diego Spine Symposium & Workshop - "Management of Spondylolisthesis in the Adult", Update on Bone Substitutes in Spine Surgery", "The Economics of Spinal Implants". San Diego, California November 18-20, 1994

Korean Spine Society Meeting - "Minimally Invasive Spine Approaches for Discectomy", Minimally Invasive Technique for Lumbar Interbody Fusion Both Laparoscopic and Retroperitoneal Approach Using Special New Techniques".

Seoul, Korea November 25-26, 1994

Thai Orthopaedic Association - "Minimally Invasive and Retroperitoneal Insuflated Anterior Lateral Approach and Anterior Laparoscopic Approach to the Lumbar Spine for Discectomy and Fusion", "One Year Follow Up on Experiences with BAK in Posterior Interbody and Anterior Interbody Fusion for Degenerative Disc and Low Grade Degenerative Spondylolisthesis of the Lumbar Spine".

Bangkok, Thailand November 30-Degember 4, 1994

8th International Conference on Biomedical Engineering;

Instructional Course - "Advances in Biomaterials in Spinal Surgery", "Minimally Invasive Disc Surgery", "Role of Pedicle Screw Fixation for Spinal Stabilization", "Indications for Threaded Fusion Cage". Singapore December 7-11, 1994

Joint Session on Disorders of the Spine and Peripheral Nerves of the CNS/AANS - "Absorbable Spinal Implants".

Phoenix, Arizona February 15, 1995

AAOS/AANS Symposium on Spinal Trauma - "Biomechanics and Treatment of Thoracolumbar Spine Injuries".

Orlando, Florida February 20, 1995

Future Challenges to Spine Surgery - "Minimally Invasive Spinal Surgery", "The Economics of Spinal Implants".

Tampa, Florida March 10, 1995

Anterior Surgical Approaches to the Spine - "Anterior Cervical Fixation Alternatives".

Memphis, Tennessee April 1-2, 1995

Japanese Orthopaedic Association Annual Meeting - "Interbody Fusion with BAK Device". Yokohama, Japan April 9-11, 1995

AANS Spine Trauma Symposium - "Orlando, Florida

April 25-26, 1995

St. Luke's Episcopal Hospital Symposium - "Posteromedial, Posterolateral, and Anterior Approaches to the Lumbar Spine. When and Why?", "The Biomechanical Rationale for Interbody Fusion in the Treatment of Low Back Pain", "Percutaneous Transperitoneal Endoscopic Anterior Interbody Fusion", "The Physician's Perspective on Regulation and Litigation in the Use of New Medical Technologies".

Houston, Texas April 28-29, 1995

Carolinas Medical Center Spring Symposium - "Pedicle Screw Update", "Minimally Invasive Spine Surgery".

Charlotte, North Carolina May 17-19, 1995

Current Concepts on Surgery of the Spine - 13th Annual
Meeting - "Posterior Surgery for Cervical Trauma; Indications
for Different Approaches", "Indications and Techniques for
Cervical Cable", "Classifications of Thoracic and Lumbar
Spine Injuries; Indications for Surgical Approaches",
"Thoracolumbar Fractures; Posterior Approach Techniques,

Pitfalls, and Results", "Percutaneous Anterior Interbody Fusion Instrumentation". Galveston, Texas May 24-27, 1995

Thoracoscopic Approaches for the Treatment of Thoracic Spinal Pathology - "Surgical Techniques: Anterior Release For Spinal Deformity". Phoenix, Arizona June 1, 1995

Scientific Presentations...Continued:

Minimally Invasive Discectomy/Endoscopy Course - "Discography, Biopsy, Chymopapain".

Bethesda, Maryland June 15-17, 1995

Smith & Nephew Richards Annual Meeting - "Autograft, Allograft and Substitute Graft Material for Spinal Fusion", "Interbody Fusion with BAK Device", "Overview of Different Minimally Invasive Approaches to the Lumbar Spine and Their Application"

Great Barrier Reef, Queensland

Nineteenth Annual Meeting of the American Society of
Biomechanics - "Structural Features and Thickness of the
Vertebral Cortex in the Thoracolumbar Spine" - Stanford
University, Stanford, California

August 24-26, 1995

1995 Missouri State Orthopaedic Association Meeting "Minimally Invasive Disc Surgery - Past, Present and the
Future", and "Interbody Fusion Technique Using Cages:
Comparison of Open and Laparoscopic Approaches" St. Louis, Missouri September 9-10, 1995
'95 QUINGDAO INTERNATIONAL CONGRESS on ORTHOPAEDICS "Minimally Invasive Disc Surgery and Minimally Invasive Spine
Fusion Techniques". Qingdao, China October 8-10, 1995

North American Spine Society Annual Meeting - "The Removal of Posterior Lumbar Instrumentation to Relieve Localized Discomfort Over the Hardware", "Clinical and Radiographic Assessment of Fusion Techniques in Degenerative Conditions of the Lumbar Spine", "Complications in the Use of a Pedicle Screw Instrumentation System in Fusions of the Lumbar Spine", "Video Assisted Thoracic Corpectomy and Reconstruction: Biomechanical of Open Α Analysis Endoscopic Technique", "New Concept of H-Reflex from S1 Root Stimulation: A Highly Sensitive Test for S1 Radiculopathy", "Anterior Odontoid Screw Fixation", "Arthroscopic

Microdiscectomy: Post-Operative Imaging Study".
Washington, D.C. October 18-21, 1995

Mexican Orthopaedic Association - "Update in Degenerative Management", "Operative and Non-Operative Treatment and Expected Results of Cervical Spine Trauma", and Spinal Cord Injury Management, "Treatment and Timing".

Tijuana, Baja California October 27-Nov. 1, 1995

Scientific Presentations...Continued:

AAOS Spine Surgical Skills Course - Contemporary Issues in Advanced Spine Surgery - " Indications/Techniques for Fusion in Back Pain Syndromes". San Diego, California Nov.2-3,1995

Asian-Australian Congress of Neurological Surgery "Arthroscopic Microdiscectomy and Foramenal Arthroscopic
Discectomy", and "Interbody Fusion with Back Device".
Taipei, Taiwan
November 5-10, 1995

A Contemporary Update on Disorders of the Spine - "Critical Assessment of Indications for Instrumentation in the Cervical Spine". Whistler, British Columbia, Canada

Jan.14-19, 1996

Orthopaedic Research Society 23rd Annual Meeting "In Vitro Biomechanical Evaluation of the Functional Spinal
Unit: After Nucleotomy and with a Hydrogel Implant".
Atlanta, Georgia February 1996

Joint Section on Disorders of the Spine and Peripheral Nerves of the AANS/CNS - "The Role of Electromagnetic Stimulation in Spinal Fusion".

Orlando, Florida Feb. 29, 1996

Contemporary Surgery of the Lumbar Spine - Minimally Invasive Techniques - "Microdisectomy".

Orlando, Florida March 27, 1996

Current Topics in the Treatment of Spinal Disorders - "Current Regulatory Status of Pedicle Fixation", "Anatomy and

Treatment of the Posterior Cervical Spine", "Laparoscopic Interbody Fusion Techniques", and "New Advances in Lumbar Interbody Fusions: A Retroperitoneal Approach".

Jacksonville, Florida March 28-30, 1996

New Frontiers in Spinal Surgery - "Bone Substance Substitutes", "Posterior Surgery for Cervical Trauma Indications and Approaches", "Minimally Invasive Spinal Surgery: Methods and Indications".

Leiden, Amsterdam April 18-20, 1996

AAOS Course - Debating Complex Issues in Spine Surgery - "Low Back Fusion: Anterior Posterior or Circumferencial".
Washington, D.C. April 24-27, 1996

International <u>Intradiscal</u> Therapy Society Meeting - "Discogenic Pain : Contemporary and Experimental Treatments", "Minimally Invasive Fusion Techniques of the Thoracic and Lumbar Spine." Amsterdam, Netherlands May 8-12, 1996

Toronto Endoscopic Spinal Surgery Symposium & Workshop "Indications and Techniques for Endoscopic Spinal Fusions".
Toronto, Ontario, Canada May 17-18, 1996

Scoliosis Research Society Thorascopic/Laparoscopic Course - "Approach to L5-S1 and L4-5", and "Laparoscopic BAK Fusion and Complications". Cincinnati,Ohio June 12, 1996

8th Annual International Spine Workshop-Thoracolumbar Course-"Transthoracic Approach - Open and Thoracoscopic Approach" and "Anterior Lumbar Interbody Fusion (ALIF)". Bethesda, Maryland June 17-21, 1996

International Society for the Study of the Lumbar Spine
23rd Annual Meeting - "Biomechanical Evaluation of the
Functional Spinal Unit with a Hydrogel Disc Nucleus."
Burlington, Vermont

June 24-29, 1996

8th International Operative Course in Spinal Surgery "Minimally Invasive Lumbar Spinal Fusion Technique", and
"Minimally Invasive Disc Surgery".

Jakarta, Indonesia June 30-July 3, 1996

Florida Spine Study Group - "Minimally Invasive Techniques for Disc Surgery and Fusion". July 26, 1996

Anterior Surgical Approaches to the Spine - "Anterior Cervical Fixation Alternatives".

Memphis, Tennessee August 3-4, 1996

Contemporary Surgery of the Thoracic & Lumbar Spine Minimally Invasive Techniques - "What the Future Holds for
Spine Surgery". Orlando, Florida Sept. 8-12, 1996

American College of Osteopathic Surgeons Meeting - "Minimally Invasive Spine Surgery for Disc Excision and Spine Fusion

Techniques". San Diego, California October 18, 1996

New Horizons in Spinal Surgery - "Laparoscopic for Approach to the Anterior Lumbar Spine for Anterior Column Distraction and Stabilization".

Philadelphia, Pennsylvania

November 1-2, 1996

Scientific Presentations...Continued:

Anterior Column Support: Implications in Cervical & Thoracolumbar Spine Surgery - "Posterior Reconstruction for Thoracolumbar Fractures", "When Is Posterior Fusion Alone Sufficient?", and "Treatment of Acute Cervical Trauma: Subaxial Spine." Paradise Island, Bahamas November 7-9, 1996

Society of Military Orthopaedic Surgeons Meeting - "Minimally Invasive Spinal Surgery Techniques with Disc Surgery and 1996 Fusion." San Diego, California November 22, 1996

Peking Union Medical College Hospital - "Cervical Spine -Acute Injury and Fixation", and "Minimal Invasive Disc Surgery - Thoracic and Lumbar Spine." Beijing, China November 25-26, 1996

Future Challenges to Spine Surgery -"Minimally Invasive Spine Surgery". Palm Springs, California January 3, 1997

AAOS Comprehensive Spine Course - "Surgery for Discogenic Back Pain-Does it Help?", "Arthroscopic Discectomy", "Lower Cervical Spine Fractures: Indications and Surgical Techniques and Results". Tucson, Arizona March 12-15, 1997

North American Spine Society Spine Across the Sea -MODERATOR - "Tumor/Infection/Deformity" Kamuela, Hawaii March 17, 1997

Scientific Congress of the Chinese Speaking Orthopaedic Society Symposium - "Minimally Invasive Thoracic Lumbar Decompression and Fusion: Techniques and Indications", and Fixation "Anterior Cervical Alternatives, Dynamism", and "Anterior Column Load Sharing for Spinal Fusion and the Ability to Indirectly Stabilize and Hence Fusion Along With Indirect Decompression of Spinal Stenosis Secondary to Degenerative Spondylosis in the Adult Spine".

Shanghai, China March 27-30, 1997

Smith & Nephew International Spinal Meeting - "Posterior Surgery for Cervical Trauma - Indications, Complications, Approaches", and Treatment of Odontoid and C1-2 Fracture Dislocations". Bologna, Italy April 17-19, 1997

Spinal Surgery Association of Republic of China Annual Meeting "New Concept and Research in Low Back Pain", and "Current Trend in Spine Surgery".

Taipei, Taiwan April 26, 1997

Scientific Presentations...Continued:

Minimally Invasive/Endoscopy Course - "Overview of Posterior Percutaneous Procedures". Bethesda, Maryland May 14-16, 1997

International Intradiscal Therapy Society - "Laparoscopic and Minimally Incisional Approaches For Lumbar Spine Discectomy and Fusion". Naples, Florida May 28-31, 1997

Spine Symposium 1997 - "Thoracoscopic Surgical Techniques: Indications, Technique Results, and Future Possibilities", "Laparoscopic, Anterior Lumbar Surgical Techniques: Indications, Techniques, Results, and Future Possibilities", and Round Table Discussion: "Lumbar Spine".

Vancouver, British Columbia July 24-26, 1997

Contemporary Surgery of the Thoracic and Lumbar Spine Minimally Invasive Techniques - "Clinical Applications of
Minimally Invasive Surgery".
Orlando, Florida

August 24-28,1997

8th International Conference on Lumbar Fusion and Stabilization - "Posterior Lumbar Interbody Fusion with Presented by Jie Zhao, M.D.
San Antonio, Texas Sept.30-Oct.4,1997

North American Spine Society - " A Double-Blind Study of Electrical Capacitive Coupling as an Adjunct to Lumbar Spine Fusions", "Changes in Spinal Canal Dimensions Using Interbody Distraction for Spondylolisthesis", "Posterior Lumbar Interbody Fusion with Single Posterolateral Threaded Cage Insertion", "Failure Properties of a Hydrogel Nucleus in the Intervertebral Disc", and "Open Versus Laparoscopic Fusion of Lumbar Spine Using BAK Fusion Cage".

New York, New York

October 22-25, 1997

5th Spinal Surgery Course - "Endoscopic Surgery", "Advances in the Management of Spinal Surgery", and "Cervical Spine Fractures". Hammersmith Hospital, London October 29-31, 1997

17th Congress of the Asean Orthopaedic Association "The Role of Interbody Fusion using a Cage Technology".
Penang, Malaysia November 13-16,1997
The Canadian Orthopaedic Association - A Course on Spinal
Disorders - "Indications of Thoracoscopic Release and
Fusion", & "Endoscopic procedures for the Lumbar Spine".
Montreal, Canada November 21-22, 1997

Scientific Presentations...Continued:

Philippine Orthopaedic Association Annual Congress "Surgical Options for DDD: BAK Interbody Fusion", "Lumbar
Spinal Stenosis: Clinical and Radiologic Evaluation and
Non-Operative Treatment", and "Minimally Invasive Approaches
to the Spine". Quezon City, Philippines December 3-6, 1997

Methods of Interbody Fusion of the Spine - "Interbody Fusion Devices", and "Minimally Invasive and Laparoscopic Approaches to the Spine". New York, New York December 12, 1997

Tenth Annual Ski with the Spine Center - "Surgical Options for Treatment of Primary and Metastatic Spine Tumors".

Whistler, British Columbia, Canada January 18-23, 1998

Spinal Surgery...Current and Innovative Theory and Techniques "Anterior Thoracolumbar Plates for Trauma", Posterior Lateral Interbody Approach with Bak Cage & Facet Fixation", and "Anterior Load Sharing: Thoracolumbar & Lumbar Anterior Load Sharing and Fixation".

Snowmass, Colorado January 24-27, 1998

Anterior Lumbar Fusion: Instructional Course "Can Instability be Treated by Stand-Alone Devices?",
"Comparative Laparotomy to Laparoscopic Spine Fusion Using the BAK and Introduction of New BAK Proximity Cage", and
"Minimally Invasive Disc Surgery Revisited and What's New".
Leuven, Belgium February 13-14, 1998

Federation of Spine Associations - "Changes in Spinal Canal Dimension Using Interbody Distraction for Spondylolisthesis". Presented by Lisa Fay.

New Orleans, Louisiana

March 22, 1998

44th Annual Meeting of the Orthopaedic Research Society "Gelfoam as a Barrier for Preventing PMMA-Induced Thermal
Injury of the Spinal Cord: In-Vitro and In-Vivo Studies in
Pigs". New Orleans, Louisiana March 1998

Ray TFC Symposium - "My Experience with BAK Open Anterior/Posterior Laparoscopic and Transforaminal Approach with Adjunctive Fixation and Lateral Approach using Minimally Incisional Approach".

The Woodlands, Texas

April 3-4 ,1998

Japanese Orthopaedic Association Annual Meeting "Endoscopic Surgery of Degenerative Lumbar Spine".
Tokushima, Japan April 17-20,1998

Scientific Presentations...Continued:

The Association of Spinal Surgery R.O.C. Annual Conference - "Endoscopic Surgery of the Degenerative Lumbar Spine".

Taipei, Taiwan April 25, 1998

AAOS Debating Complex Issues in Spine Surgery - Videotaped Surgical Demonstration-"Percutaneous Discectomy - Alternative Techniques", "Anterior Techniques - Laparoscopic: results/Techniques".

Chicago, Illinois

April 30-May 21, 1998

AAOS Debating Complex Issues in Spine Surgery "In My Practice - Case Presentations of Low Back Pain".
Chicago, Illinois April 30-May 21, 1998

International Spine Meeting - "Dynamic Fixation of the Cervical Spine", Anterior Fusion of the Lumbosacral spine through Minimally Invasive Techniques", and Biomechanics of the Anterior Fusion of the Lumbosacral Spine with Cages".

Lisbon, Portugal May 8-9, 1998R

ISSLS Annual Meeting - Paper Presentation - "Posterior Lumbar Interbody Fusion with Single Posterolateral Threaded Cage Insertion: A Biomechanical Evaluation".

Brussels, Belgium June 12, 1998

Long Island Spine Group - "Status of Intervertebral Disc Replacements". Commack, New York June 27, 1998

Sulzer Spine-Tech Dinner - Guest Speaker - "Theory of Discogenic Pain BAK/Proximity Indications, Future Technologies". Boston, MA. September 3, 1998

Western Orthopaedic Association - "Complications Using the BAK Interbody Fixation Cages", and "The Next Generation Interbody Fixation Fusion Cages".

Aspen, Colorado September 6-10, 1998

North American Spine Society Annual Meeting - "Adcon-L Anti-Adhesion Barrier Gel Inhibits Post-operative Peridural Fibrosis and Reduces Pain: Randomized, Controlled, Double-blind Clinical Studies", and "Effects of a Synthetic Ligament on Anterior Cervical Interbody Fusion".

San Francisco, California October 28-31, 1998

North American Spine Society Symposium - "The Artificial Disc: Real Solution or Dream".

San Francisco, CA. October 30, 1998

Scientific Presentations...Continued:

Korean Spine Society Meeting - "Stand-Alone Interbody Fusion," and "Minimally Invasive Disc Surgery for Discogenic Pain". Seoul, Korea November 20, 1998

The Management of Vertebral Intercorporeal Disorders - What Works and What Doesn't - "Lumbar Fusions - New Techniques and Spacers". Chicago, Illinois December 5-6, 1998

Chinese University of Hong Kong - "Surgical Treatment for Low Back Pain", "Lumbosacral Fusion: Technical Principles", "Future of Degenerative Disc Disease Management", "Management of Degenerative Adult Scoliosis", and "Minimal Invasive Surgery in Spine".

December 12-19,1998

A Contemporary Update on Disorders of the Spine - Ski With the Spine Center - "Primary Bone Tumors" and "New Directions in Cages".

Whistler, British Columbia, Canada January 17-22,1999

Joint Section on Disorders of the Spine and Peripheral Nerve -"Metallic Interbody Struts and Threaded Cages". Orlando, Florida February 10-13,1999

Complications of Spinal Fusion - "Anterior Cervical Fusion: Graft Subsidence, Dislodgement and Collapse" and "Interbody Cages: Indications and Techniques". Squaw Creek, Olympic Valley, California March 6-7, 1999

Laparoscopic Spinal Fusion and Anterior Cervical Fusion with the BAK Cage - "Laparoscopic Spinal Surgery Set-up, Indications and Technique", "Pitfalls and Contra-Indications Managing the Learning Curve in Laparoscopic Spinal Surgery", and "Anterior Cervical Interbody Fusion".

National University Hospital, Singapore April 16-17,1999

Minimally Invasive Technologies: Medicine in the 21st Century "Hardware Controversies".

