

Update: June 2017

Signature

**CURRICULUM VITAE
OF
LUCIA J. ZAMORANO, M.D., FICS**

Table of Contents

Table of Contents	2
A.PERSONAL INFORMATION	3
B.EDUCATION AND TRAINING	4
C.FACULTY/HOSPITAL/OTHERACADEMIC/CLINICAL APPOINTMENTS.....	6
C1.ACADEMIC APPOINTMENTS	6
C2. PROFESSIONAL APPOINTMENTS.....	9
C3. ADMINISTRATIVE APPOINTMENTS	11
D. APPOINTMENTS.....	13
E.PROFESSIONAL MEMBERSHIP AND OTHER SOCIETIES	16
F. LICENSURES AND BOARD CERTIFICATIONS.....	20
G.HONORS/AWARDS/ELECTED POSITIONS.....	21
H.SCIENTIFIC CONSULTANT	25
I.PROFESSIONAL ACTIVITIES/SOCIETIES COMMITTEES	26
J. HOSPITAL/UNIVERSITY COMMITTEES	27
K. SCIENTIFIC SESSION CHAIRMANSHIP.....	29
L. PUBLICATIONS-JOURNALS	30
L1. Peer Reviewed Journal Publications	30
L2. Non Peer Reviewed Journal Publications/Proceedings	52
M. PUBLICATIONS BOOKS/ CHAPTERS IN BOOKS.....	68
N. PARTICIPATION/GUEST LECTURER - CONGRESS, SEMINARS & COURSE	73
O. ATTENDANCE TO/ PARTICIPATION PROFESSIONAL MEETINGS	162
P. RESEARCH/GRANTS	200
Q. SERVICE.....	205
Q1.EDITORIAL & REVIEW ACTIVITIES	205
Q2. PROFESSIONAL	206
Q3. PUBLIC: COMMUNITY BOARDS AND COMMITTEES	208

CURRICULUM VITAE

A. PERSONAL INFORMATION

Name	Lucia J. Zamorano
Home Address	xxxxxxxxxxxxxxxx West Bloomfield, Michigan 48324 USA
Business addresses	Michigan Brain & Spine Surgery Center 2004 Hazel Birmingham MI 48009 Michigan Brain & Spine Surgery Center 5107 Rochester Road Troy, MI 48085
Telephone	1.248.7232477 1.248.6813209 (FAX)
Email	lzamorano@dmc.org lzamorano@luciazamorano.com lucia.zamorano@beaumont.edu
WEB Site	http://www.luciazamorano.com
Business Name	Lucia Zamorano, MD, PLC DBA: Michigan Brain & Spine Surgery Center
Place of Birth	Santiago, Chile

Citizenship	United States and Chilean
Language Proficiency	Spanish, English, Italian German, French, Portuguese

B. EDUCATION AND TRAINING

Basic School	Montessori Special School Santiago, Chile (1960-1965)
High School	Public Girls High School N5 Santiago, Chile (1966-1972)
Medical School	Catholic University Medical School Santiago, Chile Degree: Medical Doctor (1973 - 1979)
Internship	Catholic University Medical School Santiago, Chile (1978 - 1979)

POSTGRADUATION

Residency	Catholic University Medical School Department of Surgery Division of Neurosurgery (1980 - 1983)
Chief Resident	Catholic University Medical School Department of Surgery

	(1983)
Magister	Catholic University Medical School Title: Magister of Surgery (March 1983)
Clinical Fellowship	Neurosurgery sponsored by Deutsche Akademische Austauschdienst- Freie Universitat West Berlin, Germany Department of Neurosurgery (Jan 1984 -June 1986) (Chief: Prof. Mario Brock, M.D.)
	Albert-Ludwig Universitaet Freiburg, Germany Department of Stereotaxis an Radiation Therapy (May 1 - June 30, 1986) (Chief: Prof. F. Mundinger, M.D)
Clinical Fellowship	Henry Ford Hospital Detroit, Michigan USA Department of Neurosurgery (July 1986 - Dec 1988) (Chief: J. Ausman, M.D., Ph.D.)
Doctorate (Dr. Med)	Freie Universitat Berlin, West Germany FR: "magna cum laude" (December 1985)

C.FACULTY/HOSPITAL/OTHERACADEMIC/CLINICAL PROFESSIONAL APPOINTMENTS

C1.ACADEMIC APPOINTMENTS

Clinical Fellow

Department of Neurosurgery
Freie Universitat
Klinikum Steglitz
Berlin, West Germany
(July 1984 - March 1986)
(Chief: Prof. M. Brock, M.D.,
and Ph.D.)

