

17th Annual Meeting

17th Annual Meeting
AANS/CNS Section
on Disorders of the Spine
and Peripheral Nerves

Challenges in the Spine Specialty

February 14-17, 2001

Pointe South Mountain Resort

Phoenix, AZ

Program Book



American
Association of
Neurological
Surgeons



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The Program Book is sponsored
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Continuing Medical Education Credit



American
Association of
Neurological
Surgeons

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The American Association of Neurological Surgeons designates this educational activity for a maximum of 20.5 hours in category 1 credit toward the AMA Physician's Recognition Award with an additional 3.5 hours of category 1 credit available for each Special Course. Each physician should claim only those hours that he/she actually spent in the educational activity.

Disclaimer Officers

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Some drugs and medical devices demonstrated or described on the print publications of the AANS/CNS Spine Section Annual Meeting have a FDA clearance for use for specific purposes or for use only in restricted research settings. The FDA has stated that it is the responsibility of the physician to determine the FDA status of each drug or device he or she wished to use in compliance with applicable law.

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Chairperson:	Curtis A. Dickman, MD
Chairperson Elect:	Paul C. McCormick, MD
Secretary:	Nevan G. Baldwin, MD
Treasurer:	Gerald E. Rodts, MD
Immediate Past Chairperson:	Vincent C. Traynelis, MD
Members-at-Large:	Srinath Samudrala, MD Lloyd Zucker, MD H. Louis Harkey, MD

2001 Annual Meeting Committee

Annual Meeting Chairman:	Timothy C. Ryken, MD
Scientific Program Chairman:	Robert F. Heary, MD
Exhibit Chairman:	Regis W. Haid, Jr., MD
CME Sponsorship Chairman:	Joseph T. Alexander, MD

2001 Scientific Abstract Review Committee

Joseph T. Alexander, MD	Andrea L. Halliday, MD
Barry D. Birch, MD	Timothy C. Ryken, MD
Michael G. Fehlings, MD	Kenneth S. Yonemura, MD

2001 Scientific Advisory Committee

Joseph T. Alexander, MD	Rajiv Midha, MD
Barry D. Birch, MD	Stephen L. Ondra, MD
Michael G. Fehlings, MD	Christopher G. Paramore, MD
Richard G. Fessler, MD, PhD	Daniel K. Resnick, MD
Regis W. Haid, Jr., MD	Gerald E. Rodts, Jr., MD
Haynes L. Harkey, III, MD	Timothy C. Ryken, MD
Robert F. Heary, MD	Kenneth S. Yonemura, MD
R. John Hurlbert, MD	

Past Officers

1999

Chairman:	Vincent C. Traynelis, MD
Chairman Elect:	Curtis A. Dickman, MD
Secretary:	Nevan G. Baldwin, MD
Treasurer:	Curtis A. Dickman, MD
Immediate Past Chairman:	Stephen M. Papadopoulos, MD
Members-at-Large:	Charles L. Branch, MD Srinath Samudrala, MD Lloyd Zucker, MD

1998

Chairman:	Stephen M. Papadopoulos, MD
Chairman Elect:	Vincent C. Traynelis, MD
Secretary:	Vincent C. Traynelis, MD
Treasurer:	Curtis A. Dickman, MD
Immediate Past Chairman:	Richard G. Fessler, MD
Members-at-Large:	Charles L. Branch, Jr., MD Mark N. Hadley, MD John E. McGillicuddy, MD

1997

Chairman:	Richard G. Fessler, MD
Chairman Elect:	Stephen M. Papadopoulos, MD
Secretary:	Vincent C. Traynelis, MD
Treasurer:	Curtis A. Dickman, MD
Immediate Past Chairman:	Edward C. Benzol, MD
Members-at-Large:	Charles L. Branch, Jr., MD Mark N. Hadley, MD John E. McGillicuddy, MD

1996

Chairman:	Edward C. Benzol, MD
Chairman-Elect:	Richard G. Fessler, MD
Secretary:	Stephen M. Papadopoulos, MD
Treasurer:	Peter M. Klara, MD, PhD
Immediate Past Chairman:	Arnold H. Menezes, MD
Members-at-Large:	Gary L. Rea, MD Nancy Epstein, MD John E. McGillicuddy, MD
Ex-Officio Members:	Kevin T. Foley, MD Mark N. Hadley, MD

1995

Chairman:	Arnold H. Menezes, MD
Chairman-Elect:	Edward C. Benzol, MD
Secretary:	Stephen M. Papadopoulos, MD
Treasurer:	Peter M. Klara, MD
Immediate Past Chairman:	Russell L. Travis, MD
Members-at-Large:	Gary L. Rea, MD Nancy Epstein, MD John E. McGillicuddy, MD
Ex-Officio Members:	Kevin T. Foley, MD Mark N. Hadley, MD

1994

Chairman:	Russell L. Travis, MD
Chairman-Elect:	Arnold H. Menezes, MD
Secretary:	Stephen M. Papadopoulos, MD
Treasurer:	Peter M. Klara, MD
Immediate Past Chairman:	Edward C. Tarlov, MD
Members-at-Large:	Edward C. Benzol, MD Gary L. Rea, MD Nancy Epstein, MD

1993

Chairman:	Edward C. Tarlov, MD
Chairman-Elect:	Russell L. Travis, MD
Secretary:	Arnold H. Menezes, MD
Treasurer:	Russell L. Travis, MD
Immediate Past Chairman:	Volker KH Sonntag, MD
Members-at-Large:	Edward C. Benzol, MD Gary L. Rea, MD

1992

Chairman:	Volker KH Sonntag, MD
Chairman-Elect:	Edward C. Tarlov, MD
Secretary:	Arnold H. Menezes, MD
Treasurer:	Russell L. Travis, MD
Members-at-Large:	Donald J. Prolo, MD Melville P. Roberts, MD

Past Officers

1991

Chairman:	Carole A. Miller, MD
Chairman-Elect:	Volker KH Sonntag, MD
Secretary:	Arnold H. Menezes, MD
Treasurer:	Russell L. Travis, MD
Members-at-Large:	Donald J. Prolo, MD Melville P. Roberts, MD

1990

Chairman:	Edward S. Connolly, MD
Chairman-Elect:	Carole A. Miller, MD
Secretary:	Volker KH Sonntag, MD
Treasurer:	Russell L. Travis, MD
Members-at-Large:	Arnold H. Menezes, MD Donald J. Polo, MD

1989

Chairman:	Edward S. Connolly, MD
Chairman-Elect:	Carole A. Miller, MD
Secretary:	Volker KH Sonntag, MD
Treasurer:	Russell L. Travis, MD
Members-at-Large:	Arnold H. Menezes, MD Donald J. Prolo, MD

1988

Chairman:	Stewart B. Dunsker, MD
Secretary:	Carole A. Miller, MD
Treasurer:	Edward C. Tarlov, MD
Members-at-Large:	Phanor L. Perot, Jr., MD Volker KH Sonntag, MD

1987

Chairman:	Stewart B. Dunsker, MD
Secretary:	Carole A. Miller, MD
Treasurer:	Edward C. Tarlov, MD
Members-at-Large:	Phanor L. Perot, Jr., MD Volker KH Sonntag, MD

1986

Chairman:	George W. Sypert, MD
Secretary:	Henry H. Schmidek, MD
Treasurer:	Edward S. Connolly, MD
Members-at-Large:	Carole A. Miller, MD

1985

Chairman:	Russell W. Hardy, MD
Secretary:	Henry H. Schmidek, MD
Treasurer:	Edward S. Connolly, MD
Members-at-Large:	George W. Sypert, MD

1984

Chairman:	Russell W. Hardey, MD
Secretary:	Stewart B. Dunsker, MD
Treasurer:	Edward S. Connolly, MD
Members-at-Large:	Henry H. Schmidek, MD

1983

Chairman:	Sanford J. Larson, MD, PhD
Secretary:	Stewart B. Dunsker, MD
Treasurer:	Edward S. Connolly, MD
Members-at-Large:	Henry H. Schmidek, MD