Dallas, Texas May 14-15, 1999

Japanese Spine Research Society - "Spine Fusion Past, Spine Fusion Present, Spine Fusion Future". Tokyo, Japan

June 3-5, 1999

6TH International Meeting on Advanced Spine Techniques (IMAST)
"Nucleus Replacement: A Concept for a Functional
Replacement". Vancouver, B.C. July 8-10, 1999

Scientific Presentations...Continued:

5th Stryker Spinal Invitational Symposium - "An Overview on Primary Spinal Tumors, Diagnosis and Treatment".

Brazil September 27-29, 1999

SulzerMedica Symposium - "Laparoscopic Fusion of the Lumbar Spine". Kyoto University, Kyoto, Japan October 5, 1999

SulzerMedica Symposium - "Clinical Result of BAK Interbody Fusion Cage", "Clinical Experience with Pedicle Screws Using CAS System". Saitama University Tokyo, Japan October 6, 1999

SulzerMedica Symposium - "New Generation of Interbody Fusion Cage", "Clinical Experience with Pedicle Screws Using CAS System". Osaka, Japan October 8, 1999

North American Spine Society Annual Meeting - Paper Presentation - General Session: Fusion Cages - "Four Year Follow Up Results of Lumbar Spine Arthrodesis Using the BAK/LFusion Cage". John Sherman, MD; Stephen Kuslich, MD; Guy Danielson, MD; John D. Dowdle, MD; Bruce Fredrickson, MD; Hansen Yuan, MD.

October 1999

North American Spine Society Annual Meeting - Symposium - Fusion Cages: Are They Stand Alone Devices? - "When Are Cages Alone Enough?" Chicago, Illinois October 22, 1999

Current Controversies and Challenges in Spine Surgery-A Spine Fellows Course - "Finding and Building an Academic Spine Practice", and "The Future of Organized Spine Care".

Miami Beach, Florida November 18-21, 1999

The Spine: Current Concepts and Treatment - 12th Symposium of The Spine Study Group - "Future Answers to Spinal Disease and Disc Degeneration". Naples, Florida February 2-6, 2000

AANS/CNS Section on Disorders of the Spine & Peripheral Nerves Annual Meeting - "Early Clinical Outcomes with Kyphoplasty, the Minimally-Invasive Reduction and Fixation of Painful Osteoporotic Vertebral Body Compression Fracture (VCF)". Indian Wells, California February 23-26, 2000

American Academy of Pain Management 16th Annual Meeting POSTER PRESENTATION - Wetzel, F.Todd; Andersson, G.; Peloza,
J.; Rashbaum, R.; Lee, C.; Yuan, H.; Phillips, F.M.:
"Intradiskal Electrothermal Annuloplasty (IDET) to Treat
Discogenic Low Back Pain: The Preliminary Results of a
Multi-Center Prospective Trial."
New Orleans, Louisiana
February 25-26, 2000

National Association of Orthopaedic Nurses Nursing and Allied Health Program - "Cage Fusions - Laparoscopic", and "Intradiscal Electro Thermal Therapy".

Orlando, Florida March 15, 2000

Stryker 6th Interbody Fusion Meeting - "Pre-Clinical Safety Evaluation of the Aquarelle Hydrogel Disc Nucleus".

Barcelona March 31, 2000

Japanese Orthopaedic Association - " Long Term Follow Up after Spinal Instrumentation - Indication and Contraindication". Kobe, Japan April 7, 2000

International Society for the Study of the Lumbar Spine Annual Meeting - "Indications for Cages (BAK & Proximity) as a Stand-Alone Device", and "Indications for Cage(s) with Pedicle Screws". Adelaide, Australia April 10, 2000

Spine 2000 Symposium - "Artificial Disc - Myth or Reality",
"Cervical Plates", "Vertebroplasty and Kyphoplasty", and
"IDET Procedure - My Personal Experience".
Newport Beach, California April 28-29, 2000

Failures of Spinal Surgery: A Tribute - "Limitations of Interbody Fixation and Fusion", Limitations of Posterior Fixation", "Bone and Bone Substitute", and "IDET".

Baltimore, Maryland May 12-14, 2000

Endoscopic Techniques in Spinal Surgery - World Endoscopy

Congress 2000 - "Endoscopic Lumbar Spinal Fusion", Laparoscopic Lumbar Spinal Fusion - Techniques and Tips", and Managing the Learning Curve in Laparoscopic Spinal Surgery". Singapore June 1-4, 2000

7th International Meeting on Advanced Spine Techniques - "Kyphoplasty for Osteoporotic Fractures", and "Lumbar Intradiscal Electrothermal Therapy".

Barcelona, Spain July 6-8, 2000

Scientific Presentations...Continued:

Spine Across the Sea - "Predictive Factors Associated with Favorable Outcomes using Intrasdiscal Electrothermal Modulation (IDET)". Kamuela, Hawaii July 26, 2000

Singapore Orthopaedic Association Annual Meeting - "Frontiers in Spinal Surgery", "New Developments in Cage Technology", "Computed Aided Surgery of the Spine", and "Bone Graft Enhancement & Bone Graft Substitute".

Singapore Sept. 6-8, 2000

Spinal Surgeon International Symposium - "Update Concerning the Artificial Disc in Degenerative Disc Disease". Napa Valley, California Sept. 21-23, 2000

Jefferson Orthopaedic Society 40th Annual Meeting-"Minimally Invasive Treatment Modalities for Degenerative Disc Disease". Philadelphia, Pa. November 3-4, 2000

Anterior Column Support of the Spine VI: Fusion Versus
Motion - "Kyphoplasty", Stand-Alone Threaded Anterior
Interbody Devices", and "Prosthetic Nucleus Replacement".
Scottsdale, Arizona November 8-11, 2000

Current Controversies and Challenges in Spine Surgery: A
Spine Fellows Course - "Artificial Discs", "Stand-Alone
ALIF", "Bone Graft Substitutes", and "Nuclear Replacement".
Naples, Florida December 6-10, 2000

1st Meeting of Advanced Technologies in Spinal Treatment - "Vertebroplasty and/or Kyphoplasty", and "Spine Fusion - Long

Term Follow Up: Spine Fusion Future and Beyond".

Tokyo, Japan January 27-28, 2001

Stryker Canada Alpha Group - "Percutaneous Disc Replacement: Myth or Reality", and "Vertebroplasty vs. Kyphoplasty for Osteoporotic Fractures".

Los Cabos, Mexico

February 11-18, 2001

Stryker Spine 7th Interbody Technology Meeting - "Aquarelle Nucleus Replacement".

Hong Kong

March 29-30, 2001

Stryker-Howmedica Meeting - "Artificial Disc Technique (Aquarelle/Hydrogel). Istanbul April 22-26, 2001

Acuna & Fombona 4th International Meeting - "Trifix System".

Bavaro, Dominican Republic April 30, 2001

Spine Arthroplasty - International Symposium on Intervertebral Disc Replacement & Non-Fusion Technology - "Aquarelle" Artificial Nucleus
Munich, Germany May 3-5, 2001

French Neurosurgical Society of Spine Surgery-La societe francophone de neurochirurgie du rachis Annual Meeting - "Low Back Pain, Physiopathology Present and Future"

Lille, France May 10-11, 2001

Japan Society for the Study of Surgical Technique for Spine and Spine Nerves - "Spirus 90D"

Kyoto, Japan Sept. 14-15, 2001

ISSLS Instructional Course - "BAK Cages, Basic Science, Clinical Outcome", VTI - Electromagnetic Guidance System - State of the Art", and "Artificial Nucleus Replacement".

Beijing, China Sept. 21-23, 2001

II Advance Venezuelan Spine Meeting - "Cervical - Surgical Treatment: Anterior Vs. Posterior approach", "Surgical Treatment for Spinal Trauma - Anterior Approach", and "Surgical Treatment for Spinal Trauma - Posterior Approach".

Caracus, Venezuela Sept. 28-29, 2001

North American Spine Society 16th Annual Meeting - PAPER PRESENTATION -

- 1) "Intradiscal Electrothermal Therapy (IDET) to Treat Discogenic Low Back Pain: Two-Year Results of a Multi-Center Prospective Cohort Study", F.Todd Wetzel, MD; Gunnar B.J. Andersson, MD; John H. Peloza, MD; Ralph F.Rashbaum, MD; Casey K. Lee, MD; Hansen A. Yuan, MD; Frank M. Phillips, MD; and Howard S. An, MD.
- 2) "Characterization of a Developing Lumbar Arthrodesis in Sheep Model", Mark R. Foster, PhD, MD, Hansen A. Yuan, MD, Matthew J. Allen, MB, PhD, and Joanne E. Schoonmaker, AAS.
- 3) "A Recombinant Bone Growth Factor and a Mineralized Collagen Matrix (Healos/MP52) in Threaded Interbody Fusion Cages", James Maxell, MD, Nicholas Theodore, MD, Thomas Gilbert, MD, Bettina Willie, MS, Roy Bloebaum, PhD, Nathaniel R. Ordway, MS, Hansen A. Yuan, MD, and Steven Griffith, PhD.

4) "Two-Year Post-treatment Evaluation of Pain Levels and Location of Pain After Intradiscal Electrothermal Annuloplasty (IDET) to Treat Discogenic Low Back Pain", Casey K. Lee, MD; Roseland, NJ; F.Todd Wetzel, MD; Seattle, Washington October 31 - Nov. 3, 2001

North American Spine Society 16th Annual Meeting -Symposium - Artificial Intervertebral Discs and Beyond - "Aquarelle Nuclear Replacement".

Seattle, Washington

October 31, 2001

North American Spine Society Annual Meeting - POSTER PRESENTATION - "Laparoscopic Accessibility of the Anterior Lumbar Discs Through Magnetic Resonance Imaging (MRI)", Choen Keun Park, MD, PhD; J.K. Kang, MD; Colleen Sweeney, MA; Hansen A. Yuan, MD; Hyun Choel Choi, MD; J.Y. Kim, MD; J.E. Lee, MD; J.H. Sung, MD; S.J. Choic, MD; S.W. Lee, MD; S.C. Park, MD; and K.S. Cho, MD.

Seattle, Washington

October 31 - Nov. 3, 2001

 $35^{\rm th}$ Japanese Scoliosis Society - President Invitational Lecture - "Lumbosacral Changes after Scoliosis Surgery and/or Long Segment Thoracolumbar Fusion".

Nagoya, Japan

November 17, 2001

Current Concepts in Spinal Disorders - Sponsored by Cedars-Sinai Medical Center Department of Surgery - "Nucleus Replacement", Annular Repair", and "FluoroCAT in Kyphoplasty". LaQuinta, California March 8-9, 2002

2nd Annual Pittsburgh Spine Symposium - Sponsored by Department of Orthopaedic Surgery, Human Motion Center, Alleghany General Hospital - "Degenerative Disc Disease: The Role of Nucleus Replacement", and "Kyphoplasty".

Pittsburgh, Pennsylvania March 12, 2002

AO ASIF Comprehensive & Interactive Spine Courses - "Treatment of Discogenic Low Back Pain", and "Disc Replacement".

Coronado, California

April 18-21, 2002

Spine Arthroplasty 2 - Intervertebral Disc Replacement & Non-Fusion Technology - "Nucleus Replacement".

Montpellier, France May 6-8, 2002

 $1^{\rm st}$ Annual Meeting of Korean Minimal Invasive Spine Surgery Research Society - "Nucleus Replacement", "Annual Repair", and "FluoroCAT with Kyphoplasty".

Korea May 31-June 1, 2002

A-Spine Meeting - "Kyphoplasty". Phuket Island, Thailand

June 6, 2002

 $15^{\rm th}$ Annual International Intradiscal Therapy Society Meeting "Minimally Incisional Nucleectomy with Anterior Nucleus Replacement and Annular Repair".

Seoul, Korea

August 21-24, 2002

SICOT World Congress - "Status of Artificial Disc, Present and Future" and "Indications and Techniques for Kyphoplasty". San Diego, California August 23-30, 2002

9TH Annual Meeting of Japan Society for the Study of Surgical Technique for Spine and Spinal Nerves - "Clinical Experience using a new radius lock system for lumbar fusion".

Nagoya, Japan.

Sept.14, 2002

South Carolina Spine Society Annual Meeting - "Disc and Nucleus Replacement".

Charleston, South Carolina

Sept.21, 2002

Asian Association for Dynamic Osteosynthesis Vertebroplasty Workshop - "Basic Science and Biomechanics of Vertebroplasty", "Vertebroplasty in Spinal Tumors", "Future Development of Kyphoplasty: indications/techniques and results" and Future Development of Fluoro-CAT for Kyphoplasty".

Hong Kong

October 4, 2002

5th Combined Meeting of Spinal and Paediatric Sections, APOA "Degenerative Disc Disease", and "Bone Substitutes - Advantages vs. Disadvantages".

Singapore

October 13-16,2002

International Conference on Spinal Surgery - "IDET for the Treatment of Chronic Discogenic Back Pain", "Degenerative

Disc Disease Treatment; Current and Future", and "Nucleus and Disc Replacement Status".

Beijing and Chongqing, China October 15-21, 2002

3rd World Congress Minimally Invasive Spinal Surgery & Medicine - "Disc Arthroplasty: Present and Future".
Phoenix, Arizona December 8-11, 2002

Kyphon National Sales Meeting - "Kyphoplasty".
Bonita Springs, Florida January 9-12, 2003

Second Annual Symposium on Current Concepts in Spinal Disorders - "Disc Nucleus Replacement and Annular Repair Technology".

LaQuinta, California

February 28 - March 2, 2003

The Journey of Spine - Spine Arthroplasty Society - "The Argument for Nucleus Replacement", "Other Future Disc Technology".

Scottsdale, Arizona

May 1-3, 2003

World Spine II Precourse - "Contemporary Vertebral Augmentation Treatments of Spine Fractures"

Chicago, Illinois August 10, 2003

World Spine II - "Cost of Technology" Chicago, Illinois

August 11, 2003

Eastern Japan Society of Clinical Orthopaedics - "Artificial Nucleus" and "Vertebroplasty and Kyphoplasty"

Tokyo, Japan September 24-28, 2003

NASS Pre-Course 18th Annual Meeting - Total Disc Replacement "Nuceloplasty - The Current State of the Art"
San Diego, California October 21, 2003

2nd Annual Dynamic Spine Stabilization: Arthroplasty Techniques and Technology - "Spine Stabilization: Conversion from Fusion to Disc Replacement", and "Other Nuclear Disc Replacement Devices"

Dallas, Texas

November 14-15, 2003

Korea Orthopedic Spine Surgery Society Conference - "Non-Fusion Techniques in USA".

Seoul, Korea

November 28-29, 2003

1st Chinese Scoliosis Symposium - "Single Stage Kyphosis Correction".

Beijing, P.R. China

May 13-14, 2004

7th Spinal Surgery Meeting of Chinese Medical Association Orthopedic Surgery - " " Beijing, P.R. China May 15-17, 2004

Portuguese Spine Society - "IDET as part of the conservative management for low back pain in sports".

Lisbon, Portugal May 28, 2004

AAOS/CSOS Scientific Congress - "Nucleus Replacement",
"Kyphoplasty, Downward Spiral", and "Kyphoplasty for Spinal
Metastatic Tumor".

Beijing, China

Sept. 22-24, 2004

Emerging Technologies in Spine Surgery - "Nucleus Replacement Devices".

Washington, D.C.

Sept. 30 - Oct. 2, 2004

Current Issues and Techniques in Complex Lumbar Spine
Surgery- "Lumbar Disc Replacement".
St. Louis, Missouri Nov. 11-13, 2004

The First National Congress of Minimal Invasive Spine Surgery "Kyphoplasty for Hematologic and Metastatic Tumors Wenzhou, P.R.of China Dec. 3-5, 2004

North American Spine Society Spring Break 2005 - Back into Motion - "Is There a Role for Posterior Facet Replacement?"
Bal Harbour, Florida April 6-9, 2005

 $2^{\rm nd}$ Chinese International Scoliosis Symposium - "Kyphoplasty" Beijing, China May 21-23, 2005

18th Annual International Intradiscal Therapy Society Meeting- "Nucleus Replacement using the DASCOR Device: One-Year Follow-Up Results of a Prospective Non-Randomized Multi-Center Clinic"

San Diego, California

May 25-28, 2005

3rd Stryker Italy Spine Symposium - "Nucleus Replacement, Technology and Clinical Update". Hammamet, Tunisia

June 22-25,2005

IMAST Pre-Course: Motion Sparing Technology In Spinal
Surgery - "Nucleus Replacements"
Banff, Alberta, Canada July 6, 2005

2nd Annual Innovative Techniques in Spine Surgery - "Nucleus Repair and Replacements Products"

Los Cabos, Mexico

July 21-23, 2005

4th Annual Emerging Technologies in Spine Surgery - "Nucleus Replacement Devices Sept. 15-17, 2005

20th Annual Congress of NS Association of Thailand & 3rd Thai-German NS Jt. Mtg. & Spine Workshop - "Management of Degenerative Disc Disease", Artificial Total Disc Replacement vs. Nucleus Replacement", The Role for Facet Replacement, yes or no", Kyphoplasty for Osteoporotic Compression Fractures and Selective Vertebral Primary or Metastatic Tumors", "Lumbar Pedicle Screw", and "Lateral Lumbar X-lift Minimally Invasive Approach".

Bangkok Nov. 30 - Dec. 2,2005

5th Annual Symposium on Current Concepts in Spinal Disorders, Cedars-Sinai Medical Center - "Nucleus Replacement", "Theken Lumbar Artificial Disc Replacement", and "Is Motion Preservation Beneficial in Degenerative Disc Disease".

Las Vegas, Nevada February 3 &4, 2006

Preservation of Motion in the Spine - "Porous Coated Motion Cervical Disc", and Nucleus Replacement Implant".

Duck Key, Florida April 5-8, 2006

Spine Arthroplasty Society 6 Mtg. - "Nucleus Replacement, Trials and Tribulations". Montreal, Canada May 12, 2006

MIS Korean Mtg. - "Total Disc Replacement vs. Nucleus Replacement for Degenerative Disc Disease", and "Dynamic Stabilization".

Korea May 20, 2006

2006 Summer Bioengineering Conference - Spinal Arthroplasty/Motion Preservation Workshop"Nucleus Replacement, Clinical considerations in the application of disc replacement devices".

Amelia Island, Florida

June 24, 2006

Spine Across the Sea - "Clinical Results of Nucleus Replacement with the DASCOR Disc Arthroplasty System: A European Multi-Center Clinical Study".

Kapalua, Hawaii July 24, 2006

NASS 21st Annual Meeting - Abstract - Rick Delamarter, MD,
Jack Zigler, MD, Jeffrey Spivak, MD, Raymond Linovitz, MD,
Guy Daneilson, MD, Thomas Haider, MD, Frank P. Cammisa, MD,
James Zucherman, MD, Richard Balderston, MD, Scott Kitchel,
MD, Kevin Foley, MD, Robert Watkins, MD, David Bradford, MD,
James Yue, MD, Hansen Yuan, MD, Harry Herkowitz, MD, Douglas
Geiger, MD: Lumbar Total Disc Replacement with the Pro-DiscL Artificial Disc vs. Fusion: A Prospective Randomized
Multi-Center Food and Drug Administration IDE Trial.
Seattle, Washington

NASS 21st Annual Meeting - Abstract - Hansen Yuan, Michael Ahrens, Henry Halm, Peter Donkersloot, Ulf Liljenqvist, Anthony Tsantrizos, John Sherman, Jean Charles Lehuec: Two Year Follow Up Results of Nucleus Replacement with the Dascor Device: A Prospective European Multicenter Clinical Study. Seattle, Washington September 30, 2006

Chinese Orthopaedic Association First International Congress "Total Nucleus Replacement", and "Motion Preservation with Degenerative Disc Disease".

Beijing, China

November 12-15, 2006

Aesculap Spine Workshop - "Lumbar Nuclear Replacement, Pedicle Screw Based Motion Preservation" and "Cervical Arthroplasty".

Snowbird

March 21-24, 2007

NASS Motion Stabilization Course - "Indications of Intradiscal Repair", and "Dascor".

Burr Ridge, Illinois May 18-19, 2007

MISS Congress - "Spine Surgery: History and Future"
Changsha, China June 2007

SAS7 - "An Investigational Study of Nucleus Replacement Using an Incurable Polyurethane - An In Vivo Non Human Primate Model".

Berlin, Germany

May 2007

Facet Joint Repair and Emerging Facet Technologies - "Future

of Lumbar Arthroplasty". Austin, Texas October 22, 2007

North American Spine Society Symposium - Treatment of the Symptomatic Lumbar Degenerative Disc Disease: Repair, Regenerate and Rehabilitate - "Annulus Repair".

Austin, Texas October 24, 2007

Scientific Presentations...Continued:

COA - "Nucleus Replacement" - Zhengzhou, China Nov. 11,2007

1st Asia Pacific SAS Conference - "Pre-Clinical Characterization of the DASCOR Nucleus Replacement Device", and "Motion Preservation in the Functional Spinal Unit in Degenerative Disc Disease".

Seoul, Korea January 16-18, 2008

Current Concepts in Spinal Disorders - "DASCOR" and "NUBAC".

Las Vegas, Nevada February 1-2, 2008

3rd Congress of The Indonesian Spine Society - Towards The Healthy Spine - The Past, Present and Future of Spinal Surgical Management for Degenerative Disc Disease", "Annular Repair and Regeneration", and "The Nucleus Replacement vs. Total Disc Replacement".

Jakarta, Indonesia July 16-18, 2009

Society for Minimally Invasive Spine Surgery- "Nubac Lumbar Nucleus Replacement".

Las Vegas, Nevada October 9-12,2009

Innovative Techniques in Spine Surgery - "Where is spine surgery heading?", and "Nucleus Replacement - Design Rationale and Challenges".

Scottsdale, Arizona October 15-17, 2009

 $2^{\rm ND}$ MISS Summit Forum at the Aichi Spine Institute - "Advancement of Spine Surgery" Nagoya, Japan March 12-14,2010

Preservation of Motion in the Spine - Keynote Lecture - "Biomaterials for Disc Arthroplasty"

Duck Key, Florida April 7-10, 2010

Innovative Techniques in Spine Surgery - "Oxygenated Scaffolds for Spinal Surgery", "POD System for Percutaneous Vertebral Augmentation", and "Mechanical Devices: Design Rationale and Challenges".

June 17-19, 2010

19th Annual Meeting-Japanese Spinal Instrumentation Society "Osteotherapeutic"
Sapparo, Japan October 28-29, 2010

Exhibits:

American Roentgen Society Annual Meeting "Computed Tomography in Degenerative Spinal
Stenosis:" San Francisco, California. Received
Certificate of Merit.

March 1981

Scoliosis Research Society Annual Meeting - "Computed Tomography in Degenerative Spinal Stenosis". Montreal, Canada.

Sept. 1981

Roentgen Society of North American Annual Meeting - "Computed Tomography in Degenerative Spinal Stenosis". Chicago, Illinois.

Nov. 1981

50th Annual Meeting of Orthopaedic Surgeons - 2 Audio-Visual displays - 1.) Computed Tomography in Non-Traumatic conditions of the Spine and 2.) The Use of CT in Thoracolumbar Fractures in Determination of Spinal Stability.

American Academy of Orthopaedic Surgeons 50th
Annual Meeting - "The Classification and
Management of Thoracolumbar Injuries - An Analysis
Based on 100 Consecutive Cases with Computed
Tomography". Anaheim, California. March 1983

IV World Congress on Pain of the International
Association for the Study of Pain; POSTER exhibit "Transcutaneous Electrical Nerve Stimulation
(TENS) for Post-Operative Pain Control.
Seattle, Washington.
August 1984

IV World Congress on Pain of the International
Association for the Study of Pain; SLIDE exhibit "Liquid Crystal Thermography: A Non-Invasive
Technique to Document Treatment Results in
Patients with Low Back Syndrome."
Seattle, Washington.
August

August 1984

Orthopaedic Research Society Annual Meeting - POSTER exhibit. "Biomechanical Evaluation of the Effectiveness of Anterior Spinal Fixation

Systems". San Francisco, California. Jan.-Feb. 1987

1987

American Academy of Orthopaedic Surgeons 44th Annual Meeting - "Computerized Axial Tomography of the Hip and Spine". Las Vegas, Nevada.

Exhibits... Continued:

American Academy of Orthopaedic Surgeons 45th Annual Meeting - "Computed Tomography of the Spine: Sagittal and Coronal Reconstruction". San Francisco, California.

1987

International Society for the Study of the Lumbar Spine Annual Meeting-POSTER Exhibit-"Biomechanical comparison of AO Internal Fixator to the Syracuse I-Plate with and without facet screws in experimentally created thoracolumbar burst fractures". Miami, Florida.

April 1988

International Society for the Study of the Lumbar Spine Annual Meeting - POSTER Exhibit-"Late Anterior Decompression for Incomplete neural deficits secondary to thoracolumbar fractures". Boston, Massachusetts.

June 1990

International Society for the Study of the Lumbar Spine Annual Meeting - POSTER Exhibits"The Contribution of the Posterior Annular Attachments in the Reduction of Experimental Lumbar Burst Fractures". "the Torn Outer Annulus-Imaging the Outer Barrier to Intervertebral Disc Herniation". Heidelberg, Germany

1991

North American Spine Society 7th Annual Meeting POSTER EXHIBIT -" The Effect of Lumbar Distraction and
Decompression in Reducing Neuroforaminal Stenosis".
Boston, Massachusetts

July 1992

International Society for the Study of the Lumbar Spine POSTER EXHIBIT - "Effects of Angled Pedicle Screws on
Axial Pull-Out Strength in the Calf Spine - A Biomechanical
Study". Marseilles, France June 1993

Spine Across the Sea Course - POSTER EXHIBITS - "Accuracy of Magnetic Resonance Imaging for Intervertebral Dsic Hydration Measurements"; "Increasing Neuroforaminal Volume by Interbody Fusion in the Reduction of Foraminal Stenosis, "The Effect of Pulsed Magnetic Fields on Posterolateral Spinal Fusion and

Device-Related Osteopenia," "A Comparative Study of the Results of Anterior Cervical Fusion using Allograft vs.

Autograft Bone." Maui, Hawaii April 1994

Exhibits... Continued:

International Society for the Study of the Lumbar Spine - POSTER - "Interbody Fusion with a Reabsorbable Bone Substitute Supplemented with Autologous Growth Factors (AGF): Evaluation in a Sheep Model", Matthew J. Allen, Vet. M.D., Ph.D., Joanne E. Schoonmaker, Fang Li, M.D., Nathaniel R. Ordway, M.S., P.E., Douglas R. Arm, Ph.D. and Hansen A. Yuan, M.D.; "Electrodiagnosis in low back pain patients with Diabetic Polyneuropathy", Y. Tai, P. Zhu, R. Weber, B. Fredrickson, H. Yuan, S. Haldeman.; "F Waves of peroneal and tibial nerves provide unique information in ongoing L5 and Sl radiculopathies", Y. Zhu, R. Weber, J.Li, J.Chu, S. Haldeman, H. Yuan, B. Fredrickson.

Cleveland, Ohio

May 13-19, 2002

International Society for the Study of the Lumbar Spine - POSTER EXHIBITS - "The Biomechanical Effects of Discectomy on the Human Lumbar Intervertebral Disc", "Accuracy of Magnetic Resonance Imaging on Intervertebral Disc Hydration Measurements", "Increasing Neuroforaminal Volume by Interbody Fusion in the Reduction of Foraminal Stenosis", "Arthroscopic Micro-Discectomy: Influence for the Intervertebral Disc", "The Effect of Pulsed Magnetic Fields on Posterolateral Spinal Fusion and Device Related Osteopenia". June 1994

New Frontiers in Spinal Surgery European Spine Meeting "Cervical Implants: Design Rationale", "Current Technique
Utilizing Interbody Fusion Device", and VIDEO Presentation on
"Laparoscopic Interbody Fusion".

May 5-6, 1995

Congress of Neurosurgery Meeting - "Two Year Follow-Up Results of an Interbody Fusion Device: Open and Laparoscopic Approaches". May 7-11, 1995

International Society for the Study of the Lumbar Spine Annual Meeting - POSTER EXHIBITS - "The Differentiation of Unilateral S1 Radiculopathy, Bilateral S1 Radiculopathy and Peripheral Neuropathy in Patients Using Electrical and Magnetic Stimulation of the S1 Nerve Root", "Criterion used to Assess Spine Fractures in Osteoporosis May Bias Outcome Findings", "The Cortical Thickness of the Vertebrae along the Thoracolumbar Spine", "Distribution of Trabecular Bone

Density in the Human Thoracolumbar Vertebrae: A Comparison of the Trabecular Orientation Laterally", "Goodness of Fit of the Hydrogel Intervertebral Disc Nucleus and the Intervertebral Anulus of the Lumbar Spine Analyzed by FEA", "Structural Features and Thickness of the Vertebral Cortex in the Thoracolumbar Spine." Helsinki, Finland June 1995

Exhibits... Continued:

North American Spine Society Annual Meeting - POSTER EXHIBIT -"Video Assisted Thoracic Corpectomy and Spinal Reconstruction: A Biomechanical Analysis of Open vs. Endoscopic Technique". Washington, D.C. October 18-21, 1995

17th Annual Bioelectromagnetics Society - POSTER EXHIBIT "The Effect of Pulsed Magnetic Fields on Instrumented
Posterolateral Spinal Fusion and Device-Related Stress
Shielding."
Boston, Massachusetts

Society for the Physical Regulation in Biology and Medicine - POSTER EXHIBIT - "The Effect of Pulsed Magnetic Fields on Instrumented Posterolateral Spinal Fusion and Device-Related Stress Shielding." Crystal City, Washington, D.C.

International Society for the Study of the Lumbar Spine - POSTER EXHIBIT - "Biomechanical Evaluation of the Functional Spinal Unit with a Hydrogel Disc Nucleus." NR Ordway, YG Zheng, GL McCullen, QB Bao, ZH Han, HA Yuan, WT Edwards. Burlington, Vermont June 25-29, 1996

International Society for the Study of the Lumbar Spine "Thickness Variation of the Vertebral Cortex Along the
Thoracolumbar Spine." L.A. Fay, Y.G. Zheng, W.T. Edwards,
H.A. Yuan. Burlington, Vermont June 25-29, 1996

International Society for the Study of the Lumbar Spine "Biomechanical Assessment of Anterior Lumbar Interbody Fusion
Using the BAK system: A Comparison of Anterior vs. Lateral
Insertion." L.A. Fay, Y.G. Zheng, G.S. Shapiro, K.A. Mann,
P.C. Connolly, H.A. Yuan.
Burlington, Vermont

June 25-29, 1996

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Cervical Spine Research Society - European Section, X11th

Annual Meeting - "Quantitative Computed Tomography of the Cervical Spine: Assessment of the Lateral Mass and Vertebral Body Bone Mineral Densities." L.A. Fay, D.Chen, W.T. Edwards, H.A. Yuan. Nice, France June 1996

Scoliosis Research Society 31st Annual Meeting "Video Assisted Thoracic Discetomy and Anterior Release: A
Biomechanical Analysis of Open vs. Endoscopic Technique."
P.J. Connolly, R. Kolata, N.R. Ordway, V. Vamvanij, E. Wall,
T. Sacks, K.A. Mann, H.A. Yuan.
Ottawa, Canada
September 26-28, 1996

Exhibits... Continued:

Eastern Orthopaedic Association 27th Annual Meeting "Video Assisted Thoracic Discetomy and Anterior Release: A
Biomechanical Analysis of Open vs. Endoscopic Technique."
P.J. Connolly, R. Kolata, N.R. Ordway, V. Vamvanij, E. Wall,
T. Sacks, K.A. Mann, H.A. Yuan.
Hilton Head, S. Carolina

North American Spine Society 11th Annual Meeting "Biomechanical Evaluation of the Functional Spinal Unit with
a Hydrogel Disc Nucleus." N.R. Ordway, Y. Zheng, G.
McCullen, Q. Bao, Z. Han, H.A. Yuan, W.T. Edwards.
VanCouver, B.C., Canada October 23-26, 1996

North American Spine Society 11th Annual Meeting "Video Assisted Thoracic Discetomy and Anterior Release: A
Biomechanical Analysis of Open vs. Endoscopic Technique."
P.J. Connolly, R. Kolata, N.R. Ordway, V. Vamvanij, E. Wall,
T. Sacks, K.A. Mann, H.A. Yuan.
VanCouver, B.C. Canada October 23-26, 1996

ISSLS Annual Meeting - "Effect of Cages Orientation and Posterior Instrumentation on the Initial Stability of the Bovine Lumbar spine following Interbody Fusion."

NR Ordway, V. Vamvanij, J. Zhao, HA Serhan, HA Yuan, K.Mann.

June 1997

8th International Conference on Lumbar Fusion and Stabilization - "Arthroscopic BAK".
San Antonio, Texas Sept.30-Oct.4, 1997

North American Spine Society Annual Meeting - POSTER "Dynamic Stabilization of the Cervical Spine: A Myth or
Reality." Raman Dhawan, MD; Hansen Yuan, MD; Bruce
Fredrickson, MD; Yupeng Sun, MD; Chaiyachet Paradeevisut, MD.
San Diego. California October 21-25, 2003

11TH Annual International Meeting on Advanced Spine
Techniques(IMAST) - POSTER - "Single Center European
Experience with an Injectable, In-Situ Curable Arthroplasty
System." Michael Ahrens, Zsolt Fekete, John Sherman, Hansen
Yuan, Henry Halm. Bermuda July 1-3, 2004

NASS Annual Meeting - ELECTRONIC POSTER - "Eighteen Month Follow-Up of Lumbar Spine Range of Motion Following Intervertebral Disc Replacement Using Radiostereometric Analysis". Nathaniel Ordway, MS, PE, Amir Fayyazi, MD, Bruce Fredrickson, MD, Kenneth Yonemura, MD, Hansen Yuan, MD. Seattle, Washington September 27, 28, 29, 2006

Exhibits... Continued:

NASS Annual Meeting - ELETRONIC POSTER - "IDE Clinical Results of the ProDisc-L: Comparison of Training Cases to Randomized Trial". Jack Zigler, MD, Rick Delamarter, MD, Jeffrey Spivak, MD, Raymond Linovitz, MD, Guy Danielsonm, MD, Thomas Haider, MD, Frank Cammisa, MD, James Zucherman, MD, Richard Balderston, MD, Scott Kitchel, MD, Kevin Foley, MD, Robert Watkins, MD, David Bradford, MD, James Yue, MD, Hansen Yuan, MD, Harry Herkowitz, MD, Douglas Geiger, MD.

Seattle, Washington September 27, 28, 29, 2006

NASS Annual Meeting - ELECTRONC POSTER - "Endplate Contact Stress of the Dascor Device During Segmental Flexability". Anthony Tsantrizos, MSc,PhD, Nathaniel Ordway, MS,PE, Chip Bao, PhD, Hansen Yuan, MD. Seattle, Washington September 27, 28, 29, 2006

NASS Annual Meeting - ELECTRONC POSTER - "An Investigational Study of Nucleus Pulposus Replacement Using and In-Situ Curable Polyurethane. An In Vivo Non-Human Primate Model". Bryan W. Cunningham, Hansen A. Yuan.

Austin, Texas October 23-27, 2007

NASS Annual Meeting - ELECTRONC POSTER - "Nucleus Replacement Using an In Situ Cured, Balloon Contained, Injectable Polyurethane Device: Clinical Results from Two Prospective Multi-Center European Studies". Anthony Tsantrizos, Michael Ahrens, Hansen A. Yuan.

Austin, Texas October 23-27, 2007

Workshops & Training Sessions:

Holmium: YAG Laser for Percuteneous Discectomy Applications Training - July 13, 1994

BAK/L Surgeon Training Course - Minnesota January 9-10, 1997 February 7-8, 1997

BAK/L Surgeon Training Course - Connecticut April 4, 1997

Minimally Invasive Spinal Surgery Course - 1997 AANS/CNS Spine Section Meeting - Newport Beach, California February 22, 1997

Spine Tech VIP Surgeon Education Course - Syracuse, NY April 2, 1997

BAK - Spine Tech - Physicians Round Table - Cleveland, Ohio April 4, 1997

9th Annual International Spine Workshop for Spine Surgeons - Minimally Invasive/Endoscopy Course- Hands-On Cadaver Lab Bethesda, Maryland May 1998

Spine Tech BAK Course - Minneapolis, MN. Sept. 13, 1997

Spine Tech BAK Course - New York, New York September 20, 1997

Spine Tech BAK Interbody Fusion System for the Lumbar Spine - Columbus, Ohio October 1997

Spine Tech New Technology Seminar with Live Interactive Laparoscopic Surgery Broadcast - NY, New York October 22, 1997

Spine Tech Surgery Course on the BAK Interbody Fusion System - Quezon City, Philippines

November 6-7, 1997

Smith & Nephew Training on Aurora Spine System - Japan December 9, 1997

Workshops & Training Sessions (continued):

Endoscopic Lumbar Fusion Workshop - "Results of Open BAK Fusion", and "Limitations and Complications of Open BAK Fusion".

University of Massachusetts, Worcester, MA. March 27, 1998

Tech BAK Lumbar Interbody Fusion Systems - Taipei, Taiwan April 22-24, 1998

10th Annual International Spine Workshop For Spine Surgeons - Thoraco-Lumbar Course - Hands-On Cadaver Lab Bethesda, Maryland June 15-19, 1998

Sulzer Spine-Tech BAK Interbody Fusion System for the Lumbar Spine - San Diego, California August 7, 1998

Sulzer Spine-Tech BAK Interbody Fusion Systems - Pinehurst, North Carolina November 6, 1998

Surgical Dynamics Ray TFC/SDRS/Disk Whisk System Surgeon Training Workshop - Atlanta, Georgia November 7, 1998

Surgical Dynamics - SDRS New 3-D Pedicle Screw System: Basic Science and Surgical Technique - Shanghai, China April 8, 1999

Surgical Dynamics - SDRS New 3-D Pedicle Screw System: Basic Science and Surgical Technique - China General PLA Hospital 301, Beijing, China April 9, 1999

Surgical Dynamics - SDRS New 3-D Pedicle Screw System: Basic Science and Surgical Technique - China General PLA Hospital 306, Beijing, China April 10, 1999

Sulzer Spine-Tech - Malaysian Orthopaedic Association Meeting-Cervical Fusion with BAK/C and Posterior Lumbar Interbody Fusion with BAK - Malaysia April 22, 1999

Workshops & Training Sessions (Continued):

Surgical Dynamics - SDRS Design Rationale and Clinical Application - Oklahoma City, Oklahoma May 20, 1999

Sulzer Spine Tech - Korean Surgeon Training - Minneapolis, Minnesota November 9, 1999

Sulzer Spine Tech - BAK/Proximity Course - Bioscience, Design Rationale Proximity, Case Studies Bronx, New York
November 22, 1999

Sulzer Spine Tech - BAK-L and Proximity Training - Japan April 4, 2000

DePuy AcroMed Tumor/Trauma Training Course - Dallas, Texas
April 30, 2000

Oratec Interventions - IDET Course - Phoenix, Arizona
May 20-21,2000

Sulzer Spine Tech Workshop - "Updates on Surgical Treatment on Low Back Pain". Kuala Lumpur, Malaysia June 5-8, 2000

Stryker Xia Workshop Kamuela, Hawaii July 24, 2000

Surgical Dynamics & Anspach Surgeon Training Program - Surgical Methods and Technology Review: An Update for the Spine Surgeon - "Treatment Options for Spinal Tumors", "Indications for Posterior vs. Anterior Interbody Fusion in the Lumbar Spine", "Spine Fusion, Past, Present & Future", and "Artificial Disc Replacements: Fact or Fantasy". Palm Beach Gardens, Florida March 9-11, 2001

Kyphon - Inflatable Bone Tamp Uses in Cancellous Bone Phoenix, Arizona
March 23-24, 2001

Workshops & Training Sessions (Continued):

Oratec Interventions - IDET New York City May 31, 2001

Kyphon Inflatable Bone Tamp Uses in Cancellous Bone Boston, MA.
April 26, 2002

DePuy-AcroMed Spine "Think-Tank" Coronado Island, CA.
July 11-13, 2002

Asian Assoc. for Dynamic Osteosynthesis Vertebroplasty Workshop Hong Kong October 4, 2002

Kyphon Trauma Study Group Rye Brook, New York June 7, 2003

Kyphon Advanced Concepts Hershey, Pa. July 18, 2003

DePuy AcroMed "Spine Think Tank" - The Future of Spine Treatments, Technologies & Techniques LaJolla, CA.
July 24-26, 2003

Styker Spine - SR90D Panel Meeting Maui, Hawaii July 29, 2003 Smith Nephew - IDET Bangkok, Thailand October 13, 2003

Smith Nephew - IDET & Disc Decompression
Singapore
October 16, 2003

Kyphon - Advanced Concepts in Minimally Invasive Vertebral Compression Fracture Management New York, New York February 13, 2004

Workshops & Training Sessions (Continued):

Kyphon - Advanced Concepts in Minimally Invasive Vertebral Compression Fracture Management Asheville, North Carolina February 21, 2004

Stryker SR90D Panel Meeting New York, New York February 27, 2004

Smith-Nephew - IDET - The only minimally invasive treatment for early degenerative disc disease - "Patient Selection - young athlete".