1982

Chairman:	Sanford J. Larson, MD, PhD
Secretary:	Stewart B. Dunsker, MD
Treasurer:	Edward S. Connolly, MD
Members-at-Large:	Henry H. Schmidek, MD

1981

Chairman:	Sanford J. Larson, MD, PhD
Secretary:	Stewart B. Dunsker, MD
Treasurer:	Edward S. Connolly, MD
Members-at-Large:	Henry H. Schmidek, MD

1980

Chairman:	Sanford J. Larson, MD, PhD
Secretary:	Stewart B. Dunsker, MD
Treasurer:	Edward S. Connolly, MD
Members-at-Large:	K. Smith, MD

Meetings

Previous Meetings

1985	Greenleaf, Florida
1986	San Diego, California
1987	Boca Raton, Florida
1988	Phoenix, Arizona
1989	Cancun, Mexico
1990	Captiva Island, Florida
1991	Rancho Mirage, California
1992	Miami, Florida
1993	Tucson, Arizona
1994	Fort Lauderdale, Florida
1995	Phoenix, Arizona
1996	Lake Buena Vista, Florida
1997	Newport Beach, California
1998	Rancho Mirage, California
1999	Lake Buena Vista, Florida
2000	Palm Springs, California

Meetings

Future Meetings

2002	Lake Buena Vista, Florida
	February 27 - March 2

Committees

Past Program Committees

1985

Barth A. Green, MD
George W. Sybert, MD

1986

Stanley J. Goodman, MD
Barth A. Green, MD
John F. Howe, MD
Hector E. James, MD
Randall W. Smith, MD
Volker KH Sonntag, MD
Philip R. Weinstein, MD

1987

Joel N. Abromovitz, MD
Timothy Harrington, MD
Robert S. Hood, MD
Volker KH Sonntag, MD

1988

Melville P. Roberts, MD
Richard L. Saunders, MD
Volker KH Sonntag, MD
Russell L. Travis, MD
Harold A. Wilkinson, MD

1989

John C. Godersky, MD
Patrick W. Hitchon, MD
Arnold H. Menezes, MD
Carole A. Miller, MD
Russell L. Travis, MD

1990

Bennett Blumenkopf, MD
Paul D. Dernbach, MD
Nancy Epstein, MD
Edward C. Tarlov, MD

1991

Joy Aprin, MD
Benjamin G. Benner, MD
Lawrence F. Borges, MD
Nancy Epstein, MD
Emily D. Friedman, MD

1992

Bennett Blumenkopf, MD
Charles L. Branch, Jr., MD
David W. Cahill, MD
Richard G. Fessler, MD, PhD
Stephen M. Papadopoulos, MD
Gary L. Rea, MD

1993

Charles L. Branch, Jr., MD
David W. Cahill, MD
Curtis A. Dickman, MD
Richard G. Fessler, MD, PhD
Regis W. Haid, Jr., MD
Robert J. Martin, MD
John E. McGillicuddy, MD
Stephen M. Papadopoulos, MD
Noel I. Perin, MD
Gary L. Rea, MD
Moris Senegor, MD

1994

David W. Cahill, MD
Curtis A. Dickman, MD
Richard G. Fessler, MD, PhD
Peter G. Gianaris, MD
H. Louis Harkey III, MD
Paul C. McCormick, MD
Russ P. Nockels, MD
Moris Senegor, MD
Vincent C. Traynelis, MD

1995

Charles L. Branch, Jr., MD
David W. Cahill, MD
Paul R. Cooper, MD
Curtis A. Dickman, MD
Michael G. Fehlings, MD
Regis W. Haid, Jr., MD
H. Louis Harkey III, MD
James P. Hollowell, MD
Peter M. Klara, MD
John J. Knightly, MD
John E. McGillicuddy, MD
Eugene Rossitch, Jr., MD
Charles B. Stillerman, MD
Vincent C. Traynelis, MD

1996

Nevan G. Baldwin, MD
Brian G. Cuddy, MD
Kevin T. Foley, MD
Allan H. Friedman, MD
Regis W. Haid, Jr., MD
H. Louis Harkey III, MD
Patrick W. Hitchon, MD
James P. Hollowell, MD
Richard K. Osenbach, MD
Noel I. Perin, MD
Robert B. Snow, MD
Richard H. Tippetts, MD
Dennis G. Vollmer, MD

1997

Ronald I. Apfelbaum, MD
Paul M. Arnold, MD
Nevan G. Baldwin, MD
Perry A. Ball, MD
Allan J. Belzberg, MD
Brian G. Cuddy, MD
Curtis A. Dickman, MD
Kevin T. Foley, MD
H. Louis Harkey, MD
James P. Hollowell, DM
David G. Kline, MD
Paul C. McCormick, MD
Christopher G. Paramore, MD
Noel I. Perin, MD
Charles B. Stillerman, MD

1998

Nevan G. Baldwin, MD
Charles L. Branch, Jr., MD
Brian G. Cuddy, Jr., MD
Richard G. Fessler, MD
H. Louis Harkey, MD
Gerald E. Rodts, MD

1999

Joseph T. Alexander, MD
Nevan G. Baldwin, MD
Allan J. Belzberg, MD
Charles L. Branch, MD
Brian G. Cuddy, MD
Michael G. Fehlings, MD
Richard G. Fessler, MD, PhD
Kevin T. Foley, MD
Regis W. Haid, Jr., MD
Andrea L. Halliday, MD
H. Louis Harkey, MD
Stephen M. Papadopoulos, MD
Noel I. Perrin, MD
Gerald E. Rodts, Jr., MD
Robert L. Tiel, MD

2000

Joseph T. Alexander, MD
Paul M. Arnold, MD
Nevan G. Baldwin, MD
Perry A. Ball, MD
Christopher H. Comey, MD
Brian G. Cuddy, MD
Michael G. Fehlings, MD
Allan H. Friedman, MD
Mitchell R. Gropper, MD
Regis W. Haid, Jr., MD
Andrea L. Halliday, MD
Louis H. Harkey, MD
Robert F. Heary, MD
R. John Hurlbert, MD
John J. Knightly, MD
Carl Laurysen, MD
Allan D. Levi, MD
Christopher G. Paramore, MD
Gerald E. Rodts, Jr., MD
William S. Rosenberg, MD
Timothy C. Ryken, MD
Robert L. Tiel, MD
Vincent C. Traynelis, MD
Christopher E. Wolflla, MD
Eric J. Woodard, MD
Seth M. Zeidman, MD

Award Winners

Mayfield Award Winners

1984

Mark N. Hadley, MD
Phoenix, AZ

1985

Ab Guha, MD
Toronto, Ontario

1986

No Award Presented

1987

John A. Feldenzer, MD
Ann Arbor, MI

1988

No Award Presented

1989

Richard K. Simpson, Jr., MD
Houston, TX

1990

R. John Hurlbert, MD, PhD
Toronto, Ontario

1991

Peter G. Gianaris, MD
Eau Claire, WI

1992

Rajiv Midha, MD
Toronto, Ontario

1993

Clinical Science
Gerald F. Tuite, MD
Ann Arbor, MI

Basic Science

Allan D.O. Levi, MD, PhD
Miami, FL

1994

Timothy C. Ryken, MD
Iowa City, IA

1995

Simcha J. Weller, MD
Boston, MA

1996

Clinical Science
Paul D. Sawin, MD
Iowa City, IA

Basic Science

Paul C. Francel, MD
Troy, VA

1997

Michael A. Marone
Atlanta, GA

1998

Tord D. Alden, MD
Charlottesville, VA

1999

Basic Science
Steven Casha, MD
Toronto, Ontario

Clinical Science

Nicholas Theodore, MD
Phoenix, Arizona

2000

Basic Science
Neill M. Wright, MD
St. Louis, MO

Clinical Science

Viswanathan Rajaraman,
MD, FRCS
Newark, NJ

2001

Basic Science

Ketan R. Bulsara, MD
Durham, NC

Clinical Science

Gordon W. Tang, MD
Atlanta, GA

Winners

Fellowship Awards

Recipients

Service Awards

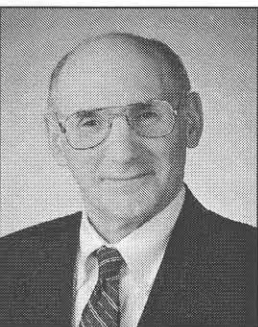
AANS/CNS Section on Disorders of the Spine and Peripheral Nerves Fellowship Award Winners