Spine Week

Porto, Portuguese June 3, 2004

Stryker - Award Winning Fixation System - 90D Biomechanical Review and Clinical Applications
Spine Week
Porto, Portuguese

June 4, 2004

Kyphon - Inflatable Bone Tamp Uses In Cancellous Bone

Syracuse, New York
November 20, 2004

Kyphon - -Inflatable Bone Tamp Uses in Cancellous Bone

Montreal, Canada February 5, 2005

Charite Artificial Disc Training - Cincinnati, Ohio February 23-24, 2005

Applied Spine - Cadaver Lab & Training - Stabilimax Baltimore, Maryland March 19, 2006

Cervitech - PCM Artificial Cervical Disc Workshop - Korea May 2-3, 2006

Applied Spine Investigator Training - Baltimore
June 3-4, 2006

Applied Spine Investigator Training - Baltimore
June 10, 2006

Workshops & Training Sessions (Continued):

Applied Spine Surgeon Training Lab - Dallas, Texas September 17, 2006

ProDisc-L Surgeon Training Philadelphia, PA. Jan. 14-15, 2007

ProDisc-L Forum Denver, Colorado March 18-19, 2007

ProDisc-L Forum Philadelphia, PA. April 22-23, 2007

Spondylo, anterior approach Xuanwu Hospital Workshop March 30, 2009

Abstracts:

Yuan, Hansen A.; Spadaro, J.A.; Berger, T.J.; Becker, R.O.; Webster, D.A.: Electrically generated silver ions as a bacteriocidal agent in acute and chronic osteomyelitis in rabbits. "Orthopaedic Transactions", Journal of Bone and Joint Surgery, Soc. 2:28 (1977)

Yuan, Hansen A.: Electrically generated silver ions as bacteriocidal agent in acute and chronic Enterobacter cloacae. Journal of Bone and Joint Surgery. 1977

Olans, Richard; Yuan, Hansen; Frederickson, Bruce.: Hematogenous Vertebral Osteomyelitis in Rabbits. "Orthopaedic Transactions", Journal of Bone and Joint Surgery. 1978

Spadaro, J.A.; Webster, D.A.; Chapin, S.I., Yuan, H.A.; Murray, D.G.; Becker, R.O.: Silver-PMAA Antibacterial Bone Cement. "Orthopaedic Transactions", Journal of Bone and Joint Surgery. 1978

Ullrich, Christopher G; Yuan, Hansen A.: Computerized Tomography in the Evaluation of Thoraco-Lumbar Spinal Injuries. "Orthopaedic Transactions", Journal of Bone and Joint Surgery. 1978

Lasda, Norman; Yuan, Hansen A.; Levinsohn, Mark; Bunnell, William: Computerized Axial Tomography about the Hip. "Orthopaedic Transactions", Journal of Bone and Joint Surgery. 1978

McAfee, Paul C.: Yuan, Hansen A.: Computed Tomography in Spondylolisthesis. "Orthopaedic Transactions", Journal of Bone and Joint Surgery. 1982

Froehling, A.; Spadaro, J.A.; Yuan, H.A.; Frederickson, B.E.: Dermatome-Stimulated Cortical Evoked Potentials (DCEPs) in the Diagnosis of Lumbosacral Root Lesions. Orthopaedic Transactions, Vol. 8. 1983

J.A. Spadaro; J.P. Lubicky; H.A.Yuan; B.E. Fredrickson:

Evaluating SCEP'S during Dept.\Lab Orthopaedic Procedures on the Spine. Transactions Orthopaedic Research Society 15: 251, 1990

Abstracts...Continued:

- Zou, D.; Chang, K.; Donovan, D.; Edwards, T.; Fredrickson, B.; Yuan, H.; Bayley, J.: Mechanics of Anatomic Reduction of Thoracolumbar Burst Fractures. Transactions of ISSLS, p. 11-12, Heidelberg, Germany, 1991.
- Wu, S.; Liang, P.; Edwards, T.; Zou, D.; Ordway, N.R.; Yuan, H.: Orientation of Transpedicular Vertebral Screws in Osteoporotic Human Vertebrae: Effect on Screw-Vertebrae Interface Stiffness. A Biomechanical Study of Transpedicular Screw Fixation in Different Direction. Transactions of ISSLS, p.25-26, Heidelberg, Germany, 1991.
- Wu, S.S; Edwards, W.T.; Zou, D.: Ordway, N.R.; Fay, L.A.; Yuan, H.A.: Transpedicular Vertebral Screws in Human Vertebrae: Effect on Screw-Vertebra Interface Stiffness. Transaction Orthopaedic Research Society 17:459, 1992
- Fay, L.A.; Kao, H.C.; Edwards, W.T.; Yuan, H.A.: The Assessment of Computed Tomography of Neuroforaminal Stenosis. Transactions Orthopaedic Research Society 18: 392, 1993.
- C.Y. Zhang; N.R. Ordway; H.A. Yuan; W.T. Edwards: Effect of Disc Height on the Compression Response of the Lumbar Spine Analyzed by FEA. Trans. 1995 Annual Meeting, Orthopaedic Research Society, Orlando, Florida, p. 671, 1995.
- N.R. Ordway; Z.H. Han; Q.B. Bao; M. Itoh; B.M. Pascucci; H.A. Yuan; W.T. Edwards: A Biomechanical Evaluation of a Hydrogel Intervertebral Disc Nucleus in Vitro. Trans. 1995 Annual Meeting, Orthopaedic Research Society, Orlando, Florida, p. 676, 1995.
- Y.G. Zheng; L.A. Fay; H.A. Yuan; W.T. Edwards: Structural Features and Thickness of the Vertebral Cortex in the Thoracolumbar Spine. 19th Annual American Society of Biomechanics, pp.113, Stanford, California.
- M. Itoh; L.A. Fay; Y. Ito; M.R. Yuan; W.T. Edwards; H.A. Yuan: The Effect of Pulsed Magnetic Fields on Instrumented Posterolateral Spinal Fusion and Device-Related Osteopenia. North American Spine Society, 10th Annual Conference

Proceedings - October 1995 - pp.21, Washington, D.C.

Abstracts...Continued:

J.M. Lane; F. Girardi; S.N. Kahn; N. Parvataneni; I.H. Lieberman; S.R. Garfin; Frank Phillips; H.A. Yuan: Preliminary Outcomes of the First 311 Consecutive Kyphoplasties for the Fixation of Painful Osteoporotic Vertebral Compression Fractures. ISSLS 28th Annual Meeting Abstracts - June 2001 - p. 109, Edinburgh, Scotland

Zhu, Y.; Haldeman S; Yuan HA; Fredrickson, BE: Distal Entrapment Neuropathy of the Tibial and Peroneal Nerves with Coexisting Lumbar Radiculopathy: Double Crush Syndrome in the Lower Extremities? ISSLS 28th Annual Meeting Abstracts - June 2001 - p. 198, Edinburgh, Scotland

Bibliography:

Edgar, Arlan, Yuan, Hansen A.: Daily Locomotory Activity in Phalangium opilio and Seven Species of Leiobunum (Arthropoda: Phalangida). Bios, Vol. XXX1X, No. 4: 168-176, December 1968.

Peimer, C.A., Yuan, H.A., and Sagerman, R.H.: Post-radiation Chondrosarcoma, A Case Report. Journal of Bone and Joint Surgery, Vol. 58A(7): 1033-1036, October 1976.

Fredrickson, B., Yuan, H., and Olans, R.: Management and Outcome of Pyogenic Vertebral Osteomyelitis. Clinical Orthopaedics and Related Research, Vol. 131: 160-167, March-April 1978.

Lasda, N.A., Levinsohn, M.E., Yuan, H.A., Bunnell, W.P.: Computerized Tomography in Disorders of the Hip. Journal of Bone and Joint Surgery, Vol. 60A(8): 1099-1102, December 1978.

Levinsohn, M.E., Bunnell, W.P., Yuan, H.A.: Computed Tomography in the Diagnosis of Dislocation of the Sternoclavicular Joint. Clinical Orthopaedics and Related Research, Vol. 140: 12-16, May 1979.

Yuan, H., Ullrich, C.: Computed Tomography with Sagittal-Coronal Reconstruction Images in Thoracolumbar Spinal Fractures. Orthopaedic Review, Vol. VIII, No. 6, June 1979.

Webster, D., Yuan, H.A.: Pathologic Dorsal Compression Fractures Related to Anticonvulsant Therapy and Hemodyalasis. New York State Journal of Medicine, Vol. 79, No. 9: 1417-1419, August 1979.

Levinsohn, E. Mark; Bunnell, William P.; Yuan, H.A.: Computed Tomography in the Diagnosis of Dislocations of the Sternoclavicular Joint. Clinical Orthopaedics and Related Research, Vol. 140: 12-16, May 1979.

VanHanswyk, C.O.; Yuan, Hansen A.; Eckhardt, Wayne A.: Orthotic Management of Thoraco-lumbar Spine Fractures

with a "Total-Contact" TLSO. Orthotics and Prosthetics, Vol. 33, No. 3: 10-19, September 1979.

Yuan, H.; Cady, R., deRosa, Carlo: Osteochondritis Dissecans of the Talus Associated with Subchondral Cysts: Report of Three Cases. Journal of Bone and Joint Surgery, Vol. 61A(8): 1249, December 1979.

Bibliography...Continued:

O'Callaghan, John P.: Ullrich, Christopher G.; Yuan, Hansen A.; Kieffer, Stephen A.: CT of Facet Distraction in Flexion Injuries of the Thoracolumbar Spine: The "Naked" Facet. American Journal of Neuroradiology, Vol. 1: 97-102, January-February 1980.

McAfee, Paul C.; Ullrich, Christopher G.; Yuan, Hansen A., Sherry, Richard G.; Lockwood, Robert C.: Computed Tomography in Degenerative Spinal Stenosis.

Clinical Orthopaedics and Related Research, Vol. 161, 221-234, November-December 1981.

McAfee, Paul C.; Yuan, Hansen A.: Computed Tomography in Spondylolisthesis, Clinical Orthopaedics and Related Research, Vol. 166: 62-71, June 1982.

Fredrickson, Bruce E.; Yuan, Hansen A.; Miller, Howard E.: Treatment of Painful Long Standing Displaced Fracture Dislocations of the Sacrum: A Case Report. Clinical Orthopaedics and Related Research, Vol. 166, p. 93-95, June 1982.

Smith, Duret; Yuan, Hansen A.: Surgical management of the Symptomatic Cervical Spine in Rheumatoid Arthritis. Orthopaedics, Vol. 5: 563-570, May 1982.

Levinsohn, E. Mark; Sterrick, Andrew; Echeverria, Thomas S.; Yuan, Hansen A.: Acute Hematogenous Osteomyelitis of the Rib. Skeletal Radiology, Vol. 8, 291-293, 1982.

McAfee, Paul C.; Ullrich, Christopher G.; Levinsohn, E. Mark; Yuan, Hansen A.; Cacayorin, Edwin D.; Lockwood, Robert C.: Computed Tomography in Degenerative Lumbar Spinal Stenosis: The Value of Multiplanar Reconstruction. RadioGraphics, Vol. 2, No. 4, 529-551, Nov. 1982.

Lumbar Spinal Stenosis: The Value of Multiplanar Reconstruction. RadioGraphics, Vol. 2, No. 4, 529-551, Nov. 1982.

McAfee, Paul C.; Yuan, Hansen A.; Lasda, Norman: The Unstable Burst Fracture. Spine, Vol. 7, No. 4: 365-373, 1982.

Bibliography...Continued:

Fredrickson, Bruce E.; Yuan, Hansen A.; Miller, Howard; Burst Fracture of the Fifth Lumbar Vertebra. Journal of Bone and Joint Surgery, Vol. 64-A, No. 7, 1088-1094, September 1982.

Trief, P.: Yuan, H.: The Use of the M.M.P.I. in a Chronic Back Pain Rehabilitation Program. Journal of Clinical Psychology, Vol. 29, No. 1, 47-53, January 1983. McAfee, Paul C.; Yuan, Hansen A.: Fredrickson, Bruce E.; Lubicky, John P.; The Value of Computed Tomography in Thoracolumbar Fractures: An Analysis of One Hundred Consecutive Cases and New Classification. Journal of Bone and Joint Surgery, Vol. 65A, No. 4: 461-473, April 1983.

Fredrickson, B.E.; Baker, D.; Yuan, H.A.: The Natural History of Spondylolysis and Spondylolisthesis. Journal of Bone and Joint Surgery, Vol. 66A, 699, 1984.

Thomas, P.S.; Park, S.P.; Yuan, H.A.; Fredrickson, B.E.; Zauder, H.L.: Transcutaneous Electrical Nerve Stimulator for Post-Operative Pain. Pain Supplement 1984. Fredrickson, Bruce E.; Yuan, Hansen A.: Spinal Fractures and Their Treatment. Practice of Surgery, 1984.

McAfee, Paul C.; Bohlman, H.H.; Yuan, Hansen: Anterior Decompression of Traumatic Thoracolumbar Fractures with Incomplete Neurological Deficit Using a Retroperitoneal Approach. Journal of Bone and Joint Surgery, Vol. 67-A, No. 1, 89-104, January 1985.

Wiltse, L.L., Widell, E.H., Yuan, H.A.: Chymopapain Chemonucleolysis in Lumbar Disc Disease. Journal of American Medical Association, Vol. 231: 474-479, 1985.

Krompinger, W.J.; Fredrickson, Bruce E.; Mino, David E.; Yuan, Hansen A.: Conservative Treatment of Fractures of the Thoracic and Lumbar Spine. The Orthopedic Clinics of North America, p. 161-169, January, 1986.

Fredrickson, Bruce E.; Yuan, Hansen A.: Fractures of the Spine. Orthopaedics, Vol. 2, Chapter 9.

Guyer, David; Yuan, Hansen A.; Werner, Frederick W.; Fredrickson, Bruce E.; Murphy, Dennis: Biomechanical Comparison of Seven Internal Fixation Devices for the Lumbosacral Junction. Spine, Vol. 2, No. 6, 569-573, 1987.

Bibliography...Continued:

Fredrickson, B.E.; Mann, K.; Yuan, H.; Lubicky, J.: Distraction Increases Canal Size in Vertebral Burst Fracture Reduction. Orthopaedics Today, December 1987.

Mann, K.; Found, Ernest; Yuan, H.: Biomechanics evaluation of Effectiveness of Anterior Spinal Fixation Systems. Orthopaedic Transactions, Vol. 11, 1987.

Yuan, Hansen A.; Mann, Kenneth A.; Found, Ernest M.; Helbig, Thomas E.; Fredrickson, Bruce E.;, Lubicky, John P.; Albanese, Stephen A.; Winfield, Jeffrey A.;, Hodge, Charles J.: Early Clinical Experience with the Syracuse I-Plate: An Anterior Spinal Fixation Device. Spine, Vol. 13, No. 3, p. 278-285, March 1988.

Fredrickson, Bruce E.; Mann, Kenneth A.; Yuan, Hansen A.; Lubicky, John P.: Reduction of the Intracanal Fragment in Experimental Burst Fractures. Spine, Vol. 13, No. 3, p. 267-271, March 1988.

Fredrickson, Bruce E.; Trief, Paula M.; VanBeveren, Patrick; Yuan, Hansen A.; Baum, Greg: Rehabilitation of the Patient with Chronic Back Pain: A Search for Outcome Predictors. Spine, Vol. 13, No. 3, p. 351-353, March 1988.

Yuan, Hansen A.: New I-Plate Burst Fracture Fixation Procedure uses shorter Instrumentation in Lumbar Spine. Orthopaedics Today (Newspaper), Vol. 8, No. 6, p. 18-19, June 1988.

Spadaro, J.A.; Lubicky, J.P.; Yuan, H.A.; Fredrickson, Bruce E.: Evaluating SCEP's during Orthopedic Procedures on the Spine. Orthopaedic Transactions 1989.

Lubicky, J.P; Spadaro, J.A.; Yuan, H.A.; Fredrickson, B.E.; Henderson, N: Variability of Somatosensory Cortical Evoked Potential Monitoring during Spine Surgery. SPINE, Vol. 14, p. 790-798, 1989.

CHAPTER - Fredrickson, Bruce E.; Yuan, Hansen A.; Bayley, James C.: The Nonoperative Treatment of Thoracolumbar Injuries. Seminars in Spine Surgery, Vol. 2, No. 1 p.70-78, March 1990.

Bibliography...Continued:

Mann, Kenneth A., MS; McGowan, Dennis P.; Fredrickson, Bruce E.; Falahee, Mark; Yuan, Hansen: A Biomechanical Investigation of Short Segment Spinal Fixation for Burst Fractures with Varying Degrees of Posterior Disruption. Spine, Vol. 15, No. 6, June 1990.

Fredrickson, Bruce E.; Yuan, Hansen A.: Internal Fixation, Chapter for The Lumbar Spine, p. 941-955, 1990.

Spadaro, J.A.; Lubicky, J.P.; Yuan, H.A.; Fredrickson, B.E.: "Evaluating SCEPs During Orthopedic Procedures on the Spine" Transactions of the Orthopedic Research Society, Vol. 15, p. 251, 1990.

Schlegel, John; Yuan, Hansen A.; Fredrickson, Bruce E.: Anterior Interbody Fixation Devices, The Adult Spine: Principles and Practice, Chapter 93, 1991.

Bayley, J.C.; Fredrickson, B.E.; Yuan, H.A.: The Syracuse I-Plate. Spine, Vol. 16(3S) p.120-124, 1991.

D. Zou; J. Yoo; N.R. Ordway; J.A. Handal; B.E. Fredrickson; J.C. Bayley; H.A. Yuan; Edwards, W.T.: Interference Screw Fixation of Cervical Grafts: A Biomechanical Studyof a New Method of Cervical Fixation. Journal of Spinal Disorders, Vol.4, No.2, p. 168-176, 1991.

Falahee, M.; Mann, K.; Yuan, H.; Fredrickson, B.; Lubicky, J.; Albanese, S.; McGowan. D.: A Biomechanical Evaluation of Augmented Anterior and Posterior Short Segment Internal Fixation for Thoracolumbar Burst Fractures. The Journal of Bone and Joint Surgery.

A. E. Rosenbaum; S. Yu, N.Szeverenyi; H. A. Yuan; R. G. Donelson; C. M.Mills; B. Fredrickson: A Comparison with CT discography and Cryomicrotome. Neuroradiology, Vol.33, p.5-7, 1991.

Fredrickson, B.; Yuan, H.; Bayley, J.: Conservative Treatment of Spine Fractures. Skeletal Trauma

Schlegel, John; Yuan, Hansen A.; Fredrickson, B.E.: Chapter - The Adult Spine, Principles and Practice, Vol. 2, p.1947-1959, May 1991.

Bibliography...Continued:

Fredrickson, B.; Yuan, H.; Bayley, J.; Albanese, S.: Conservative Care of Thoracolumbar Trauma. Seminars and Spine Surgery. Edited by Dr. Ed Hanley; published by Saunders.

Zou, D.; Chang, K.; Donovan, D.; Edwards, T.; Fredrickson, B., Yuan, H.; Bayley, J.: Mechanics of Anatomic Reduction of Thoracolumbar Burst Fractures. Trans. of International Society for the Study of the Lumbar Spine, p. 11-12, Heidelberg, Germany, 1991.

Wu, S.; Liang, P.; Edwards, T.; Zou, D.; Yuan, H.:
Orientation of Transpedicular Vertebral Screws in Human
Vertebrae: Effect on Screw-Vertebral Interface Stiffness.
A Biomechanical Study of Transpedicular Screw Fixation in
Different Direction. Trans. of International Society for the
Study of the Lumbar Spine, p. 25-26, Heidelberg, Germany,
1991.

Bayley, J.; Schlegel, J.; Yuan, H.A.; Fredrickson, B.E.; Edwards, W.T.: The Contribution of the Posterior Annular Attachments in the Reduction of Experimental Lumbar Burst Fractures. Trans. of International Society for the Study of the Lumbar Spine, p. 40, Heidelberg, Germany, 1991.

Yuan, Hansen A.; Fredrickson, B.E.: Non-Operative Treatment of the Spine: External Fixation. Skeletal Trauma, Vol. 1, p. 623-644, 1991.

- J. Yoo; D. Zou; W.T. Edwards; H.A. Yuan: Alteration of neuroforaminal size secondary to cervical motion. American Orthopaedic Association Meeting, Palm Beach, Florida. June 13, 1991.
- Wu, S.; Albanese, S.; Edwards, W.T.; Zou, D.; Fay, N.R.; Ordway, L.; Liang, P.; Yuan, H.A.: Orientation of Transpedicular Vertebral Screws: Effect of Screw-Vertebra Interface. Scoliosis Research Society, Sept. 25-27, 1991.

SYMPOSIUM - Spinal Instrumentation, Biomaterial, Biomechanics and Clinical Aspects. Contemporary Orthopaedics, Vol. 24,

No. 2, p. 218-237, February 1992.

Bibliography...Continued:

S.S. Wu; W. T. Edwards; D. Zou;, N.R. Ordway; L.A. Fay; H.A. Yuan: Transpedicular Vertebral Screws in Human Vertebral Vertebrae: Effect on Screw-Vertebral Interface Stiffness. Transactions of the 38th Annual Meeting Orthopaedic Research Society, Washington, D.C., Feb. 17-20, 1992, Vol. 17, Section 2, p. 459.

ROUND TABLE SYMPOSIUM at the North American Spine Society Annual Meeting July 1992 - Fusion Controversies. Orthopaedic Special Edition, September 1992.

B.E. Fredrickson; W.T. Edwards; W. Rauschning; J.C. Bayley; H.A. Yuan: Vertebral Burst Fractures: An Experimental, Morphologic, and Radiographic Study. SPINE, Vol. 17, No. 9, September 1992.

J.U. Yoo; D. Zou; W.T. Edwards; J.C. Bayley; H. Yuan: Effect of Cervical Discectomy and Distraction Bone Grafting on Neuroforaminal Dimension. SPINE, Vol. 17, No. 10, pp. 1131-1136, 1992.

Vazquez-Seoane, Pablo; Gertzbein, Stanley D.; Yuan, Hansen A.: CHAPTER - AO Internal Fixator. SPINAL INSTRUMENTATION, pp. 297-301, 1992.

Bayley, James C.; Yuan, Hansen A.; Fredrickson, Bruce E.: CHAPTER - The Syracuse Anterior I-Plate. SPINAL INSTRUMENTATION, pp. 397-411, 1992.

CHAPTER -" Thoracolumbar Spine Fractures". Raven Press 1993

Heggeness, Michael H.; Esses, Stephen I.; Errico, Thomas; Yuan, Hansen A.: Late Infection of Spinal Instrumentation by Hematogenous Seeding. SPINE, Vol. 18, No. 4, p. 492-496, 1993

P. Gregory; D. Jung; G. Riebel; J. Yoo; H. Yuan; B. Fredrickson: Review of Harrington Rod Treatment of Spinal Trauma. SPINE, Vol. 18, No. 4, p.479 - 491, March 1993.

Contributing Author to the American Academy of Orthopaedic Surgeons Monograph Series "Thoracolumbar Spine Fractures

Without Neurologic Deficit". August 1993.

P. Vazquez-Seone, MD; J. Yoo, MD; D. Zou, MD; L.A.Fay, BSEE, BS; B. E. Fredrickson, MD; J.C. Handal, MD; H. A. Yuan, MD: Interference Screw Fixation of Cervical Grafts: A Combined In Vitro Biomechanical and In Vivo Animal Study. SPINE, Vol.18, No. 8, pp.946-954, September 1993.

Bibliography...Continued:

D. Zou; J.U. Yoo; W.T. Edwards; D. Donovan; K. Chang; J.C. Bayley; B.E. Fredrickson; H.A. Yuan: Mechanics of Anatomic Reduction of the Thoracolumbar Burst Fractures. Comparison of Distraction Plus Lordosis, in the Anatomical Reduction of the Thoracolumbar Burst Fracture. SPINE, Vol.18, No.2, pp.195-203, 1993.

CHAPTER - Edwards, W.; Yuan, H.: Basic Science of spine-associated features: Bone. In Rehabilitation of the Spine - Science and Practice, pp. 225-242. Edited by S. Hochschuler; H. Coter, and R. Guyer. St. Louis, Mosby, 1993.

Hu, John C.H.; Yuan, Hansen A.: Surgical Treatment of Thoracolumbar and Lumbar Spine Fractures. Spinal Instrumentation Techniques by Scoliosis Research Society Instrumentation Committee. 1994

SYMPOSIUM - Lumbar Spine Fixation - The Pedicle Screw Controversy. Contemporary Orthopaedics, Vol. 29, No. 6, pp. 439-454, December 1994

Yuan, H.A.; Kuslich, S.D.: The BAK Interbody Fusion System. Orthopedics Today, Vol. 14, No. 12, pp. 6-9, December 1994

Yuan, Hansen A.; Garfin, Steven R.; Dickman, Curtis A.; Mardjetko, Steven M.: A Historical Cohort Study of Pedicle Screw Fixation in Thoracic, Lumbar, and Sacral Spinal Fusions. SPINE, Vol. 19, Number 205, pp. 2279S-2296S, 1994

Connolly, Patrick J.; Yuan, Hansen A.: Cervical Spine Fractures, Chapter 101, Spine Care: Diagnosis and Treatment. 1995

Connolly, Patrick J.; Yuan, Hansen A.: Thoracolumbar Fractures, Chapter 101, Spine Care: Diagnosis and Treatment. 1995

Connolly, Patrick J.; Yuan, Hansen A.: Anterior Lumbar Instrumentation and Fusion, Chapter 101, Spine Care: Diagnosis and Treatment. 1995

Connolly, Patrick J.; Yuan, Hansen A.: Anterior Instrumentation of The Cervical Spine, Chapter 101, Spine Care: Diagnosis and Treatment, 1995.

Yuan, H.A.: Public Citizen Opposition to Spinal Implant. Journal of Spinal Disorders, Vol. 8, No. 3, May 1995.

Bibliography...Continued:

Connolly, Patrick J.: Yuan, Hansen A.: Endoscopic Retroperitoneal Approach to the Lumbar Spine. Atlas of Endoscopic Spine Surgery, 1995.

Chen, Deyu, M.D.; Fay, Lisa A., BSEE; Lok, Jason, BS; Yuan, Philip, BS; Edwards, W. Thomas, PhD.; Yuan, Hansen A., M.D.: Increasing Neuroforaminal Volume by Anterior Interbody Distraction in Degenerative Lumbar Spine. Spine, Vol. 20, No.1, pp. 74-79, 1995.

Connolly, Patrick J., M.D.; Yuan, Hansen A., M.D.; Kolata, Ronald J., D.V.M.; Clem, Michael F., D.V.M.: Endoscopic Approach to the Lumbar Spine Using the Insufflation Technique.

Atlas of Endoscopic Spine Surgery, pp. 345-349, 1995.

Regan, John J., M.D.; Kambin, Parviz, M.D.; Mathews, Hallett H.; Yuan, Hansen A. (Panel Discussion): Endoscopic Spine Surgery. Neurological Surgery - Expert Exchange, Vol. 6, No.2, pp. 69-77, 1995.

Robert J. Martin, M.D.; Hansen A. Yuan, M.D.. Neurosurgical Care of Spinal Epidural, Subdural, and Intramedullary Abscesses and Arachnoiditis. The Orthopaedic Clinics of North America, Vol. 27, Number 1, pp. 125-136, January 1996.

N.R. Ordway; Y. Zheng; G. McCullen; Q. Bao; Z. Han; H.A. Yuan; W.T. Edwards. In Vitro Biomechanical Evaluation of the Functional Spinal Unit: After Nucleotomy and with a Hydrogel Implant. Orthopaedic Research Society 1996 Annual Meeting Transactions, p. 191, 1996.

Yuan, Hansen A.; Van Hanswyk, Edward; Lehman, Thomas: Lumbosacral Orthosis. The Lumbar Spine Second Edition, Vol. 1, Chapter 4, pp. 251-258, 1996.

Fredrickson, Bruce; Yuan, Hansen: Internal Fixation: Indications, Technique, and Results. The Lumbar Spine Second Edition, Vol. 2, Chapter 22, pp. 1216-1229, 1996.

Schlegel, John; Bayley, James; Yuan, Hansen; Fredrickson, Bruce: Timing of Surgical Decompression and Fixation of Acute Spinal Fractures. Journal of Orthopaedic Trauma, Vol. 10, No. 5, pp. 323-330, 1996.

Bibliography...Continued:

Schlegel, John; Schleusener, Rand; Yuan, Hansen: Use of the Syracuse I-Plate and Anterior Locking Plate System (ALPS) for Anterior Spinal Fixation. Current Techniques in Spinal Stabilization, pp. 201-210, 1996.

Yuan, Hansen A.: Electrical Stimulation and Spinal Fusion. Perspectives in Neurological Surgery, Vol. 7, No. 2, pp. 77-90, 1996.

Bruce E. Fredrickson; Hansen A. Yuan; Patrick J. Connolly: Thoracic and Lumbar Fractures: Nonsurgical Management. Orthopaedic Knowledge Update Trauma, pp. 347-349, 1996.

W. Thomas Edwards; Hansen A. Yuan: Chapter - Biomechanics: General Considerations, Evaluation, and Testing. The Textbook of Spinal Surgery, Second Edition, Vol. 2, Section II pp. 141-154, 1996.

Qi-Bin Bao, Geoffrey M. McCullen, Paul A. Higham, John H. Dumbleton and Hansen Yuan - REVIEW - The artificial disc: Theory, design and materials. Biomaterials, Vol.17, No.12, pp. 1157-1167, 1996.

Geoffrey M. McCullen; Hansen A. Yuan: Low Back Pain. Conn's Current Therapy, pp. 43-45. January 1997.

Hansen A. Yuan, M.D.; Stephen D. Kuslich, M.D.; John A. Dowdle Jr., M.D.; Cynthia L. Ulstrom, R.N.; Steven L. Griffith, Ph.D.

Prospective Multi-Center Clinical Trial of the BAK Interbody Fusion System. White Paper 1997.

John J. Regan; Hansen A. Yuan; Geoffrey McCullen: Minimally Invasive Approaches to the Spine. Instructional Course Lectures - American Academy of Orthopaedic Surgeons, Vol. 26, pp. 127-141, 1997.

Parviz Kambin, M.D.; Geoffrey McCullen, M.D.; Wesley Parke, Ph.D.; John J. Regan, M.D.; Jonathan L. Schaffer, M.D.; Hansen Yuan, M.D.: Minimally Invasive Arthroscopic Spinal Surgery. Instructional Course Lectures - American Academy of Orthopaedic Surgeons, Vol. 26, pp. 143-161, 1997.

Steven R. Garfin; Hansen A. Yuan: Food and Drug Administration Regulation of Spinal Implant Fixation Devices. Clinical Orthopaedics and Related Research, Number 335, pp. 32-38, 1997.

Bibliography...Continued:

Kenneth F. Casey; Mark K. Chang; Evan D. O'Brien; Hansen A. Yuan; Jonathan Schaffer; Parviz Kambin: Arthroscopic Microdiscectomy: Comparison of Preoperative and Postoperative Imaging Studies. Arthroscopy Vol.13, No.4, pp. 438-445, 1997.

Geoffrey M. McCullen; Hansen A. Yuan, Bruce E. Fredrickson: Thoracolumbar Spine Injuries. Principles and Techniques of Spine Surgery, Chapter 16, pp. 359-384, 1997.

Qi-Bin Bao and Hansen A. Yuan: The Artificial Disc. Science & Medicine Vol.5, No.1, pp. 6-15, January/February 1998.

Hansen A. Yuan: Point of View. Spine Vol.23, p. 1332, June 15, 1998.

Patrick J. Connolly; Bruce E. Fredrickson; Hansen A. Yuan. Complications Associated with Posterior Spinal Instrumentation. The Spine, Fourth Edition; Vol. II, Chapter 54, pp. 1694-1704. 1998

Hansen A. Yuan: Point of View. Spine, Vol. 23, Number 22, p. 2431. November 15, 1998.

John J. Regan, MD; Hansen Yuan, MD; Paul C. McAfee, MD. Laparoscopic Fusion of the Lumbar Spine: Minimally Invasive Spine Surgery. Spine, Vol. 24, No. 4, February 15, 1999.

Hansen A. Yuan: Products reduce peridural scarring; may minimize postop pain - Adcon-L Gel and Preclude Spinal Membrane inhibit the development of Fibrosis following Surgery. Orthopaedics Today. March 1999.

Yuan, Hansen: BOOK REVIEW - Whiplash Injuries. Current Concepts in Prevention, Diagnosis, and Treatment of the Cervical Whiplash Syndrome. Edited by Robert Gunzburg and Marek Szpalski. Philadelphia, Lippincott-Raven, 1998, p 347. Journal of Bone and Joint Surgery, p. 898, 1999.

Charles B. Goodwin, M. D.; Carl T. Brighton, M.D.; Richard D. Guyer, M.D.; John R. Johnson, M.D.; Kenneth I. Light, M.D.; Hansen CA. Yuan, M.D. A Double-Blind Study of Capactively Coupled Electrical Stimulation as an Adjunct to Lumbar Spinal Fusions. Spine, Vol. 24, No. 13, p.1349-1356, July 1999.

Bibliography...Continued:

Bruce Thomas, M.D.; Geoffrey McCullen, M.D.; Hansen Yuan, M.D. Cervical Spine Injuries in Football. Journal of the American Academy of Orthopaedic Surgeons, p. 338-347, September/October 1999.

Choon-Keun Park, Matthew J. Allen, Joanne Schoonmaker, Philip Yuan, Bo Bai, Hansen A. Yuan. Gelfoam as a Barrier for Preventing PMMA-Induced Thermal Injury of the Spinal Cord: In-Vitro and In-Vivo Studies in Pigs. Journal of Spinal Disorders, Vol.12, No. 6, p. 496-500, November 1999.

Qi-Bin Bao, PhD.; Hansen A. Yuan, M.D. Prosthetic Disc Implant. The Practice of Minimally Invasive Spinal Technique, First Edition, p. 261-270, 2000.

Steven R. Garfin, Mark A. Reiley, Wade O. Wong, Hansen A. Yuan, Karen Talmadge. Vertebroplasty and Kyphoplasty. The Practice of Minimally Invasive Spinal Technique, First Edition, p. 249-260, 2000.

Jie Zhao, MD; Yong Hai, MD; Nathaniel R. Ordway, MS, PE; hoon Choon Keun Park, MD; Hansen A. Yuan, MD. Posterior Lumbar Interbody Fusion Using Posterolateral Placement of a Single Cylindrical Threaded Cage. SPINE, Vol. 25, No. 4, February 15, 2000.

A.A. Criscitiello, H.A. Yuan. Principles of Endoscopic Techniques to the Thoracic and Lumbar Spine. Minimally Invasive Spine Surgery - A Surgical Manual, Chapter 15, p. 153-158, 2000.

A.A. Criscitiello, H.A. Yuan. The Endoscopic Retroperitoneal Approach to the Lumbar Spine. Minimally Invasive Spine Surgery - A Surgical Manual, Chapter 22, p. 217-223, 2000.

Stephen D.Kuslich, M.D.; Guy Danielson, M.D.; John D. Dowdle, M.D.; John Sherman, M.D.; Bruce Fredrickson, M.D.; Hansen Yuan, M.D.; Steven L.Griffith, PhD.

Four Year Follow-Up Results of Lumbar Spine Arthrodesis Using the Bagby and Kuslich Lumbar Fusion Cage. SPINE, Vol. 25, No.

20, p. 2656-2662, October 15, 2000.

W.Thomas Edwards, Ph.D.; Yinggang Zheng, M.D.; Lisa A Ferrara, M.S.; and Hansen A. Yuan, M.D. Structural Features and Thickness of the Vertebral Cortex in the Thoracolumbar Spine. SPINE, Vol. 26, No. 2, p. 218-225, January 15, 2001.

Bibliography...Continued:

Vamvanij, Visit, MD; Ferrara, Lisa A, MS; Hai, Yong, MD; Zhao, Jie, MD; Ronald Kolata, DVM; and Hansen A. Yuan, MD. Quantitative Changes in Spinal Canal Dimensions Using Interbody Distraction for Spondylolisthesis. SPINE, Vol.26, No. 3, Online Article, February 2001.

Jee Soo Jang; Won Bok Lee; Hansen A. Yuan. Use of a guide device to place pedicle screws in the thoracic spine: a cadaveric study. Journal of Neurosurgery: Spine, Vol. 94, No. 2, p. 328-333, April 2001.

Steven R. Garfin, M.D.; Hansen A. Yuan, M.D.; and Mark A. Reiley, M.D New Technologies in Spine: Kyphoplasty and Vertebroplasty for the Treatment of Painful Osteoporotic Compression Fractures. SPINE, Vol. 26, No. 14, p. 1511-1515, July 15, 2001.

W.Thomas Edwards, Ph.D.; N.R. Ordway, M.S., P.E.; Y.Zheng, M.D.; G. McCullen, M.D.; Z. Han, M.D.; and Hansen A. Yuan, M.D. Peak Stresses Observed in the Posterior Lateral Anulus. SPINE, Vol. 26, No. 16, p. 1753-1759, August 15, 2001.

Fang Li, M.D.; H.Claude Sagi, M.D.; Bauwei Liu, M.D. and Hansen A. Yuan, M.D. Comparative Evaluation of Single-Level Closing-Wedge Vertebral Osteotomies for the Correction of Fixed Kyphotic Deformity of the Lumbar Spine: A Cadaveric Study. SPINE, Vol. 26, No. 21, p. 2385-2391, November 1, 2001.

Bao, Qi-Bin, PhD and Yuan, Hansen A., MD. Prosthetic Disc Replacement: The Future? Clinical Orthopaedics & Related Research, 1(394), p. 139-145, January 2002.

Bao, Qi-Bin, PhD and Hansen A. Yuan, MD. New Technologies in

Spine: Nucleus Replacement. SPINE, Vol.27, No. 11, p. 1245-1247, June 1, 2002.