1993 Ziya L. Gokasian, MD Houston, TX	1997 No Award Given
1994 Christopher I. Shaffery, MD Charlottesville, VA	1998 No Award Given
1995 R. John Hurlbert, MD, PhD Toronto, Ontario	1999 No Award Given
1996 Simcha J. Weller, MD Boston, MA	2000 Larry Khoo, MD

Meritorious Service Award Recipients (previously Lifetime Achievement Award)

1990 Ralph B. Cloward, MD	1996 No Award Given
1991 Frank H. Mayfield, MD	1997 David G. Kline, MD
1992 Charles A. Fager, MD	1998 Russell L. Travis, MD
1993 Joseph A. Epstein, MD	1999 Volker KH Sonntag, MD
1994 Stanford J. Larson, MD, PhD	2000 Arnold H. Menezes, MD
1995 No Award Given	2001 Stewart B. Dunsker, MD

2001 Meritorious Service Award Recipient



Stewart B. Dunsker, MD

It is with great pleasure that we announce Stewart B. Dunsker, MD as the Meritorious Service Award Recipient for the American Association of Neurological Surgeons and the Congress of Neurological Surgeons Joint Section on Disorders of the Spine and Peripheral Nerves for the 2001 Annual Meeting.

Dr. Dunsker is Professor, Vice-Chairman and Director of the Division of Spine Surgery of the Department of Neurosurgery at the University of Cincinnati where he has been in practice for over thirty years. Following his undergraduate education at Harvard, he completed his Neurosurgical training at Washington University in 1968. He completed his fellowship training and continued on into a successful academic neurosurgical practice.

Dr. Dunsker has been an active member of the AANS and has served a major role in the organization including President (2000-2001), President-Elect (1999-2000), Vice-President (1998-1999), Treasurer (1995-1998), Board of Directors (1992-1996), as well as serving on numerous educational and organizational committees. He has been active in the Congress of Neurological Surgeons as well, serving on the Executive Committee, the Continuing Education Committee, the Joint Committee on Spinal Disorders, the Nominating Committee and numerous appointments on the Annual Meeting Committees. His contributions also include active involvement in the American Academy of Neurological Surgeons

(Vice-President 1990, Scientific Program Chair 1988-1990, Executive Committee 1983), the Society of University Neurosurgeons (President 1981, President-Elect 1980, Vice-President 1979), the Ohio State Medical Association (President 1981-1982), and the Ohio State Neurosurgical Society (President 1983-1984).

Dr. Dunsker has served on the American Board of Neurological Surgery, including positions as Vice-Chairman, Treasurer, Examiner and as a member of the Board of Directors. He has received numerous honors including being named the Neurosurgeon of the Year in 1992 by the Ohio State Neurosurgical Society and numerous other humanitarian and teaching citations. He serves on numerous editorial boards including the journals, *Neurosurgery*, *Spine*, *Journal of Spinal Disorders*, and as Associate Editor of the latest edition of *Youman's Text of Neurosurgery*. Having numerous presentations, visiting professorships and symposia to his credit, he has also authored over 50 publications on topics ranging from spinal disorders to cerebellar neurophysiology.

In addition to his many other contributions to organized Neurosurgery, he is being honored by our Section for his outstanding dedication and service. He is one of the Founding Fathers of the Joint Section on Spine and Disorders of the Peripheral Nerves, joining that historic first group in 1979 and beginning the annual tradition which has now grown to one of the largest organized neurosurgical meetings in the country. He has served the Section as Chairman (1987-1989), Chairman-Elect (1985-1987) and Secretary (1980-1984). Dr. Dunsker truly demonstrates the qualities, character and dedication of the academic neurosurgeon. On behalf of the Section, it is our privilege to honor Dr. Dunsker and his achievements as the 2001 Meritorious Award Recipient.

Winners

Mayfield Award Winners

Basic Science



Ketan Ramanlal Bulsara, MD

Dr. Bulsara was born in Bombay, India in 1971. In 1983, Dr. Bulsara emigrated from Zambia, Africa to the United States. He later became a naturalized citizen of the United States in 1991.

Dr. Bulsara finished high school at the age of 16 and went on to Davidson College in North Carolina to study Biology. After graduating Magna Cum Laude from

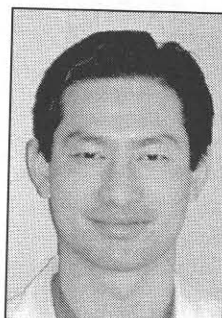
Davidson College, Dr. Bulsara moved on to medical school at Duke University School of Medicine where he graduated with honors. Currently, Dr. Bulsara is a Neurological Surgery Resident at Duke University Medical Center.

In addition to the Mayfield Basic Science Award, Dr. Bulsara has been honored with other awards and grants during his residency. These awards and grants include the following: the Shulman Resident Award, the International Neurosurgery Foundation Grant, the Ruth K. Broad Biomedical Research Grant and a Travelling Fellowship in Neurosurgery with mentor and past Meritorious Service Award recipient, Arnold Menezes, MD. Dr. Bulsara has also received 14 prestigious awards and grants throughout his studies as an undergraduate and in medical school. Some of these honors include being selected by faculty and peers as the Ideal Physician of the Duke Medical School graduating class of 1992, the Howard Hughes Research Fellowship, the Dana Foundation Research Grant and the Carnegie Mellon Fellowship.

Since 1996, Dr. Ketan Bulsara has been the lead author or co-author in 13 published research articles or case studies. During the same time period, he has also been the lead author or co-author in 10 published abstracts, many of these abstracts have also been given as oral presentations at several International or National Scientific meetings. Lastly, Dr. Bulsara has had a co-author involvement in 3 books, including 1 textbook.

The work that Dr. Bulsara will be presenting at the AANS/CNS Section on Disorders of the Spine and Peripheral Nerves meeting will have also been published in the January, 2001 issue of *Nature Neuroscience*.

Clinical Science



Gordon Tang, MD

Dr. Tang is a 6th year neurosurgery resident at Emory University. He received undergraduate degrees in engineering and philosophy at the University of California, Berkeley. Dr. Tang attended medical school at the University of Southern California where he was a member of the Alpha Omega Alpha Honor Society and graduated with highest distinction. In

addition to the Mayfield Award, he is the winner of 18 research awards or fellowships including the most recent Galbraith Award for cerebrovascular disease. Dr. Tang has authored over 70 publications and presentations primarily in the areas of spine and cerebrovascular disorders. He is married and has three children.

Winners

Award Winners

Cloward Fellowship



Jason Eric Garber, MD

Dr. Garber, a native of Houston, Texas, earned a bachelor's degree in History and Classical Studies at Duke University in 1991. While at Duke University, Dr. Garber was selected as a Howard Hughes Fellow for Research in the Biological Sciences. He subsequently received his medical degree from The University of Texas Health Science Center at San

Antonio, Texas in 1995. Following graduation from medical school, Dr. Garber entered the Baylor College of Medicine Neurosurgical Residency training program, where he is currently in his chief residency year.

Under the direction of Dr. Robert G. Grossman, Dr. Garber has pursued research interests in cancerous and non-cancerous pain management. He has published a number of articles in the area of pain management, as well as authoring several book chapters. Dr. Garber has an interest in pursuing a career in academic neurosurgery, with an emphasis on combining clinical and basic science research and spinal surgery. Specifically, he has an interest in the biology and biomechanics of bone fusion.

One of Dr. Garber's hobbies is traveling, and in conjunction with his interest in archeology and ancient Greco-Roman history, he has carried out excavations in Turkey and Greece. Furthermore, he is planning a trip down the Amazon in March.

Dr. Garber would like to thank his parents for their constant love, support and encouragement. He would also like to thank Dr. Grossman for providing him the opportunity of a lifetime. Finally, Dr. Garber would like to thank Dr. Dennis Maiman, and the Medical College of Wisconsin for providing him the opportunity to further his neurosurgical research interests in the field of spinal surgery.

Non-Disclosure Information

The AANS/CNS Section on Disorders of the Spine and Peripheral Nerves and American Association of Neurological Surgeons control the content and production of this CME activity and attempt to assure the presentation of balanced, objective information. In accordance with the Standards for Commercial Support established by the Accreditation Council for Continuing Medical Education, speakers and paper presenters are asked to disclose any relationship they or their co-authors have with commercial companies which may be related to the content of their lecture.

Speakers and paper presenters/authors who have reported they do not have any relationship with commercial companies are listed below.

Serdar Ozgen, MD (61)
 Yaser A. Abdel Maksoud, MD (101)
 Laurie L. Ackerman, MD (35), (69)
 Michael A. Amaral, MD (2)
 Paul M. Arnold, MD (103)
 Perry A. Ball, MD (48)
 Juan C. Bartolomei, MD (107)
 Emile Berger, MD (57)
 William J. Beutler, MD (8), (14)
 Bikash Bose, MD (14), (73)
 Ketan R. Bulsara, MD (27)
 Steven Casha, MD (22)
 Peng Chen, MD (75)
 John C. Chiu, MD (45), (46), (47)
 Kyoung-Suok Cho, MD, PhD (17), (42), (72)
 Jay Y. Chun, MD, PhD (104)
 Park Chun-Kun, MD (6)
 Alex deCholnoky, MD, MA (108)
 Darryl J. DiRisio, MD (37)
 David A. Ditsworth, MD (59)
 Stephan J. Du Plessis, MD (13)
 Thomas B. Ducker, MD (36)
 Neil Duggal, MD (31)
 Kevin T. Foley, MD (3), (67)
 Daryl R. Fournay, MD (24)
 Fred H. Geisler, MD, PhD (26), (98)
 Benoit Goulet, MD, FRCSC (82)

John J. Guarnaschelli, MD (70), (85)
 James D. Guest, MD, PhD, FRCS (C) (91)
 Patrick P. Han, MD (95)
 J. Frederick Harrington, MD (88)
 Robert F. Heary, MD (7)
 Matthew N. Henry, MD (63)
 Martin D. Herman, MD, PhD (30)
 Kazutoshi Hida, MD (38)
 Otakar Hubschmann, MD (96)
 Arthur L. Jenkins III, MD (33)
 Byung Chan Jeon, MD, PhD (71)
 Timothy J. Johans, MD (105)
 M. T. Jurkiewicz, MD (9)
 Sadashiv Karanth, MS FRCS (90)
 Larry T. Khoo, MD (23), (29)
 Young Soo Kim, MD (11), (32)
 Kee D. Kim, MD (16)
 Phillip Kissel, MD (17)
 Andrei V. Krassioukov, MD, PhD (5), (58)
 Kosuke Kuribayashi, MD (54)
 Daniel T. Laich, DO, MD (60)
 Sang Ho Lee, MD, PhD (83), (97)
 Steven P. Leon, MD (23)
 Allan D. Levi, MD, PhD (21)
 John C. Liu, MD (8)
 Ming-Ying Liu, MD (80)
 Gary L. Lowery, MD, PhD (13), (50)
 James J. Lynch, MD (68)
 Junichi Mizuno, MD (53)
 Hiroshi Nakagawa, MD (34)
 Andrew N. Nemecek, MD (18)
 Eric W. Nottmeier, MD (14)
 Serge K. Obukhov, MD, PhD (36)
 Christopher G. Paramore, MD (5)
 Choon-Keun Park, MD (74), (89)
 Mansour Parvaresh-rizi, MD (56)
 Naresh P. Patel, MD (21), (65)
 Noel I. Perin, MD, FRCS (Ed) (19), (79)
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 Christian G. Zimmerman, MD, FACS (3), (100)

Disclosure Information

The AANS/CNS Section on Disorders of the Spine and Peripheral Nerves and American Association of Neurological Surgeons control the content and production of this CME activity and attempt to assure the presentation of balanced, objective information. In accordance with the Standards for Commercial Support established by the Accreditation Council for Continuing Medical Education, speakers and paper presenters are asked to disclose any relationship they or their co-authors have with commercial companies which may be related to the content of their lecture.

Speakers and paper presenters/authors who have disclosed a relationship* with commercial companies whose products may have a relevance to their presentation are listed below and will be designated throughout the program book by an "*".

Bryan B. Barnes, MD (12)	Gerald E. Rodts, Jr., Regis W. Haid, Jr. consultants, Sofamor Danek
Sarah J. Baum, MD (28)	Resident Educational Grant Depuy / Acromed
Orin Bloch, (20)	Radionics, Inc., J. Patrick Johnson, MD, research support
James P. Burke, MD, PhD (2), (10)	Sofamor-Danek, Dr. Abba, research grant
	Sofamor-Danek, Dr. Abba, research grant
David W. Cahill, MD (9)	Research support, Safamor Danek
Joseph C. Cauthen, MD (22)	Sulzer Spine-Tech, Inc., Research Support
Neil Duggal, MD (4)	Research grant from Spinal Concepts
Lisa A. Ferrara, MS (55)	DePuy Acromed funded the research study
Kevin Foley, MD (28)	Research support obtained from Medtronic; Foley, Rodts are Medtronic consultants.
Paul C. Francel, MD, PhD (20)	This work was partially supported by the Walter Lorenz Company. Support was both financial and material. Financial support was in the form of an unrestricted grant for general research.
Patrick W. Hitchon, MD (16)	Howmedica provided financial support for research
Patrick W. Hitchon, MD (86)	Financial support for research from Spine Tech Inc., Minneapolis, MN
Langston T. Holly, M.D. (62)	Radionics Inc. - educational support to Dr. Johnson
J. Patrick Johnson, MD (84)	Depuy-Acromed Inc., Consultant
Gary L. Lowery, MD, PhD (18)	Consultant Agreement, DePuy Acromed, Raynham, MA

Gary L. Lowery, MD, PhD (25)

Marta Martinez, PhD (11), (27)

Praveen V. Mummaneni, MD (93)

T. Glenn Pait, MD (6)

Sylvain Palmer, MD (49)

Walter C. Peppelman, DO (1)

William S. Rosenberg, MD (4)

Ann R. Stroink, MD (25)

Narayan Sundaresan, MD (39)

William R. Taylor, MD (81)

A. Giancarlo Vishteh, MD (1)

Anthony T. Yeung, MD (29), (31), (33)

Sofamor-Danek Group, 1800 Pyramid Place, Memphis, TN 38132, (Royalties)
The research was funded by NIH Grant NCRR Grant 2P41RR066009 and ONR Grant # N00014-94-1-0989
This work was funded in part by the University of California, San Francisco, Department of Neurosurgery; the University of California, Berkeley, Department of Mechanical Engineering; and by an Unrestricted Research Grant from Medtronic Sofamor Danek (Memphis, TN).

T. Glenn Pait, MD, Consultant: Medtronic, Sofamor Danek, Johnson & Johnson, DePuy AcroMed Medtronic, Inc., Sylvain Palmer, Consultant

Dr. Peppelman is a consultant for Sulzer-Spinetech. He has not received any financial support with regard to BAK interbody cages, however.

Unrestricted gift for research from Medtronic Sofamor Danek US Surgical Corporation (grant/research support)

Sofamor Danek, Inc., Dr. N. Sundaresan (consultant)

ArthroCare - Scientific Advisory Board

Research grant from Medtronic Sofamor Danek

Inventor of the YESS system. Consultant for Richard Wolf Surgical Instrument Co, Ellman International, and former advisor to Oratec.