Qi-Bin Bao, PhD and Hansen A.Yuan, MD. Disc Replacement Prosthetics. American Academy of Orthopaedic Surgeons Orthopaedic Knowledge Update, Spine 2, Chapter 48, p. 277-481, 2002.

Matthew J. Allen Vet.M.D., Ph.D., Yong Hai, M.D., Nathaniel R. Ordway, M.S., Choon-Keun Park, M.D., Bo Bai, M.D., and Hansen A. Yuan, M.D. Assessment of a Synthetic Anterior Cervical Ligament in a Spinal Fusion Model in Sheep.

The Spine Journal, Vol. 2, Number 4, p. 261-266, July/August 2002.

Bibliography...Continued:

ChI-Chien Niu, MD; Yong Hai, MD; Bruce E.Fredrickson, MD; Hansen A. Yuan, MD. "Anterior Cervical Corpectomy and Strut Graft Fusion Using a Different Method". The Spine Journal, Vol.2, p. 179-187, July/August 2002.

Mark R. Foster, PhD, MD; Matthew J. Allen, VetMB, PhD; Joanne E. Schoonmaker, Hansen A. Yuan, MD; Atsunori Kanazawa, MD; Soo-an Park, MD; Baowei Liu, MD. "Characterization of a developing lumbar arthrodesis in a Sheep Model with Quantitative Instability". The Spine Journal, Vol.2, Number 4 p. 244-250, July/August 2002.

Scott L. Blumenthal, MD; Donna D. Ohnmeiss, DrMed; Richard Guyer, MD; Stephen Hochschuler, MD; Paul McAfee, MD; Rolando Garcia, MD; Richard Salib, MD; Hansen Yuan, MD; Casey Lee, MD; Rudolph Bertagnoli, MD; Vincent Bryan, MD; Robert Winter, MD. "Artificial intervertebral discs and beyond: a North American Spine Society Annual Meeting symposium". The Spine Journal, Vol. 2, Number 6, p. 460-463, November/December 2002.

H. Claude Sagi, M.D.; Q.B. Bao, PhD, and Hansen A. Yuan, M.D. "Nuclear Replacement Strategies". The Orthopedic Clinics of North America - Chronic Low Back Pain: Issues and Management, Part I, Vol. 34, Number 2, p. 263-267, April 2003.

McCullen, Geoffrey M. MD; Yuan, Hansen A. MD. "Artificial Disc: Current Developments in Artificial Disc Replacement". Current Opinion in Orthopedics, Vol. 14, No. 3, p. 138-143, June 2003.

Raman Dhawan, MD; Hansen Yuan, MD; Bruce Fredrickson, MD; Yupeng Sun, MD; Chaiyachet Paradeevisut, MD. "Dynamic Stabilization of Cervical Spine: A Myth or Reality." The Spine Journal, Proceedings of the North American Spine Society 18th Annual Meeting. Volume 3, Number 5S, p. 145S, September/October 2003.

Raman Dhawan, M.D; Bruce E. Fredrickson, M.D.; Hansen A. Yuan, M.D. "Implant Alternatives in Surgical Management".

Management of Thoracolumbar Fractures, Mongraph Series 26, Chapter 7, p. 55-63, 2004.

Hansen A. Yuan: Point of View. Spine, Vol. 29, Number 17, p.1909. September 1, 2004.

Bibliography...Continued:

Ken S. Yonemura, M.D.; Hansen A. Yuan, M.D. "The Black Disc". Spine Surgery: Techniques, Complication Avoidance, and Management, 2nd Edition, Volume 1, Chapter 51, p. 626-632. 2004

Iain H. Kalfas, M.D., Bruce M. McCormack, M.D., Hansen Yuan, M.D. "Intraoperative Imaging of the Spine". Spine Surgery: Techniques, Complication Avoidance, and Management, 2nd Edition, Volume 2, Chapter 133, p. 1778-1787. 2004

Hansen A. Yuan, M.D., Courtney W. Brown, M.D., Frank M. Phillips, M.D. "Osteoporotic Spinal Deformity: A Biomechanical Rationale for the Clinical Consequences and Treatment of Vertebral Body Compression Fractures". J Spinal Disorders & Techniques; 17(3): 236-42, 2004.

Hansen A. Yuan, Qi-Bin Bao. "Development of Disc Nucleus Replacement". Spinal Arthroplasty, A New Era in Spine Care; Chapter 8, p. 101-112, 2005.

Henry Claude Sagi, M.D., Qi-Bin Bao, Ph.D., Hansen A. Yuan, M.D. "Artificial Intervertebral Disc Prostheses: An Overview". Emerging Spine Surgery Technologies; p.501-518, 2006.

R. Garryl Hudgins, Ph.D., Qi-Bin Bao, Ph.D., Hansen A. Yuan, M.D. "Disc Dynamics in Situ Cured Prosthetic Intervertebral Nucleus". Emerging Spine Surgery Technologies; p.595-604, 2006.

Qu-Bin Bao, Ph.D., Hansen A. Yuan, M.D. "New Technologies in Spine: Nucleus Replacement". China Orthopaedics Journal; #6, 2005.

Geoffrey M. McCullen, M.D.; Hansen A. Yuan, M.D. "Disc and Nucleus Replacement: Basic Science and Clinical Results". Rothman-Simeone The Spine, Volume II, Fifth Edition, p. 953-966, 2006.

Hansen A. Yuan, MD; Bruce E. Fredrickson, MD. "In Memoriam:

Leon L. Wiltse, MD". The Spine Journal, Vol.6, No.2, p.211, March/April 2006.

John E. Sherman, Hansen A. Yuan, Qi-Bin Bao, Bruce R. Bowman. "Lumbar Nucleus Replacement". NonFusion Techniques for the Spine; Motion Preservation and Balance, Chapter 14, p. 269-281, 2006.

Bibliography...Continued:

Amir H. Fayyazi, M.D.; Hansen A. Yuan, M.D. "Lumbar Anular and Intradiskal Treatment for Degenerative Disk Disease: Nucleoplasty". Spinal Arthroplasty-The Preservation of Motion, Chapter 13C, p. 219-223, 2007.

Michael Ahrens, M.D.; Anthony Tsantrizos, MSc, PhD; Peter Donkersloot, M.D.; Frederic Martens, M.D.; Philippe Lauweryns, M.D., hD.; Jean Charles LeHuec, M.D., PhD.; Slawomir Moszko, M.D.; Zsolt Fekete, M.D.; John Sherman, M.D.; Hansen A. Yuan, M.D.; Henry Halm, M.D.
"Nucleus Replacement With the DASCOR Disc Arthroplasty Device". SPIINE, Volume 34, Number 13, pp. 1376-1384.

Hansen A. Yuan, Adam K. MacMillan, and Edward S. Ahn "Techniques for Use in Indirect Distraction Procedures". Minimally Invasive Spine Surgery: A Practical Guide to Anatomy and Techniques, Chapter 20, p. 167-177, 2009

Thomas J. Raley, Qi-Bin Bao, and Hansen A. Yuan "Nucleus Augmentation". The Lumbar Intervertebral Disc, Chapter 22, p. 185-190, 2010

Co-ordinator of the Back Rehabilitation Program organized at St. Camillus Rehabilitation Center, Syracuse, New York. The program is staffed by a full time Clinical Psychologist and a Biofeedback Technician along with a Physical Therapist, Occupational Therapist, and Vocational Counselor. The program is designed for both in-patients and out-patients. However, a maximum of eight in-patients and two out-patients are permitted at any one time. 1977-1983.

Research Interests:

Degenerative Disc Disease

Degenerative Scoliosis

Artificial Nucleus for Spinal Disc Replacement

Tissue engineering and genetic engineering for tissue healing

Development of Scoliosis and Degenerative Spine Fixator

Development of Percutaneous Spine Fixator for Spine Fusion

Bone Morphogenic Protein

Bone Healing, Osteoblast Stimulation

Hydroxyapatite for Bone Substitute

Courses Attended:	Credit Hours
LUMBAR CHEMONUCLEOLYSIS COURSE - December 9, 19 American Academy of Orthopaedic Surgeons - New	
AMERICAN ACADEMY OF ORTHOPAEDIC SURGEONS - Annual Meeting - March 1-6, 1975	40
San Francisco, California THE SPINE - INJURY AND DISEASE STATES - October 30 - November 1, 1975. Duke University Medical Center Durham, N. Carolina	40
AMERICAN ACADEMY of ORTHOPAEDIC SURGEONS - Annual Meeting - January 28 - February 4, 1976 New Orleans, Louisiana	40
BACK PAIN - THORACO-LUMBAR SPINE DISEASE and INJURY STATES - October 8-9, 1976 Upstate Medical Center, Syracuse, New York	11
29th ANNUAL CONFERENCE for ENGINEERING in MEDIC and BIOLOGY - November 8 -10, 1976 Boston, Massachussets	CINE 24
AMERICAN ACADEMY OF ORTHOPAEDIC SURGEONS - Annual Meeting - February 3 - 8, 1977 Las Vegas, Nevada	40
SPORTS MEDICINE: ATHLETIC INJURIES ABOUT THE K	TNEE - 7
EASTERN ORTHOPAEDIC ASSOCIATION - Annual Meetin Acapulco, Mexico	ng 21
ASSOCIATION for ACADEMIC SURGERY Annual Meeting - November 13 - 15, 1978 Cleveland, Ohio	
HAND SYMPOSIUM - June 3, 1977 Upstate Medical Center, Syracuse, New York	9

Credit Hours

Courses Attended...Continued:

TAX, RETIREMENT, and ESTATE PLANNING and FINANCIAL INVESTMENTS - July 17 - 22, 1977 - Medical College of Georgia - Jekyll Island, Georgia 20 AMERICAN ACADEMY OF ORTHOPAEDIC SURGEONS, Annual Meeting - Dallas, Texas 40 2ND ANNUAL TRI-CITY ORTHOPEDIC MEETING -April 7 - 8, 1978 - Upstate Medical Center, Syracuse, New York 10 EASTERN ORTHOPAEDIC ASSOCIATION - Annual Meeting Acapulco, Mexico 21 ASSOCIATION for ACADEMIC SURGERY - Annual Meeting November 13 - 15, 1978 - Cleveland, Ohio IF I HAD...BACKACHE, A PHYSICIAN'S DILEMNA -Feb. 8, 1979, Rochester Academy of Medicine 6 Auditorium, Rochester, New York AMERICAN ACADEMY OF ORTHOPAEDIC SURGEONS -Annual Meeting - Feb. 20 - 27, 1979 San Francisco, California 40 BACK PAIN: DIAGNOSIS and a HOLISTIC APPROACH to MANAGEMENT - March 18 - 25, 1970 - sponsored by SUNY Upstate Medical Center, Syracuse, New York and presented in Kiawah Island, South Carolina. 20 SPINAL CORD MONITORING: Fundamentals and Clinical Application, Case Western Reserve University, School of Medicine, Cleveland, Ohio. May 21 - 22, 197913 EASTERN ORTHOPEDIC ASSOCIATION - Annual Meeting -October 17 - 21, 1979 - Palm Beach, Florida. 21

Hansen A. Yuan, M.D.	(124)
THE TECHNIQUE of EXTERNAL FIXATION - November 1979 Upstate Medical Center, Syracuse, New York	6
EASTERN ORTHOPAEDIC ASSOCIATION - Annual Meeting - October 15 -22, 1980 - Dorado Beach, Puerto Rico	21
AMERICAN ACADEMY of ORTHOPAEDIC SURGEONS - Annual Meeting -February 26 - March 4,1981 Las Vegas, Nevada	40
LOW BACK DISEASE - May 13 - 14, 1981 - University of Vermont College of Medicine, Burlington, Vermont	10
11TH ANNUAL POSTGRADUATE OBSTETRICS/GYNECOLOGY TEACHING DAY, May 26, 1981 - Syracuse, New York	5
SCIENTIFIC BASIS for the USE of FLEXION in the TREATMENT of LUMBAR DISORDERS - December 1979; sponsored by CAMP International, Rochester, New York	
EASTERN ORTHOPAEDIC ASSOCIATION - October 14-18,1981 Syracuse, New York	15
MECHANICAL THERAPY OF THE LUMBAR SPINE, Robin McKenzie Annual Meeting - October 26 - 29, 1981 Boca Raton, Florida	21
AMERICAN ACADEMY of ORTHOPAEDIC SURGEONS - Annual Meeting January 21 - 26, 1982 - New Orleans, Louisiana	35
NEW YORK STATE SOCIETY OF ORTHOPAEDIC SURGEONS, INS. Annual Meeting - April 21 - 25, 1982 Cancun, Mexico	7
2ND ANNUAL ALUMNI DAY, Department of Orthopaedic Surgery, Upstate Medical Center - May 14, 1982 Syracuse, New York	7

May 20,	USTRIAL BACK INJURY - A STRAIN ON SOCIETY - 1982 - sponsored by International itation Associates, Syracuse, New York	
	K DISEASE - May 13 - 14, 1982	
	ORTHOPAEDIC ASSOCIATION - Annual Meeting 13 - 17, 1982 - Southamptom, Bermuda	
	ORTHOPAEDIC ASSOCIATION - EXTERNAL FIXATION October 11 - 12, 1982 - Southamptom, Bermuda	
October	RAPHY INTRAMUSCULAR DISORDERS - 9 - 10, 1982 - presented by American raphy Society, Glencove, New York	
Annual I	N ACADEMY of ORTHOPAEDIC SURGEONS - Meeting - March 10 - 15, 1983 , California	
	TIONAL SOCIETY for the STUDY of the LUMBAR SE - 9, 1983 - Cambridge, England	PINE
	URGEON REPRESENTATIVES MEETING - 7 - 28, 1983, Chicago, Illinois	
NEW YOR	K STATE SOCIETY of ORTHOPAEDIC SURGEONS -	
	Meeting - May 19 - 21, 1983 , Canada	
Toronto 3RD ANN	-	-
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INTERNATIONAL VIDEO TELE SESSION and MOTOR SKILLS
LAB on KNEE ARTHROSCOPY - October 21, 1983

AMERICAN ACADEMY of ORTHOPAEDIC SURGEONS - Annual Meeting February 9 - 14, 1984	35
NEW YORK STATE SOCIETY of ORTHOPAEDIC SURGEON - May 9 - 13, 1984 - Innisbrook, Tarpon Springs, Florida	8.5
4TH ANNUAL ALUMNI DAY - April 27, 1984 - SUNY, Upstate Medical Center, Syracuse, New York	6
<pre>INTERNATIONAL SOCIETY of the LUMBAR SPINE - June 3 - 7, 1984 - Montreal, Canada</pre>	
AMERICAN ACADEMY OF ORTHOPAEDIC SURGEONS - Annual Meeting - February 1985 - New Orleans	36
ANNUAL ALUMNI DAY - SUNY Upstate Medical Center, Orthopaedic Surgery Department May 31, 1985 - Syracuse, New York	7
<pre>INTERNATIONAL SYMPOSIUM ON ALTERNATIVES IN SPINAL SURGERY - June 1985 - Paris France</pre>	12
NORTH AMERICAN LUMBAR SPINE ASSOCIATION MEETING - July 1985 - Laguna Beach	
AO SPINE STUDY GROUP - August 17, 1985 Toronto, Canada	
AO/ASIF SPINE COURSE - December 8 - 13, 1985 Davos, Switzerland	35
EASTERN ORTHOPAEDIC ASSOCIATION ANNUAL MEETING - October 16 - 20, 1985 - Boca Raton, Florida	2

6

Courses Attended...Continued:

NORTH AMERICAN SPINE STUDY GROUP - March 8, 1986 - Kansas City, Kansas	13.5
6TH ANNUAL ALUMNI DAY - June 14, 1986 - SUNY Health Science Center, Syracuse, New York	6
NORTH AMERICAN SPINE SOCIETY - July 20 - 23, 1986 - Bolton Landing, New York	13.5
AO - Spine Course - August 17, 1986 Chicago, Illinois	
ADVANCED TECHNOLOGIES INPRIMARY & REVISION TOTAL	
HIP REPLACEMENT - November 22, 1986 New York, New York	8
AO Spine Course - August 17, 1986 Chicago, Illinois	6
AMERICAN ACADEMY OF ORTHOPAEDIC SURGEONS - Annual Meeting - January 22 - 27, 1987	3
AO Spine Course - March 7, 1987 Kansas City, Kansas	
AMERICAN SPINAL INJURY ASSOCIATION - March 20 - 21,1987 Boston, Massachusetts	20.5
INTERPEDUNCULAR LUQUE SEGMENTAL INTERNAL FIXATION COURSE - May 3, 1987	
AMERICAN ORTHOPAEDIC ASSOCIATION and 8TH COMBINED MEETIN of the ORTHOPAEDIC ASSOCIATION of the ENGLISH - SPEAKING WORLD - May 3 - 8, 1987	īG

ANNUAL ALUMNI DAY - May 8, 1987

INTERNATIONAL SOCIETY for the STUDY of the LUMBAR SPINE - May 24, 1987 - Rome, Italy

SUNY Health Science Center, Syracuse, New York

Hansen A. Yuan, M.D.

(128)

September 20 - October 2, 1988	
Baltimore, Maryland	
THE CHALLENGE OF THE LUMBAR SPINE	
November 9-13,1988 - San Antonio, Texas	31
AO/ASIF SPINE COURSE - December 4 - 9, 1988	31
AMERICAN ACADEMY OF ORTHOPAEDIC SURGEONS ANNUAL	
MEETING - February 9 - 14, 1989	
Las Vegas, Nevada	32.5
FEDERATION OF SPINE ASSOCIATION - NORTH AMERICAN SPINE	
SOCIETY - Discussor - February 12, 1989	
Las Vegas, Nevada	8
INTERNATIONAL SOCIETY for the STUDY of the LUMBAR	
SPINE ANNUAL MEETING - May 15 - 19, 1989	
Kyoto, Japan	
AO TECHNIQUES OF PEDICLE SCREW FIXATION - TABLE	
	
INSTRUCTOR - June 2, 1989 - Toronto, Canada	
BASIC COURSE ON THE OPERATIVE TREATMENT OF FEMUR	
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BASIC COURSE ON THE OPERATIVE TREATMENT OF FEMUR FRACTURES - June 3, 1989 - Syracuse, New York	8
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BASIC COURSE ON THE OPERATIVE TREATMENT OF FEMUR FRACTURES - June 3, 1989 - Syracuse, New York AMERICAN ORTHOPAEDIC ASSOCIATION - June 11 - 15, 1989 Colorado Springs, Colorado	
BASIC COURSE ON THE OPERATIVE TREATMENT OF FEMUR FRACTURES - June 3, 1989 - Syracuse, New York AMERICAN ORTHOPAEDIC ASSOCIATION - June 11 - 15, 1989	
BASIC COURSE ON THE OPERATIVE TREATMENT OF FEMUR FRACTURES - June 3, 1989 - Syracuse, New York AMERICAN ORTHOPAEDIC ASSOCIATION - June 11 - 15, 1989 Colorado Springs, Colorado ANNUAL ALUMNI DAY - June 16, 1989 - Syracuse, New York NORTH AMERICAN SPINE SOCIETY ANNUAL MEETING	5
BASIC COURSE ON THE OPERATIVE TREATMENT OF FEMUR FRACTURES - June 3, 1989 - Syracuse, New York AMERICAN ORTHOPAEDIC ASSOCIATION - June 11 - 15, 1989 Colorado Springs, Colorado ANNUAL ALUMNI DAY - June 16, 1989 - Syracuse, New York	
BASIC COURSE ON THE OPERATIVE TREATMENT OF FEMUR FRACTURES - June 3, 1989 - Syracuse, New York AMERICAN ORTHOPAEDIC ASSOCIATION - June 11 - 15, 1989 Colorado Springs, Colorado ANNUAL ALUMNI DAY - June 16, 1989 - Syracuse, New York NORTH AMERICAN SPINE SOCIETY ANNUAL MEETING	5
BASIC COURSE ON THE OPERATIVE TREATMENT OF FEMUR FRACTURES - June 3, 1989 - Syracuse, New York AMERICAN ORTHOPAEDIC ASSOCIATION - June 11 - 15, 1989 Colorado Springs, Colorado ANNUAL ALUMNI DAY - June 16, 1989 - Syracuse, New York NORTH AMERICAN SPINE SOCIETY ANNUAL MEETING June 29 - July 2, 1989 - Quebec, Canada	12.5
BASIC COURSE ON THE OPERATIVE TREATMENT OF FEMUR FRACTURES - June 3, 1989 - Syracuse, New York AMERICAN ORTHOPAEDIC ASSOCIATION - June 11 - 15, 1989 Colorado Springs, Colorado ANNUAL ALUMNI DAY - June 16, 1989 - Syracuse, New York NORTH AMERICAN SPINE SOCIETY ANNUAL MEETING June 29 - July 2, 1989 - Quebec, Canada SYMPOSIUM on LUMBAR INTERNAL FUSION WITH INTERNAL	5
BASIC COURSE ON THE OPERATIVE TREATMENT OF FEMUR FRACTURES - June 3, 1989 - Syracuse, New York AMERICAN ORTHOPAEDIC ASSOCIATION - June 11 - 15, 1989 Colorado Springs, Colorado ANNUAL ALUMNI DAY - June 16, 1989 - Syracuse, New York NORTH AMERICAN SPINE SOCIETY ANNUAL MEETING June 29 - July 2, 1989 - Quebec, Canada SYMPOSIUM on LUMBAR INTERNAL FUSION WITH INTERNAL FIXATION - July 3, 1989 - Quebec, Canada	12.5