*Relationship refers to receipt of royalties, consultantship, funding by research grant, receiving honoraria for educational services elsewhere, or any other relationship to a commercial company that provides sufficient reason for disclosure.

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Yaser A. Abdel Maksoud, MD (101)
Laurie L. Ackerman, MD (35), (69)
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Kosuke Kuribayashi, MD (54)
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Sang Ho Lee, MD, PhD (83), (97)
Steven P. Leon, MD (23)
Allan D. Levi, MD, PhD (21)
John C. Liu, MD (8)
Ming-Ying Liu, MD (80)
Gary L. Lowery, MD, PhD (13), (50)
James J. Lynch, MD (68)
Junichi Mizuno, MD (53)
Hiroshi Nakagawa, MD (34)
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Eric W. Nottmeier, MD (14)
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Meeting Agenda

Following the scientific sessions, attendees should be able to critique the value of the recommended surgical and non-surgical options presented in the scientific papers. They will also be able to evaluate the relevance of the research methodologies, and the findings and potential usefulness in the practice of the topics presented.

Wednesday, February 14, 2001

- 7:00 am - 9:00 am Registration (Special Course I & II) - West Registration Desk
- 7:00 am - 5:00 pm Speaker Preview Room - West Courtroom 3
- 12:00 pm - 7:00 pm Registration - West Registration Desk
- 1:00 pm - 5:00 pm Special Course I - *Kachina/Lantana/Mohave New Concepts & Technologies: The Impact on Your Practice*

Course Director: Regis W. Haid, Jr., MD
 Course Co-Director: Edgar Dawson, MD
 Faculty: Robert F. Heary, MD, Richard G. Fessler, MD, PhD, Seth M. Zeidman, MD, Curtis A. Dickman, MD, Jurgen Harms, MD, Gerald E. Rodts, Jr., MD, R. Bertagnoli, MD, Vincent C. Traynelis, MD, Kevin T. Foley, MD
 CME Credit: 3.5 hours

I. Current Controversies

1. IDET: Does it really work? Robert F. Heary, MD
2. Vertebroplasty: Who, When & How Richard G. Fessler, MD, PhD
3. Electromagnetic Stimulation: Fact or Fantasy Seth M. Zeidman, MD
4. Thoracoscopic Surgery: Long Run for a Short Slide? Curtis A. Dickman, MD
5. TLIF: Why it May be Better - Jurgen Harms, MD
6. Anterior Cervical Plates: Evolution & Classification Regis W. Haid, Jr., MD

II. Future Considerations

7. BMP: Overview, Update, FDA Status Brian R. Subach, MD
8. The Internet & Your Practice: Hype or Reality Gerald E. Rodts, Jr., MD
9. Interbody Carbon Arthrodesis: Materials in the New Millennium R. Bertagnoli, MD
10. The Artificial Disc: Early Outcomes & Future Applications Vincent C. Traynelis, MD
11. Virtual Fluoroscopy: Technology for Geeks or Surgeons? Kevin T. Foley, MD

Learning Objectives

Participants should be able to:

- 1) Summarize current and future technologies in the treatment of spinal disease.
- 2) Evaluate current controversies in the treatment of spinal disease.

1:00 pm - 5:00 pm Special Course II - *Navajo Management of Nerve Injury*

Course Director: Rajiv Midha, MD
 Faculty: Rajiv Midha, MD, David G. Kline, MD, Allan J. Belzberg, MD, Allen H. Maniker, MD, Eric L. Zager, MD, Robert L. Tiel, MD, John E. McGillicuddy, MD
 CME Credit: 3.5 hours

Learning Objectives

Participants should be able to:

- 1) Assess the patient with nerve injury for surgical and non-surgical treatment.
- 2) Differentiate methods of management of nerve pain.
- 3) Formulate treatment options towards desired outcomes.

6:00 pm - 9:30 pm Child Care - East Courtroom 3

6:30 pm - 9:00 pm Opening Reception at Pointe South Mountain Resort - East Garden

Thursday, February 15, 2001

- 6:30 am - 7:45 am Continental Breakfast - Squaw Peak Patio
- 6:30 am - 5:00 pm Registration - West Registration Desk
- 6:30 am - 5:30 pm Speaker Preview Room - West Courtroom 3
- 8:00 am - 11:00 am Guest Hospitality - East Courtroom 3
- 8:30 am - 7:00 pm Exhibit & Poster Viewing - Grande Ballroom
- 7:00 am - 7:15 am Opening Remarks - South Mountain Ballroom

Robert F. Heary, MD, Scientific Program Committee Chairman
 Curtis A. Dickman MD, Section Chairperson

7:15 am - 8:50 am Scientific Session I - South Mountain Ballroom *The Management of Spinal Deformity*

Moderators: Christopher I. Shaffrey, MD, Gerald E. Rodts, Jr., MD

Learning Objectives

Participants should be able to:

- 1) Examine the pathogenesis and clinical presentations of spinal deformity.
- 2) Interpret and evaluate radiographs demonstrating complex spinal curvatures.
- 3) Discuss surgical indications and operative treatment strategies for multiple types of spinal deformity.

7:15 am **An Introduction to Spinal Deformity**
 Robert F. Heary, MD

7:30 am **Principles of Sagittal Plane Deformity**
 Stephen L. Ondra, MD

7:45 am **Principles of Coronal Plane Deformity**
 Alexander R. Vaccaro, MD

8:00 am **Adolescent Idiopathic Scoliosis**
 David W. Polly, MD

Meeting Agenda

Thursday, February 15, 2001 (continued)

Scientific Session I (continued)

- 8:15 am** **Schuermann's Kyphosis**
Nevan G. Baldwin, MD
- 8:30 am** **Adult Scoliosis (immobile)**
Todd J. Albert, MD
- 8:50 am - 8:55 am** Introduction of Chairperson:
Volker KH Sonntag, MD
- 8:55 am - 9:10 am** Chairpersons Address:
Curtis A. Dickman, MD
- 9:10 am - 10:00 am** Beverage Break with Exhibitors -
Grande Ballroom
Session I: **What's New?**
Moderators: Mitchell R. Gropper, MD, Andrea L. Halliday, MD
- 10:00 am - 12:00 pm** Contributed Papers -
South Mountain Ballroom
Moderators: David W. Cahill, MD, Timothy C. Ryken, MD
- 10:00 am - 10:07 am** **1. Biomechanics of Anterior versus Posterior Threaded Lumbar Interbody Fusion Cages**
A. Giancarlo Vishteh, MD* (Mesa, AZ), Neil R. Crawford, PhD, Jeffrey J. Thramann, MD, Robert H. Chamberlain, BS, Sung Chan Park, MD, J. Bradley Craig, BS, Volker KH Sonntag, MD, Curtis A. Dickman, MD (Phoenix, AZ)
- 10:07 am - 10:14 am** **2. How Well Does Lumbar Fusion Preserve Physiologic Lordosis?**
Michael A. Amaral, MD (Bloomington, IL), Stephan J. Troyanovich, DC (Normal, IL)
- 10:14 am - 10:21 am** **3. Biomechanical Advantage of a Translational Anterior Cervical Plate versus a Constrained Anterior Cervical Plate**
Kevin T. Foley, MD, Denis J. DiAngelo, PhD, Weiqiang Liu, PhD, Larry Davidson, MD, Kristine M. Olney, BS (Memphis, TN)
- 10:21 am - 10:28 am** **4. Biomechanical Effects of Unilateral Cervical Facet Lock**
Neil Duggal, MD* (London, ON), Neil R. Crawford, PhD, Robert H. Chamberlain, BS, Sung Chan Park, MD, Volker KH Sonntag, MD, Curtis A. Dickman, MD (Phoenix, AZ)

- 10:28 am - 10:40 am** Discussion
- 10:40 am - 10:47 am** **5. The Use of Virtual Fluoroscopy in Anterior Cervical Spine Surgery**
Christopher G. Paramore, MD, Charles Wolff, MD, Mark N. Hadley, MD (Birmingham, AL)
- 10:47 am - 10:54 am** **6. Prognostic Role of Epidural Leakage of Polymethylmethacrylate Following Vertebroplasty in Osteoporotic Vertebral Fractures**
Park Chun-Kun, Kyeong-Sik Ryu, Kyong-Suk Cho (Seoul, Korea), Choon-Keun Park (Suwon, Korea), Joon-Ki Kang (Seoul, Korea)
- 10:54 am - 11:01 am** **7. Aggressive, Early Debridement for Vertebral Osteomyelitis**
Robert F. Heary, MD, Richard P. Schlenk, MD, Margaret Black, NP-C (Newark, NJ)
- 11:01 am - 11:08 am** **8. Recurrent Laryngeal Nerve Injury with Anterior Cervical Spine Surgery: Risk with Laterality of Surgical Approach**
William J. Beutler, MD (Harrisburg, PA), Colleen A. Sweeney, MA, Patrick J. Connolly, MD (Syracuse, NY)
- 11:08 am - 11:20 am** Discussion
- 11:20 am - 11:27 am** **9. Anatomic Reduction of Grade III and IV Spondylolisthesis**
David W. Cahill, MD* (Tampa, FL)
- 11:27 am - 11:34 am** **10. Translaminar Facet Screw versus Pedicle Screw Fixation: An Analytical Study on Perioperative Morbidity**
Sagun K. Tuli, MD, MSc, FRCSC, Arthur Jenkins, MD, Sharon Whitney, PAC, Marc Eichler, MD, Eric Woodard, MD (Boston, MA)
- 11:34 am - 11:41 am** **11. Degenerative Kyphoscoliosis: PLIF and Pedicle Screw by One-Stage Posterior Approach**
Young Soo Kim, MD, Dong-Kyu Chin, Wan-Soo Lee, Yong-Eun Cho, Byung-Ho Jin (Seoul, Korea)
- 11:41 am - 11:48 am** **12. PLIF With Allograft Bone: Results Comparing Cylindrical Dowels and Impacted Wedges**
Bryan B. Barnes, MD* (Decatur, GA), Daniel Suh, MD, Gerald E. Rodts, Jr., MD, Regis W. Haid, Jr., MD (Atlanta, GA)

11:48 am - 12:00 pm Discussion

12:00 pm - 1:00 pm Lunch with Exhibitors - Grande Ballroom

1:00 pm - 2:40 pm Contributed Papers - South Mountain Ballroom

Moderator: Seth M. Zeidman, MD, Stephen M. Papadopoulos, MD

1:00 pm - 1:07 pm **13. Cerebellar Evoked Potentials for Spinal Cord Monitoring**

Stephan J. DuPlessis, MD, R. John Hurlbert (Calgary, Alberta), R. S. Fisher, V. KH Sonntag (Phoenix, AZ)

1:07 pm - 1:14 pm **14. Neurophysiological Monitoring of Spinal Nerve Root Function During Instrumented Posterior Lumbar Spine Surgery**

Bikash Bose, MD (Newark, DE), Lawrence R. Wierzbowski, AuD, Anthony K. Sestokas, PhD (Bala Cynwyd, PA)

1:14 pm - 1:21 pm **15. Dynamic Weight Bearing Cervical MRI**

Todd W. Vitaz, MD, Christopher B. Shields, MD, George H. Raque, MD, Stephen Hushek, PhD, Thomas Moriarty, MD, PhD (Louisville, KY)

1:21 pm - 1:30 pm Discussion

1:30 pm - 1:37 pm **16. Anterior Cervical Fractional Interspace Decompression - A Clinical Series**

Kee D. Kim, MD, Jesse D. Babbitz, MD (Sacramento, CA), J. Patrick Johnson, MD (Los Angeles, CA)

1:37 pm - 1:44 pm **17. Anterior Cervical Fusion With Autogenous Vertebral Body Bone Graft: Results in Single Level Surgery**

Phillip Kissel, MD, Larry Herron, MD (San Luis Obispo, CA)

1:44 pm - 1:51 pm **18. Stabilization of Combined Anterior and Posterior Cervical Instability via Anterior Fusion and Plating**

Andrew N. Nemecek, MD (Seattle, WA), Anthony M. Avellino, MD, (Cockeysville, MD), M. Sean Grady, MD (Philadelphia, PA), Jens R. Chapman, MD, Paul A. Anderson, MD, David W. Newell, MD (Seattle, WA)

1:51 pm - 2:00 pm Discussion

2:00 pm - 2:07 pm **19. Surgical Management of Brachial and Lumbosacral Plexus Tumors**

Line Jacques, MD FRCS(C) (Montreal, PQ)

2:07 pm - 2:14 pm **20. Enhanced Regeneration of Peripheral Nerve Defect Using a Resorbable Conduit**

Paul C. Francel, MD PhD*, F.A. Stevens, BS, S. C. Kim, MD, K. Smith, DDS, J. Gossett, DDS, C. Gossett, DDS, M.E. Davis, DDS, M. Lenaerts, MD, P. Tompkins, MS (Oklahoma City, OK)

2:14 pm - 2:21 pm **21. Peripheral Nerve Grafts Promote Central Nervous System Regeneration after Primate Spinal Cord Injury**

Allan D. Levi, MD, PhD (Miami, FL)

2:21 pm - 2:28 pm **22. Death Receptor Mediated Apoptosis after Spinal Cord Injury: A Potential Therapeutic Target Reduce Post-traumatic Axonal Degeneration**

Steven Casha, MD, Michael G. Fehlings (Toronto, ON)

2:28 pm - 2:40 pm Discussion

2:40 pm - 3:10 pm Oral Poster Presentations

2:40 pm - 2:43 pm **1. Anterior Lumbar Interbody Fusion with paired BAK Proximity and paired BAK Standard Cages: Subsidence Incidence and Clinical Outcome**

Walter C. Peppelman, DO*, William J. Beutler, MD (Harrisburg, PA)

2:43 pm - 2:46 pm **2. Update to Pedicle Screw Fixation and Allograft Arthrodesis in the Young and Elderly Populations**

James P. Burke, MD, PhD*, Adnan A. Abl, MD, Hikmat El Kadi, MD, PhD, Jeff Bost, PAC, Abir Abl, Adib Abl (Pittsburgh, PA)

2:46 pm - 2:49 pm **3. Open Reduction and Internal Fixation of Hangman's Fractures**

Christian G. Zimmerman, MD FACS, Timothy Floyd, MD, Bruce Anderson, MD PhD, Pennie S. Seibert, PhD (Boise, ID)

Meeting Agenda

Thursday, February 15, 2001 (continued)

Oral Poster Presentations (continued)

2:49 pm - 2:52 pm

4. Effect of Implant and Bone Material Properties on Load Transfer in Cylindrical Interbody Cages: A Computational Study

William S. Rosenberg, MD* (San Francisco, CA), William J. Palm IV, BS, Tony M. Keaveny, PhD (Berkeley, CA)

2:52 pm - 2:55 pm

5. Intraoperative Monitoring of Anal and Bladder Sphincteric EMG during Neurosurgical Treatment of Tethered Spinal Cord Syndrome

Andrei V. Krassioukov, MD, PhD, Roger Sarjeant, MS, Homan Arkia, MD, Soad Louissi, Michael G. Fehlings, MD, PhD, FRCSC (Toronto, ON)

2:55 pm - 2:58 pm

6. Inside-Outside Technique for Occipitocervical Spine Fixation and Bone Grafting in Children

T. Glenn Pait, MD*, George T. Burson, MD, Richard E. McCarthy, MD, Ossama Al-Mefty, MD (Little Rock, AR), Frederick A. Boop, MD (Memphis, TN), Kenan I. Arnautovic, MD (Little Rock, AR)

2:58 pm - 3:01 pm

7. Role of Intracellular Calcium Stores After Traumatic Spinal Cord White Matter Injury In Vitro

William E. Thorell, MD, Sandeep K. Agrawal, PhD, Lyal G. Leibrock, MD (Omaha, NE)

3:01 pm - 3:04 pm

8. Is Laproscopic Anterior Lumbar Interbody Fusion Useful?

John C. Liu, MD, Steven L. Ondra, MD, Peter Angelos, MD, PhD (Chicago, IL), Misty L. Landers, BA (San Francisco, CA)

3:04 pm - 3:10 pm

Discussion

3:10 pm - 4:00 pm

Beverage Break with Exhibitors - Grande Ballroom
Session II: **What's New?**

Moderators: Ehud Mendel, MD, Srinath Samudrala, MD

4:00 pm - 5:30 pm

Scientific Session II -
South Mountain Ballroom
Controversies in Peripheral Nerve Disorders

Moderators: John E. McGillicuddy, MD, Rajiv Midha, MD

Learning Objectives

Participants should be able to:

- 1) Recognize the anatomy and clinical features of peripheral nerve compression syndromes and neuromas.
- 2) Discuss the appropriate evaluation and treatment options for peripheral nerve disorders.
- 3) Formulate reasonable surgical and non-surgical treatment strategies for patients with peripheral nerve complaints.