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June 14, 1991

AO\ASIF SPINE CO Vail, Colorado Courses Attended	URSE - October 15 - 20, 19	1 89
-	OF ORTHOPAEDIC CHAIRMAN 1989 - Washington, D.C.	
CHALLENGE of LUM	BAR SPINE - November 2 -	5, 1989
AMERICAN ACADEMY ANNUAL MEETING - New Orleans, Lou	-	
KEYSTONE SPINE M Keystone, Colora	EETING - March 7 - 11, 199 do	90
	VICAL SPINE - THE NEW CHA 990 - San Antonio, Texas	LLENGE"
Orthopaedic Surg	OPAEDIC ALUMNI MEETING - I ery SUNY Health Science Ce y 25, 1990 - Syracuse, Nev	enter
	ARCH SOCIETY ANNUAL MEETIN 01 - Anaheim, California	1G -
	of ORTHOPAEDIC SURGERY AN 91 - Anaheim, California	NNUAL MEETING -
	INE ASSOCIATION FOSA SPECTOR - Anaheim, California	IALTY DAY -
	CIETY FOR THE STUDY OF THE March 11 - 19, 1991 - He	
	EDIC ASSOCIATION ANNUAL ME 1 - Palm Beach, Florida	EETING -

15

NORTH AMERICAN SPINE SOCIETY ANNUAL MEETING July 31 - August 3, 1991 - Keystone, Colorado

Courses Attended...Continued:

AMERICAN ACADEMY of ORTHOPAEDIC SURGERY ANNUAL MEETING February 20 - 25, 1992 - Washington, D.C. 30.5

PEDICLE FIXATION OF THE LUMBAR SPINE - Presented by University of Illinois College of Medicine's Department and Orthopaedics -

April 30 - May 2, 1992 - Phoenix, Arizona 18

INTERNATIONAL SOCIETY FOR THE STUDY OF THE LUMBAR SPINE - May 20 - 24, 1992 - Chicago, Illinois

MOSS SPINE STUDY GROUP - June 11 - 13, 1992

AMERICAN ORTHOPAEDIC ASSOCIATION ANNUAL MEETING - June 22 - 26, 1992 - Toronto, Canada

9TH COMBINED MEETING OF THE ORTHOPAEDIC ASSOCIATION OF THE ENGLISH SPEAKING WORLD - June 21 - 26, 1992

NORTH AMERICAN SPINE SOCIETY ANNUAL MEETING July 9 - 11, 1992 - Boston, Massachusetts 21

INTERNAL REDUCTION AND FIXATION OF THE LUMBAR SPINE COURSE - FACULTY MEMBER - July 1992 - Tulane University School of Medicine

INTERNATIONAL SOCIETY FOR THE STUDY OF THE LUMBAR SPINE - August 6 - 9, 1992 - San Francisco, Ca.

15TH SINGAPORE ORTHOPAEDIC ASSOCIATION ANNUAL MEETING - November 12 - 15, 1992 - Singapore

AO SPINE COURSE - CHAIRMAN - September 3 - 6, 1992 Taichung, Taiwan

SCOLIOSIS RESEARCH SOCIETY ANNUAL MEETING - DISCUSSOR September 23 - 26, 1992 - Kansas City, Missouri 15

CURRENT	METHO	DOLOGY	OF	SPIN	AL INS	TRUMENTATI	ON;	DEGENERATIVE
AND DEF	ORMITY	APPLIC	CAT	ONS	COURSE	_		

October 2 - 3, 1992, New York, New York

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Courses Attended...Continued:

CONTROVERSIES IN THE DIAGNOSIS AND TREATMENT OF LUMBAR INSTABILITY - October 17 - 18, 1992

Lake George, New York

THE 17TH ANNUAL NEW JERSEY ORTHOPAEDIC SYMPOSIUM - October 23 - 24, 1992

SINGAPORE ORTHOPAEDIC ASSOCIATION SILVER JUBILEE MEETING - November 12 - 15, 1992 - Singapore

TECHNIQUES IN SPINAL INSTRUMENTATION December 11 - 12, 1992 - New York, New York

DISORDERS OF THE SPINE - THE SPINE CENTER/FLORIDA ORTHOPAEDIC INSTITUTE UNIVERSITY OF SOUTH FLORIDA - January 10 - 15, 1993 Cliff Lodge, Snowbird, Utah 25

AMERICAN MEDICAL ELECTRONICS NATIONAL SALES MEETING - January 23 - 27, 1993 - Cliff Lodge, Snowbird, Utah

RF SYSTEM WORKSHOP - February 6, 1993 - Kansas City, Missouri

DISORDERS OF THE SPINE AND PERIPHERAL NERVE ANNUAL MEETING - February 19, 1993 - Tucson, Arizona 20

AMERICAN ACADEMY of ORTHOPAEDIC SURGERY ANNUAL MEETING - February 17 - 23, 1993 - San Francisco, California 30.5

FEDERATION OF SPINE ASSOCATION - February 21, 1993 San Francisco, California

DIAGNOSIS AND TREATMENT OF DISEASES OF THE CERVICAL SPINE April 23 - 24, 1993 - Houston, Texas 14

SICOT INTERNATIONAL SYMPOSIUM ON SPINE SURGERY - April 27, 1993 - Seoul, Korea

PEDICLE FIXATION of the LUMBAR SPINE and OTHER ADVANCED
TECHNIQUES - May 13 - 15, 1993 - Orlando, Florida 18

AMERICAN ORTHOPAEDIC ASSOCIATION ANNUAL MEETING June 6 - 10, 1993 - California 17

INTERNATIONAL SOCIETY for the STUDY of the LUMBAR SPINE
ANNUAL MEETING - June 15 - 19, 1993 - Marseilles, France

SPINAL COURSE - June 25 - 26, 1993 - Amelia Island, Florida 16

SPINE WORKSHOP - June 27 - July 2, 1993 - Bethesda, Maryland

SPINAL INSTRUMENTATION COURSE - August 1 - 5, 1993
Orlando, Florida

SICOT MEETING - September 1 - 3, 1993 - Korea

NORTH AMERICAN SPINE SOCIETY ANNUAL MEETING October 13 - 16, 1993 - San Diego, California 17

ORTHOPAEDIC ASSOCIATION OF REPUBLIC OF CHINA - October 21 - 23, 1993 - Taipei, Taiwan

ARTHROSCOPIC MICRODISCECTOMY of the LUMBAR SPINE MINIMAL INTERVENTION IN SPINAL SURGERY - November 5-7, 1993 15

SSAF STATE of the SPINE from A to Z - November 12-15, 1993

Puerto Rico 5

ISLLS INSTRUCTIONAL COURSE - November 19-20, 1993 Buenos Aires, Argentina

SECOND ANNUAL SYMPOSIUM and CALL for PAPERS: TECHNIQUES of SPINAL INSTRUMENTATION - December 1, 1993
New York, New York

DISORDERS	OF	THE	SPINE,	6тн	ANNUAL	SKI	SNOWBIRD	WITH	THE
SPINE CENT	ER.	- Ja	nuary 9-	-14,	1994				
Snowbird,	Utah	ı							30

CONTROVERSY and CHANGING TRENDS in SPINE CARE - January 26, 1994 Chicago, Illinois

JOINT SECTION on DISORDERS of the SPINE and PERIPHERAL NERVES February 9, 1994 Fort Lauderdale Florida

AMERICAN ACADEMY of ORTHOPAEDIC SURGERY ANNUAL MEETING - February 23 - 28, 1994 New Orleans, Louisiana 30.50

CURRENT CONCEPTS in MANAGEMENT of SPINAL TRAUMA March 25 - 26, 1994 Houston, Texas 10

SPINE ACROSS THE SEA - April 18 - 21, 1994 9

EUROPEAN SPINE MEETING - May 5 - 7, 1994 Leiden, Holland

THIRD CONFERENCE ON CONTROVERSIES IN THE TREATMENT OF

LUMBAR SPINE DISEASE - June 3-5, 1994

Bolton Landing, New York 26

6TH ANNUAL SPINE WORKSHOP - June 13-14, 1994 Bethesda, Maryland

ANNUAL ORTHOPAEDIC ALUMNI DAY - Dept. of Ortho.Surgery, SUNY HealthScienceCenter, Syracuse, NY June17,1994 6

INTERNATIONAL SOCIETY for the STUDY of the LUMBAR SPINE ANNUAL MEETING - June 21 - 25, 1994
Seattle, Washington

FOURTH COMMON MEETING - CERVICAL SPINE RESEARCH SOCIETY June 29 - July 2, 1994 Rome, Italy

AMERICAN-EUROPEAN MEETING on PEDICLE FIXATION of the SPINE

Hansen A. Yuan, M.D.	(135)
<pre>and OTHER ADVANCED TECHNIQUEES - July 1-2, 1994 Munich, Germany</pre>	13.5
SPINE CHALLENGE MEETING, July 7 - 9, 1994 Toronto,Ontario,Canada	

20

Courses Attended...Continued:

ANTERIOR SURGICAL APPROACHES TO THE SPINE - July 30-31, 1994 Memphis, Tennessee 14.5

PRACTICAL TECHNIQUES and SPINAL INSTRUMENTATION -

August 28 - September 1, 1994 Orlando, Florida 24

EUROPEAN SPINE SOCIETY - September 7-10, 1994 Madrid

AMERICAN ACADEMY of ORTHOPAEDIC SURGEONS BOARD OF COUNCILORS and COMSS MEETING, September 22 - 25, 1994

Newport, Rhode Island

NORTH AMERICAN SPINE SOCIETY ANNUAL MEETING -

October 19 - 21, 1994 Minneapolis, Minnesota

AME SPINE SYMOSIUM - October 28, 1994 Boston, Massachusetts

STATE of the SPINE A TO Z COURSE - November 3 - 6, 1994

Cerromar Beach Resort, Puerto Rico 16

6TH ANNUAL BARROW NEUROLOGICAL INSTITUTE SPINE WORKSHOP -Phoenix, Arizona 12

SAN DIEGO SPINE SYMPOSIUM & WORKSHOP -

November 18 - 20, 1994 San Diego, California

KOREAN SPINE MEETING - Seoul, Korea November 25 - 16, 1994

THAI ORTHOPAEDIC ASSOCIATION - Bangkok, Thailand November 30 - December 4, 1994

8TH INTERNATIONAL CONFERENCE ON BIOMEDICAL ENGINEERING; INSTRUCTIONAL COURSE - December 7 - 11, 1994

7TH ANNUAL SKI WITH THE SPINE CENTER -

Whistler, British Columbia - January 7 - 13, 1995 33

JOINT SECTION on DISORDER of the SPINE and PERIPHERAL NERVES
Phoenix, Arizona - February 14-18, 1995

AMERICAN ACADEMY of ORTHOPAEDIC SURGERY ANNUAL MEETING Orlando, Florida - February 16-21, 1995 30.50

AAOS/AANS SYMPOSIUM on SPINAL TRAUMA - Orlando, Florida - February 20, 1995

FUTURE CHALLENGES to SPINE SURGERY - Tampa, Florida March 10, 1995

ANTERIOR APPROACHES to the SPINE - Memphis, Tennessee - April 1-2, 1995

16

32

JAPANESE ORTHOPAEDIC ASSOCIATION MEETING - Yokohama, Japan April 9-11, 1995

AANS SPINE TRAUMA SYMPOSIUM - Orlando, Florida
April 25-26, 1995 26.75

ST. LUKE'S EPISCOPAL HOSPITAL SYMPOSIUM - Houston, Texas - April 28-29, 1995

NEW FRONTIERS IN SPINAL SURGERY EUROPEAN SPINE MEETING - Holland - May 4-6, 1995

CONGRESS OF NEUROSURGERY - Berlin - May 7-11, 1995

CONTROVERSIES IN THE TREATMENT OF LUMBAR SPINE DISEASE - Kiawah Island, South Carolina - May 12-14, 1995

CAROLINAS MEDICAL CENTER SPRING SYMPOSIUM - Charlotte, North Carolina - May 17-19, 1995

CURRENT CONCEPTS on SURGERY of the SPINE Galveston, Texas - May 24-27, 1995

THORACOSCOPIC APPROACHES for the TREATMENT of THORACIC

SPINAL PATHOLOGY - Phoenix, Arizona - June 1-3, 1995 25.5

MINIMALLY INVASIVE DISCECTOMY/ENDOSCOPY COURSE - Bethesda, Maryland - June 15-17, 1995

INTERNATIONAL SOCIETY FOR THE STUDY OF THE LUMBAR SPINE ANNUAL MEETING - Helsinki, Finland - June 18-22, 1995

SMITH & NEPHEW RICHARDS ANNUAL WINTER MEETING Great Barrier Reef, Queensland - July 8-15, 1995 29

VIDEO ASSISTED DISKECTOMY AND ANTERIOR RELEASE OF THE THOACIC SPINE IN SCOLIOSIS SURGERY - Cincinnati, Ohio July 19-21, 1995

PATHOPHYSIOLOGY and TREATMENT of the UNSTABLE LUMBAR MOTION
SEGMENT (NASS Summer CME Conference) - Chicago, Illinois
August 3-5, 1995
12.25

95' QINGDAO INTERNATIONAL CONGRESS on ORTHOPAEDICS - Quingdao, China October 8-10, 1995

NORTH AMERICAN SPINE SOCIETY ANNUAL MEETING Washington - D.C. October 18-21, 1995 18

MEXICAN ORTHOPAEDIC ASSOCIATION - Tijuana, Baja California October 27-November 1, 1995

NEW HORIZONS IN LOW BACK PAIN - San Diego, California November 1-4, 1995

AAOS SPINE SURGICAL SKILLS COURSE "CONTEMPORARY ISSUES IN ADVANCED SPINE SURGERY" - Chicago, Illinois

November 17-19, 1995

EIGHTH ANNUAL SKI WITH THE SPINE CENTER - A CONTEMPORARY UPDATE ON DISORDERS OF THE SPINE -

Whistler, British Columbia, Canada January 14-19, 1996

30

Atlanta, Georgia February 2:	
FEDERATION OF SPOINE ASSOCIATES February 25, 1996	- Atlanta, Georgia
JOINT SECTION ON DISORDERS OF THOSE THE AANS/CNS - Orlando, Flor	
Feb. 28-March 2, 1996	24.50
INTENSIVE COURSE ON MINIMAL INTERBODY FUSION - Berlin, German	
CONTEMPORARY SURGERY OF THE LUME INVASIVE TECHNIQUES - Orlando, E	
March 24-28, 1996	24
CURRENT TOPICS IN THE TREATMENT Jacksonville, Florida	
NEW FRONTIERS IN SPINAL SURGERY April 18-29, 1996	- Leiden, Amsterdam
AAOS COURSE - DEBATING COMPLEX I Washington, D.C.	April 24-27, 1996 27
,	-
INTERNATIONAL INTRADISCAL THERAF Amsterdam, Netherlands	
TORONTO ENDOSCOPIC SPINAL SURGER	
Toronto, Ontario, Canada	May 17-18, 1996 15
SCOLIOSIS RESEARCH SOCIETY THORA	ASCOPIC/LAPAROSCOPIC COURSE - June 12-13, 1996
8TH ANNUAL INTERNATIONAL SPINE W	
COURSE - Bethesda, Maryland	June 17-21, 1996

INTERNATIONAL SOCIETY FOR THE Burlington, Vermont		PINE -
8th INTERNATIONAL OPERATIVE CO U Jakarta, Indonesia	June 30 - July 3, 1996	
ANTERIOR SURGICAL APPROACHES TO Memphis, Tennessee	August 3-4, 1996	14.75
CONTEMPORARY SURGERY OF THE THO MINIMALLY INVASIVE TECHNIQUES - Sept. 8-12, 1996		24
SCOLIOSIS RESEARCH SOCIETY ANNU Ottawa Ontario Canada	JAL MEETING - Sept. 26-28, 1996	15.50
AMERICAN COLLEGE OF OSTEOPATHIC San Diego, California		8
NORTH AMERICAN SPINE SOCIETY AN VanCouver, B.C., Canada		
NEW HORIZONS IN SPINAL SURGERY November 1-2, 1996	- Philadelphia, Pennsylv	ania 15
ANTERIOR COLUMN SUPPORT: IMPLI THORACOLUMBAR SPINE SURGERY -	CATIONS IN CERVICAL &	
Paradise Island, Bahamas		16
SOCIETY OF MILITARY ORTHOPEDIC San Diego, California		10

November 26-29, 1996

'96 SHANGHAI INTERNATIONAL SYMPOSIUM ON SPINE & INSTRUCTIVE COURSE ON ORTHOPEDICS - CO-CHAIR

Shanghai, China

CERVICAL SPINE RESEARCH SOCIETY ANN	UAL MEETING -	
The Breakers, Palm Beach, Florida	December 5-7,	1996 14
CERVICAL SPINE RESEARCH SOCIETY 5TH	INSTRUCTIONAL (COURSE -
Palm Beach, Florida	December 7-9, 3	1996 16
FUTURE CHALLENGES TO SPINE SURGERY	_	
Palm Springs, California		7
<pre>INTERBODY FUSION WORKSHOP - Philade January 29, 1997</pre>	lphia, Pennsylva	ania
AMERICAN ACADEMY OF ORTHOPAEDIC SUR	GEONS ANNUAL MEI	ETING -
San Francisco, California Febru	ary 13-16, 1997	29.50
MINIMALLY INVASIVE SPINAL SURGERY C SPINE SECTION MEETING -	OURSE - 1997 AAI	NS/CNS
Newport Beach, California Fe	bruary 19-22, 19	997 18
AAOS COMPREHENSIVE SPINE COURSE - D	EBATING COMPLEX	ISSUES IN
SPINE SURGERY - Tucson, Arizona	March 12-15, 19	997 22
NASS SPINE ACROSS THE SEA - Kamuela	, Hawaii	
March 16-20, 1997		17.5
AMERICAN ACADEMY OF ORTHOPAEDIC SUR	GEONS ANNUAL MEI	ETING -
New Orleans, LA.	March 19-23,	1997 26.5
SCIENTIFIC CONGRESS OF THE CHINESE	SPEAKING ORTHOP	AEDIC
SOCIETY - Shanghai, China	March 27-30, 19	997
MINIMALLY INVASIVE/ENDOSCOPY COURSE May 14-16, 1997	- Bethesda, Mar	ryland 15
ray 14-10, 1991		Τ.)
10TH ANNUAL INTRADISCAL THERAPY SOC	IETY MEETING -	
Naples, Florida	May 29-31, 19	997 12
AMERICAN ORTHOPAEDIC ASSOCIATION 10	TH ANNUAL MEETI	NG -
Boca Raton, Florida	June 11-14, 1	