4:00 pm - 4:30 pm

Controversy 1: **Ulnar Nerve Compression at the Elbow**

4:00 - 4:09

Simple decompression is superior
Eric L. Zager, MD

4:09 - 4:18

Nerve transposition is superior
David G. Kline, MD

4:18 - 4:21

Rebuttal 1

4:21 - 4:24

Rebuttal 2

4:24 - 4:30

Audience

4:30 pm - 5:00 pm

Controversy 2:
Thoracic Outlet Syndrome

4:30 - 4:39

Surgical treatment is superior
James N. Campbell, MD

4:39 - 4:48

Conservative (non-surgical) treatment is superior
John E. McGillicuddy, MD

4:48 - 4:51

Rebuttal 1

4:51 - 4:54

Rebuttal 2

4:54 - 5:00

Audience

5:00 pm - 5:30 pm

Controversy 3
Painful Neuroma

5:00 - 5:09

Surgical excision is superior
Robert L. Tiel, MD

5:09 - 5:18

Modulatory treatment is superior
Allan J. Belzberg, MD

5:18 - 5:21

Rebuttal 1

5:21 - 5:24

Rebuttal 2

5:24 - 5:30

Audience

5:30 pm - 7:00 pm

Wine and Cheese Reception/
Poster Session - Grande Ballroom

Meeting Agenda

Friday, February 16, 2001

6:30 am - 7:45 am	Continental Breakfast - Squaw Peak Patio
6:30 am - 12:00 pm	Registration - West Registration Desk
6:30 am - 12:00 pm	Speaker Preview Room - West Courtroom 3
7:00 am - 7:45 pm	Challenging Cases Session - South Mountain Ballroom

Moderator: Stephen L. Ondra, MD

Reviewers: Daniel K. Resnick, MD, Christopher E. Wolf, MD, Mitchell R. Gropper, MD

7:45 am - 9:15 am	Scientific Session III - South Mountain Ballroom Perils and Pitfalls of Instrumented Spinal Surgeries
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Moderators: Edward C. Benz, MD, Barry D. Birch, MD

Learning Objectives

The participants should be able to:

- 1) Discuss relevant clinical indications for performing different types of spinal instrumentation.
- 2) Recognize potential graft instrumentation problems both pre- and post-operatively.
- 3) Relate the relevant surgical anatomy and technique for placement of various types of spinal instrumentation and harvest of grafts.

7:45 am	Problems with Cages Regis W. Haid, Jr., MD
8:00 am	Problems with Screws Vincent C. Traynelis, MD
8:15 am	Problems with Hooks Christopher I. Shaffrey, MD
8:30 am	Problems with Image Guidance Iain H. Kalfas, MD
8:45 am	Problems with Infections Timothy C. Ryken, MD
9:00 am	Problems with Grafts Richard G. Fessler, MD, PhD
8:00 am - 11:00 am	Guest Hospitality - East Courtroom 3
8:30 am - 12:00 pm	Exhibit & Poster Viewing - Grande Ballroom
9:15 am - 10:10 am	Awards Session - South Mountain Ballroom

Moderators: Curtis A. Dickman, MD, Robert F. Heary, MD

9:15 am - 9:40 am **Mayfield Clinical Science Award**
presented by Keith R. Kuhlengel, MD

Mayfield Clinical Science Paper
Gordon W. Tang, MD

9:20 am-9:30 am **26. The Natural History Of Discogenic Pain**

Gordon Tang, MD, Regis W. Haid Jr., MD, Gerald E. Rodts Jr., MD (Atlanta, GA)

Mayfield Basic Science Award
presented by Keith R. Kuhlengel, MD

Mayfield Basic Science Paper
Ketan R. Bulsara, MD

9:30 am-9:40 am **27. Axonal Regeneration in the Spinal Cord is Possible by Replacing Two Key Growth Cone Components**

Ketan R. Bulsara, MD, Howard Bomze, PhD (Durham, NC), Bermans J. Iskandar (Madison, WI), J.H. Pate Skene, PhD (Durham, NC)

9:40 am - 10:10 am **Poster Session Awards**
Presented by Robert F. Heary, MD

Research Grant Award
Presented by Robert F. Heary, MD

Cloward Fellowship Award
Presented by Ziya L. Gokaslan, MD
Recipient: Jason E. Garber, MD

Meritorious Achievement Award
Presented by Curtis A. Dickman, MD
Recipient: Stewart B. Dunsker, MD

10:10 am - 11:00 am Beverage Break with Exhibitors - Grande Ballroom
Session III: **What's New?**

Moderators: Gregory R. Trost, MD, Donald D. Dietze, Jr., MD

11:00 am - 12:00 pm Contributed Papers - South Mountain Ballroom

Moderators: Mark N. Hadley, MD, Iain H. Kalfas, MD

11:00 am-11:07 am **23. Posterior Microendoscopic Cervical Foraminotomy for Radiculopathy**

Larry T. Khoo, MD (Los Angeles, CA), Daniel Laich, MD, Laurie Rice-Wyllie, Richard G. Fessler, MD, PhD (Chicago, IL), Anthony Frempong, MD (New York, NY)

Meeting Agenda

Friday, February 16, 2001 (continued)

11:07 am-11:14 am **24. Laminectomy and Fusion versus Laminoplasty for Multi-Level Cervical Myelopathy: An Independent Matched Cohort Analysis**

Gerald E. Rodts Jr., MD, Charles C. Edwards II, MD,
John G. Heller, MD, Hideki Murakami, MD (Atlanta, GA)

11:14 am-11:21 am **25. Cervical Lordosis: Single Level Anterior Plating Versus Non-Plating Fusion Techniques**

Ann R. Stroink, MD (Bloomington, IL), Stephan J. Troyanovich, DC (Normal, IL), Keith A. Kattner, DO (Bloomington, IL), Irina Gubina, MD (Normal, IL)

11:21 am-11:30 am Discussion

11:30 am-11:37 am **28. Percutaneous Lumbar Pedicle Screw/Rod Placement**

Kevin Foley, MD* (Memphis, TN), Gerald E. Rodts, Jr., MD (Atlanta, Ga), William S. Rosenberg, MD (San Francisco, CA), Daniel Suh, MD (Atlanta, GA)

11:37 am-11:44 am **29. Minimally-Invasive Microendoscopic Decompressive Laminotomy for Lumbar Stenosis**

Larry T. Khoo, MD (Los Angeles, CA), Daniel Laich, MD, Kristine Khoo, NP (Chicago, IL) Anthony Frempong, MD (New York, NY), Richard G. Fessler, MD, PhD (Chicago, IL)

11:44 am-11:51 am **30. Percutaneous Spinal Fusion: Early Outcomes**

Martin D. Herman, MD, PhD (Park Ridge, IL)

11:51 am-12:00 pm Discussion

12:00 pm - 12:15 pm Annual Business Meeting - South Mountain Ballroom

12:30 pm Shot Gun Golf Tournament - Pointe South Mountain Golf Course

1:00 pm Tennis Tournament - Pointe South Mountain Tennis Court

6:30 pm - 11:00 pm Child Care - East Courtroom 3

7:00 pm - 11:00 pm Casino Night & Dinner - East Garden

Meeting Agenda

Saturday, February 17, 2001

6:30 am - 7:45 am	Continental Breakfast - Squaw Peak Patio
6:30 am - 1:00 pm	Registration - West Registration Desk
6:30 am - 5:00 pm	Speaker Preview Room - West Courtroom 3
7:00 am - 7:45 am	Challenging Cases Session - South Mountain Ballroom

Moderator: Stephen L. Ondra, MD

Reviewers: R. John Hurlbert, MD, PhD, Barry D. Birch, MD

7:45 am - 9:45 am	Scientific Session IV: South Mountain Ballroom Controversies in Spinal Surgery
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Moderators: Charles L. Branch, Jr., MD,

Richard G. Fessler, MD, PhD

Learning Objectives

Participants should be able to:

- 1) Realize the variation and rationale behind the management options presented for each topic.
- 2) Discuss the implications of the techniques of management presented.

7:45 am - 8:15 am	Controversy 1: Cervical Foraminal Stenosis
7:45 am - 7:54 am	Anterior approach is superior Volker KH Sonntag, MD
7:54 am - 8:03 am	Posterior approach is superior Thomas B. Ducker, MD
8:03 am - 8:06 am	Rebuttal 1
8:06 am - 8:09 am	Rebuttal 2
8:09 am - 8:15 am	Audience
8:15 am - 8:45 am	Controversy 2: Fibromyalgia/Chronic Fatigue
8:15 am - 8:24 am	Surgery has a role Michael J. Rosner, MD
8:24 am - 8:33 am	Surgery has no role Peter W. Carmel, MD
8:33 am - 8:36 am	Rebuttal 1
8:36 am - 8:39 am	Rebuttal 2
8:39 am - 8:45 am	Audience
8:45 am - 9:15 am	Controversy 3: Central Cord Syndrome
8:45 am - 8:54 am	Early surgery is superior Mark N. Hadley, MD

8:54 am - 9:03 am	Late surgery is superior Edward C. Benzel, MD
9:03 am - 9:06 am	Rebuttal 1
9:06 am - 9:09 am	Rebuttal 2
9:09 am - 9:15 am	Audience
9:15 am - 9:45 am	Controversy 4: Treatment of Degenerative Lumbar Disc Disease
9:15 am - 9:24 am	Interbody Fusion Techniques Charles L. Branch, Jr., MD
9:24 am - 9:33 am	All other methods Gerald E. Rodts, Jr., MD
9:33 am - 9:36 am	Rebuttal 1
9:36 am - 9:39 am	Rebuttal 2
9:39 am - 9:45 am	Audience
8:00 am - 11:00 am	Guest Hospitality - East Courtroom 3
8:30 am - 11:00 am	Exhibit & Poster Viewing - Grande Ballroom
9:45 am - 10:35 am	Beverage Break with Exhibitors - Grande Ballroom
	Session IV: What's New?
	Moderators: Bernard H. Guiot, MD, Andrew T. Dailey, MD
10:35 am - 12:05 pm	Contributed Papers South Mountain Ballroom
	Moderators: Haynes L. Harkey, III, MD, Nevan G. Baldwin, MD
10:35 am-10:42 am	31. Anterior Lumbar Interbody Fusion for Failed Back Surgery
	Neil Duggal, MD, (London, ON) Kaushik Das, MD, Ignacio Mendiondo, MD, Heraldo Pares, MD, Kathy Stone, RN, Curtis Dickman, MD (Phoenix, AZ)
10:42 am-10:49 am	32. Posterior Lumbar Interbody Fusion with Various Cages for Degenerative Disc Disease: Threaded Round Cage versus Rectangular Cage
	Young Soo Kim, MD, Dong-Kyu Chin, Yong-Eun Cho, Byung-Ho Jin (Seoul, Korea)
10:49 am-10:56 am	33. Translaminar Screw Fixation: Techniques and Indications
	Arthur L. Jenkins III, MD, Sagun K. Tuli, MD MSc FRCS(C), Marc E. Eichler, MD, Eric J. Woodard, MD (Boston, MA)
10:56 am-11:05 am	Discussion

Meeting Agenda

Saturday, February 17, 2001 (continued)

Contributed Papers (continued)

- 11:05 am-11:12 am** **37. Intramedullary Spinal Cord Tumor in Patients over 50 years old: Management and Outcome Analysis**
Raj K. Shrivastava, MD, Fred J. Epstein, MD, Kalmon D. Post, MD, George I. Jallo, MD (New York City, NY)
- 11:12 am-11:19 am** **38. Spinal Tumours in Neurofibromatosis Type 2: A Clinical Review**
Graham R. Dow, BSc, AFRCSed, Nigel Biggs, FRACS, Richard Ramsden, FRCS, Gareth Evans, MD, FRP, MRCP, Jimmie Gillespie, FRCS, Andrew King, FRCS(SN) (Manchester, UK)
- 11:19 am-11:26 am** **39. Surgery for Solitary Metastases to the Spine**
Narayan Sundaresan, MD*, Allen Rothman, MD, Karen Manhart, RN, ANP, Kevin Kelliher, MS (New York, NY)
- 11:26 am-11:35 am** Discussion
- 11:35 am-11:42 am** **34. One-stage Surgery for Irreducible Atlantoaxial Dislocation**
Hiroshi Nakagawa, MD, Junichi Mizuno, MD, Han Soo Chang, MD (Aichi, Japan), Takeya Watabe, MD, Kazuhiro Hongo, MD (Matsuyama, Japan)
- 11:42 am-11:49 am** **35. Reversal of Delayed Onset Paraplegia Following Thoracoabdominal Aortic Aneurysm Repair With Lumbar Cerebrospinal Fluid Drainage**
Laurie L. Ackerman, MD, Peter J. Lennarson, MD, Vincent C. Traynelis, MD (Iowa City, IA)
- 11:49 am-11:56 am** **36. Chiari Malformation: Truth Or Consequences**
Thomas B. Ducker, MD, Clifford Solomon, MD (Annapolis, MD)
- 11:56 am-12:05 pm** Discussion
- 12:05 pm** Closing Remarks
Robert F. Heary, MD
Meeting Adjourned

1:00 pm - 5:00 pm

Special Course III:

Fundamental Principles of Spine Surgery - South Mountain Ballroom

Course Director: Joseph T. Alexander, MD

Faculty: Donald D. Dietze, Jr., MD, Ehud Mendel, MD, Bernard H. Guiot, MD, Daniel K. Resnick, MD, Gregory R. Trost, MD, Kenneth S. Yonemura, MD, Barry D. Birch, MD, Robert F. Heary, MD, Mitchell R. Gropper, MD, Christopher E. Wolfla, MD, Christopher H. Comey, MD, Mark R. McLaughlin, MD, Massimiliano Visocchi, MD, Benjamin White, MD, Seth M. Zeidman, MD

CME Credit: 3.5 hours

Learning Objectives

Participants should be able to:

- 1) Discuss the indications for common spine surgery procedures.
- 2) Evaluate the rationale behind surgical treatment.
- 3) Assess the strategies for the avoidance of complications and optimization of outcome.

1:00 pm - 5:00 pm

Special Course IV:

CPT Coding for Spine Surgeons - East Courtroom 3

Course Director: Gregory J. Przybylski, MD

Faculty: John G. Piper, MD, William Mitchell, MD

CME Credit: 3.5 hours

Learning Objectives

Participants should be able to:

- 1) Discuss ICD-9 (diagnostic) and CPT (clinical and surgical service) coding from the unique perspective of the spinal surgeon.
- 2) Analyze the methodology for valuation of CPT codes and its application toward describing surgical services in the most accurate way.
- 3) Formulate a practical understanding.