CERVICAL SPINE RESEARCH SOCIETY - Burgenstock, Switzerland June 26-28, 1997

SPINE SYMPOSIUM 1997 - Vancouver, British Columbia
July 24-26, 1997 16

CONTEMPORARY SURGERY OF THE THORCIC AND LUMBAR SPINE - MINIMALLY INVASIVE TECHNIQUES - Orlando, Florida

August 24-28, 1997

NORTH AMERICAN SPINE SOCIETY ANNUAL MEETING New York, New York October 22-15, 1997 23

5TH SPINAL SURGERY COURSE - Royal Postgraduate Medical School, Hammersmith Hospital - London October 29-31, 1997

17TH CONGRESS OF THE ASEAN ORTHOPAEDIC ASSOCIATION -Penang, Malaysia November 13-16, 1997

THE CANADIAN ORTHOPAEDIC ASSOCIATION - A COURSE ON SPINAL DISORDERS - Montreal, Canada November 21-22, 1997 20

PHILIPPINE ORTHOPAEDIC ASSOCIATION ANNUAL CONGRESS - Quezon City, Philippines December 3-6, 1997

METHODS OF INTERBODY FUSION OF THE SPINE New York, New York December 12, 1997 8

A CONTEMPORARY UPDATE ON DISORDERS OF THE SPINE Whistler, British Columbia, Canada
January 18-23, 1998 32.5

SPINAL SURGERY...CURRENT AND INNOVATIVE THEORY AND TECHNIQUES Snowmass, Colorado

January 27-27,1998 12

ENDOSCOPIC SPINAL FUSION WORKSHOP - University of Massachusetts, Worcester, MA. March 27, 1998 8

RAY TFC SYMPOSIUM - Houston, Texas April 3-5,1998

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Courses Attended...Continued:

Dallas, Texas

JAPANESE ORTHOPAEDIC ASSOCIATION 71st ANNUAL MEETING -Tokushima, Japan April 17-20, 1998 DEBATING COMPLEX ISSUES IN SPINE SURGERY -Chicago, Illinois April 30-May 2, 1998 ISSLS ANNUAL MEETING - Brussels, Belgium June 9-13, 1998 WESTERN ORTHOPAEDIC ASSOCIATION - Aspen, Colorado September 6-10, 1998 NORTH AMERICAN SPINE SOCIETY ANNUAL MEETING -San Francisco, California October 28-31, 1998 21.25 KOREAN SPINE SOCIETY MEETING -Seoul, Korea November 20, 1998 The Management of Vertebra Intercorporeal Disorders -9 Chicago, Illinois December 5-6, 1998 A Contemporary Update on Disorders of the Spine - Ski With The Spine Center -27 Whistler, British Columbia, Canada January 17-22, 1999 AMERICAN ACADEMY OF ORTHOPAEDIC SURGEONS ANNUAL MEETING -Anaheim, California February 4-8, 1999 28.50 JOINT SECTION ON DISORDERS OF THE SPINE AND PERIPHERAL **NERVES-** Orlando, Florida February 10-13, 1999 18 COMPLICATIONS OF SPINAL FUSION - Squaw Creek, Olympic Valley, California March 6-7, 1999 8 MANAGEMENT of CERVICAL and LUMBAR SPINE DISORDERS: AN INTERACTIVE SEMINAR - Washington, D.C. March 27-28, 1999 13.5

MINIMALLY INVASIVE TECHNOLOGIES: MEDICINE in the 21st CENTURY

May 14-15, 1999

JAPANESE SPINE RESEARCH SOCIETY ANNUAL MEETING - Tokyo, Japan June 3-5, 1999

INTERNATIONAL SOCIETY FOR THE STUDY OF THE LUMBAR SPINE ANNUAL MEETING - Kona, Hawaii June 21-25, 1999

6TH INTERNATIONAL MEETING ON ADVANCED SPINE
TECHNOLOGIES (IMAST) - Vancouver, B.C. July 8-10, 1999

5TH STRYKER SPINAL INVITATIONAL SYMPOSIUM - Brazil September 27-29, 1999

NORTH AMERICAN SPINE SOCIETY ANNUAL MEETING Chicago, Illinois October 20-23, 1999 24.5

Advances in Treating Osteoporotic Vertebral Body Compression Fractures - Chicago, Illinois October 24, 1999 3

Current Controversies and Challenges in Spine Surgery - Miami Beach, Florida November 18-21, 1999

12TH SYMPOSIUM OF THE SPINE STUDY GROUP - THE SPINE: CURRENT CONCEPTS AND TREATMENT - Naples, Florida
February 2-6, 2000 20.5

AANS/CNS SECTION ON DISORDERS OF THE SPINE AND PERIPHERAL NERVES - Indian Wells, California February 22-26, 2000 16

AMERICAN ACADEMY OF ORTHOPAEDIC SURGEONS ANNUAL MEETING Orlando, Florida March 15-19, 2000 24.5

JAPANESE ORTHOPAEDIC ASSOCIATION ANNUAL MEETING - Kobe, Japan April 6-9, 2000

INTERNATIONAL SOCIETY FOR THE STUDY OF THE LUBMAR SPINE ANNUAL MEETING - Adelaide, Australia April 9-13, 2000

SPINE 2000 - Newport Beach, California

Hansen	A.	Yuan,	M.D.

(145)

April 28-29, 2000

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FAILURES OF SPINAL SURGERY: A TRIBUTE Baltimore, Maryland May 12-14, 2000
7 TH INTERNATIONAL MEETING ON ADVANCED SPINE TECHNIQUES - Barcelona, Spain July 6-8, 2000 24
SPINE ACROSS THE SEA - Kamuela, Big Island, Hawaii July 23-27, 2000 16
OSTEOPOROSIS AND VERTEBRAL BODY COMPRESSION FRACTURES: MEDICAL MANAGEMENT AND A NEW MINIMALLY INVASIVE SURGICAL PROCEDURE - Syracuse, New York August 23, 2000 2
WORLD SPINE - Berlin August 29-Sept. 1, 2000
Singapore Orthopaedic Association Annual Meeting - Singapore September 6-9, 2000
Spinal Surgeon International Symposium Napa Valley, California September 21-23, 2000 13
3 rd Annual Herman Lohman, M.D. Memorial Symposium -
"State of the Art Management of Chronic Low Back Pain" Livingston, New Jersey October 7, 2000 6
North American Spine Society 15 th Annual Meeting - New Orleans, Louisiana October 25-28, 2000 22.25
Anterior Column Support of the Spine VI: Fusion Versus Motion - Scottsdale, Arizona November 8-11, 2000 17.5
Stryker Canada Alpha Group - Los Cabos, Mexico February 11-18, 2001
American Orthopaedic Association Annual Meeting - Palm Beach, Florida June 13-16, 2001 24.5

International	Society	for	the	Study	of	the	Lumbar	Spine
Instructional	Course -	-						

Beijing, China

September 20-22, 2001

II Advance Venezuelan Spine Meeting - Caracus, Venezuela September 28-29, 2001

North American Spine Society 16th Annual Meeting - 20 Seattle, Washington October 31-November 3, 2001

North American Spine Society 16th Annual Meeting Pre-Course: Image-Guided Spine Surgery -

Washington State Convention & Trade Center
Seattle, Washington October 31, 2001

35th Japanese Scoliosis Society Meeting -

Nagoya, Japan November 16-17, 2001

Current Concepts in Spinal Disorders -

LaQuinta, California March 8-9, 2002 9.5

2nd Annual Pittsburgh Spine Symposium -

Pittsburgh, Pa. March 12, 2002

AO ASIF Comprehensive and Interactive Spine Courses -

Coronado, California April 18-21, 2002 25

U.S. Surgeon Champion Summit -

Coral Gables, Florida April 26-28, 2002

Emerging Concepts in Spine Surgery: Controversies & Challenges in the Spine Surgeon's Practice -

Key Largo, Florida May 3-4, 2002 10

Spine Arthroplasty 2 - Intervertebral Disc Replacement and Non-Fusion Technology -

Montpellier, France May 6-8, 2002

International Society for the Study of the Lumbar Spine - Cleveland, Ohio May 14-18, 2002

Credit Hours

- 1st Annual Meeting of Korean Minimal Invasive Spine Surgery
 Research Society Catholic University of Korea

 May 31-June 1, 2002
- 15th Annual Intradiscal Therapy Society Meeting Seoul, Korea August 21-24, 2002
- SICOT/SIROT 2002 XXII World Congress San Diego, California August 23-30, 2002
- Scoliosis Research Society 37th Annual Meeting Seattle, Washington September 18-21, 2002
- 5th Combined Meeting Spinal & Paediatric Sections, APOA Singapore October 13-16, 2002
- International Conference on Spinal Surgery Beijing and Chongqing, China October 15-22, 2002
- North American Spine Society 17th Annual Meeting Montreal, Canada October 30 November 2, 2002
- Scoliosis Research Society 37th Annual Meeting Seattle, Washington September 18-21, 2002 15
- South Carolina Spine Society Annual Meeting Charleston, South Carolina September 21, 2002
- 3rd World Congress Minimally Invasive Spinal Surgery & Medicine -Phoenix, Arizona December 8-11, 2002
- 2nd Annual Symposium on Current Concepts in Spinal Disorders LaQuinta, California - February 28-March 2, 2003 8.75
- The Journey of Spine Spinal Arthroplasty Society Meeting Scottsdale, Arizona May 1-3, 2003 19.5
- International Society for the Study of the Lumbar Spine VanCouver, Canada B.C. May 13-17, 2003

Credit Hours

23rd Annual Alumni Day - Department of Orthopaedic Surgery,

Upstate Medical University,

Syracuse, New York

June 13, 2003 5.75

Spine Across the Sea 2003

Maui, Hawaii

July 27-31, 2003 20.25

World Spine II

Chicago, Illinois

August 10-13, 2003 8

Eastern Japan Society of Clinical Orthopaedics

Tokyo, Japan

September 24-28, 2003

Eurospine

Prague

October 1-2, 2003

North American Spine Society 18th Annual Meeting -

San Diego, California

October 21-25, 2003

North American Spine Society 18th Annual PreCourse: 7.5
Total Disc Replacement

San Diego, California

October 21, 2003

Clinicolegal Correlations Course, Columbia University College of Physicians & Surgeons - Online Course October 30, 2003

2nd Annual Dynamic Spine Stabilization: Arthroplasty Techniques & Technology -

Dallas, Texas

November 14-15, 2003

Korea Orthopedic Spine Surgery Society Conference -

Seoul, Korea

November 28-29, 2003

Orthopaedic Research Society 50th Annual Meeting -

San Francisco, California

March 7-10, 2004

Orthopaedic Academy of Orthopaedic Surgery Annual Meeting -

San Francisco, California

March 10-14, 2004

Credit Hours

NASS Spring Break: Innovations in Spine Care -Boca Raton, Florida April 22-24, 2004 17.5

Spine Arthroplasty Society -

Vienna, Austria

May 4-7, 2004

Chinese Medical Association Orthopedic Society - The $7^{\rm th}$ Spinal Surgery Meeting -

Beijing, P.R. China

May 15-17, 2004

Portuguese Spine Society -

Lisbon, Portugal

May 28, 2004

ISSLS Annual Meeting - Spine Week 2004 -

Porto, Portugal

May 31-June 5, 2004

AAOS/CSOS Annual Meeting Beijing, China

Sept. 22-24, 2004

Emerging Technologies in Spine Surgery - Washington, D.C. Sept. 30- Oct. 2, 2004 16

North American Spine Society Annual Meeting Chicago, Illinois October 27-30, 2004 17.75

Current Issues and Techniques in Complex Lumbar Spine
Surgery - St. Louis, Missouri Nov. 11-13, 2004 6.5

The First National Congress of Minimal Invasive Spine Surgery - Wenzhou, P.R. of China Dec. 3-5, 2004

North American Spine Society Spring Break 2005 - Back Into Motion - Bal Harbour, Florida April 6-9, 2005 5.75

Spine Arthoplasty Society - Global Symposium on Intervertebral Disc Replacement & Non-Fusion Technology-New York, New York May 4-7, 2005 18

International Society for the Study of the Lumbar Spine - New York, New York May 10-14, 2005

Credit Hours

- 2nd Chinese International Scoliosis Symposium Beijing, P.R. of China May 21-23, 2005
- 18th Annual International Intradiscal Therapy Society
 Meeting San Diego, California May 25-28, 2005 15.5
- 3rd Stryker Italy Spine Symposium -Hammamet, Tunisia June 22-25, 2005
- IMAST PRE-COURSE: Motion Sparing Technology in Spinal
 Surgery Banff, Alberta, Canada June 6, 2005
- 2nd Annual Innovative Techniques in Spine Surgery Los Cabos, Mexico July 21-23, 2005
- 4th Annual Emerging Technologies in Spine Surgery Washington, DC Sept. 15-17, 2005 14
- 20th Annual North American Spine Society Meeting Philadelphia, PA. Sept. 27-Oct. 1, 2005
- Scoliosis Research Society 40th Annual Meeting Miami, Florida Oct. 28-30, 2005 15
- 20th Annual Congress of Neurosurgery Association of Thailand & 3rd Thai-German Neurosurgeon Joint Meeting & Spine Workshop Bangkok Nov. 30-Dec. 2, 2005
- IV International Annual Theoretical-Practice Mtg. of Spine Surgery
 Mexico City

 January 19-21, 2006
- 5th Annual Symposium on Current Concepts in Spinal Disorders, Cedars-Sinai Medical Center Las Vegas, Nevada February 3-4, 2006
- American Academy of Orthopaedic Surgeons Annual Meeting Chicago, Illinois March 22-26, 2006 25

Credit Hours

Preservation of Motion in the Spine Duck Key, Florida Ap

April 5-8, 2006

Spine Arthroplasty Society, 6th Annual Global Symposium on Motion Preservation Technology Montreal, Canada May 9-13, 2006 8.75

Spinal Arthroplasty/Motion Preservation Workshop - Amelia Island, Florida June 21-25, 2006

Clinicolegal Correlations Course - Basic Science Studies
Self-Study Program Continuing Medical Education Internet
Program, "Discontinued Care" Columbia University College of Physicians & Surgeons, NY, NY
June 16, 2006 1.00

Clinicolegal Correlations Course - Basic Science Studies Self-Study Program Continuing Medical Education Internet Program, "Informed Consent" -Columbia University College of Physicians & Surgeons, NY, NY June 16, 2006 1.00

Clinicolegal Correlations Course - Basic Science Studies
Self-Study Program Continuing Medical Education Internet
Program, "Accepting Patients" Columbia University College of Physicians & Surgeons, NY, NY
June 16, 2006 1.00

Clinicolegal Correlations Course - Basic Science Studies
Self-Study Program Continuing Medical Education Internet
Program, "Scope of Practice" Columbia University College of Physicians & Surgeons, NY, NY
June 16, 2006 1.00

Clinicolegal Correlations Course - Basic Science Studies
Self-Study Program Continuing Medical Education Internet
Program, "Duties to Non-Patients" Columbia University College of Physicians & Surgeons, NY, NY
June 16, 2006 1.00

Credit Hours

Clinicolegal Correlations Course - Basic Science Studies
Self-Study Program Continuing Medical Education Internet
Program, "Records and Disclosures" Columbia University College of Physicians & Surgeons, NY, NY
June 16, 2006 1.00

Clinicolegal Correlations Course - Basic Science Studies
Self-Study Program Continuing Medical Education Internet
Program, "Supervision and Control" Columbia University College of Physicians & Surgeons,
NY, NY June 16, 2006 1.50

Clinicolegal Correlations Course - Basic Science Studies
Self-Study Program Continuing Medical Education Internet
Program, "Consultation and Referral" Columbia University College of Physicians & Surgeons, NY, NY
June 16, 2006 1.00

Clinicolegal Correlations Course - Basic Science Studies
Self-Study Program Continuing Medical Education Internet
Program, "Provider Interaction" Columbia University College of Physicians & Surgeons, NY, NY
June 16, 2006 1.00

Spine Across the Sea - Kapalua, Hawaii July 23-27, 2006

North American Spine Society Annual Meeting -Seattle, Washington September 26-30, 2006

National Association of Corporate Directors - Washington, DC October 14-15, 2006

Credit Hours

Chinese Orthopaedic Association First International Congress Beijing, China

November 12-15, 2006

Viet Nam Orthopedic Association & Spine Society of HCMC, Viet Nam (SSHV)

Ho Chi Minh City, Viet Nam November 16-22, 2006

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

NASS Spring Break Phoenix, Arizona

March 14-17, 2007

Aesculap Spine Workshop Snowbird Ski Resort

March 21-24, 2007

Spine Arthroscopy Society Annual Meeting - Berlin

May 1-4, 2007

NASS Motion Stabilization Course - Burr Ridge, Illinois

May 18-19, 2007

Clinicolegal Correlations Course - Basic Science Studies Self-Study Program Continuing Medical Education Internet Program, "Patient Conduct" -

Elm Exchange, Inc.

May 30, 2007 1.75

Clinicolegal Correlations Course - Basic Science Studies Self-Study Program Continuing Medical Education Internet Program, "Orthopedics Standards of Care" -Elm Exchange, Inc. May 30, 2007 1.75

Innovative Techniques in Spine Surgery Los Cabos, Mexico June 27-30, 2007

North American Spine Society Annual Meeting Austin, Texas October 23-27, 2007

COA Meeting - Zhengzhou, China November 9-11, 2007

Credit Hours

1st Asia Pacific SAS Conference Seoul, Korea January 16-18, 2008

Current Concepts in Spinal Disorders Las Vegas, Nevada February 1-2, 2008 12.5

Spine Technology Summit - Miami, Florida

May 5, 2008

Spine Arthroplasty Society(SAS) Annual Meeting.
Miami, Florida May 6-9, 2008

1ST World Congress of Minimally Invasive Spine Surgery Techniques (WCMISST)
Honolulu, Hawaii June 3-7, 2008

8th Annual Symposium on Current Concepts in Spinal Disorders Las Vegas, Nevada January 29-31, 2009

1st International Lumbar Surgical Congress
Beijing, China March 20-22, 2009

3rd Congress of The Indonesian Spine Society - Towards the Healthy Spine
Jakarta, Indonesia July 16-18, 2009

Society for Minimally Invasive Spine Surgery
Las Vegas, Nevada October 9-12, 2009

Innovative Techniques in Spine Surgery
Scottsdale, Arizona October 15-17, 2009

NASS 24TH Annual Meeting
San Francisco, California
November 10-24, 2009

Elsevier Editors Conference Scottsdale, Arizona November 13-15, 2009

9th Annual Symposium in Current Concepts in Spinal Disorders 2010 - Las Vegas, Nevada February 4-6, 2010

Credit Hours

2nd MISS Summit Forum at the Aichi Spine Institute - Nagoya, Japan March 12-14, 2010

Preservation of Motion in the Spine Duck Key, Florida April 7-10, 2010 14.75

Innovative Techniques in Spine Surgery Los Cabos, Mexico June 17-19, 2010

19th Annual Meeting-Japanese Spinal Instrumentation Society Sapparo, Japan October 28-29, 2010

International Congress of Minimally Invasive Spine Surgery Antalya, Turkey November 4-7, 2010

10th Annual Symposium on Current Concepts in Spinal
Disorders - Las Vegas, Nevada February 3-5, 2011 10.25

SAS Annual Meeting - Las Vegas, Nevada April 25-28, 2011

11th Annual Symposium on Current Concepts in Spinal Disorders - Las Vegas, Nevada February 2-4, 2012 11.5

12th Annual Global Symposium on Motion Preservation Technology - Barcelona, Spain March 20-23, 2012 22.00

NASS 27th Annual Meeting - Dallas, Texas October 24-27, 2012

13th Annual ISASS Conference -Vancouver, BC April 2-5,2013

KOMISS Symposium and Cadaver Workshop - Seoul, Korea June 1-2, 2013