Albert-Ludwig Universitaet
Freiburg, Germany
Department of Stereotaxis and
Radiation Therapy
(May 1 - June 30, 1986)
(Chief: Prof. F. Mundinger,
M.D.)

Assistant

Department of Neurosurgery
Freie Universitat
Klinikum Steglitz
Berlin, West Germany
(January 1985 - March 1986)
(Chief: Prof. M. Brock, M.D.,
Ph.D.)

Associate Professor

Wayne State University
Chief Neuro-Oncology,
Stereotaxis, Radiosurgery and
Skull Base Division
Department of Neurosurgery
(August 1991 - August 1993)
(Chief: F. Diaz, M.D., PhD.)

Associate Professor

Wayne State University
Chief Neuro-Oncology,
Stereotaxis, Radiosurgery
and Epilepsy Division

Department of Neurosurgery
(August 1993 - August 1996)
(Chair: F. Diaz, M.D., Ph.D.)

Associate Professor

Wayne State University
Department of Radiation
Oncology
(July 1995 - August 1996)
(Chair: A. Porter, M.A., M.D.,
FRCPC)

Professor

Wayne State University
Chief Neuro-Oncology,
Stereotaxis, Radiosurgery
and Epilepsy Division
Department of Neurosurgery
(Chair: F. Diaz, M.D., and
Ph.D.)
Department of Radiation
Oncology
(Chair: A. Porter, M.A., M.D.,
FRCPC)
(August 1996 - 2005)

Professor

Wayne State University
Chief Neuro-Oncology,
Stereotaxis, Radiosurgery
and Epilepsy Division
Departments of Neurological
Surgery,
Radiation Oncology and
Karmanos Cancer Institute
(July 1, 2001 -2005)

Professor
Department of Neurosurgery
Wayne State University
Detroit, Michigan
(1996 - 2007)

Professor

Department of Radiation
Oncology
Wayne State University
Detroit, Michigan
(1996 - 2005)

Professor
Cancer Institute (Karmanos)
Wayne State University
Detroit, Michigan
(January 1, 2001 – 2005)

Faculty Associate

Institute of Gerontology
Wayne State University
(April 1994 - Present)

Visiting Research Professor
Department of Computer
Science and Biomedical
Engineering
Rutgers, The State University
of New Jersey, Piscataway,
New Jersey
(September 1, 2003 – 2005)

Medical Director

Michigan Brain & Spine
Surgery Center
(June 2005-Present)

Clinical Professor

Neurosurgery
Wayne State University
Voluntary Status
(Feb 2007 until 2014)

Professor Neurosurgery
(Clinical)

Oakland University
William Beaumont
School of Medicine
(Dec 2010-present)

C2. PROFESSIONAL APPOINTMENTS

Visiting Physician	University of Birmingham England Department of Neurosurgery (April 1 - 30, 1986) (Chief: Prof. E. Hitchcock, M.D.)
Clinical Fellow	Henry Ford Hospital Detroit, Michigan USA Department of Neurosurgery (July 1986 - Dec 1988) (Chief: J. Ausman, M.D., Ph.D.)
Associate Staff	Henry Ford Hospital Detroit, Michigan USA Department of Neurosurgery (Jan 1989 - Dec 1989) (Chief: J. Ausman, M.D., Ph.D.)
Senior Staff	Henry Ford Hospital Detroit, Michigan USA Department of Neurosurgery (Jan 1990 - August 1991) (Chief: J. Ausman, M.D., Ph.D.)
DMC Active Staff	Harper Hospital Department of Neurosurgery (August 1991 - Present)
DMC Affiliate Staff	Childrens Hospital of Michigan Department of Neurosurgery (August 1991 - Present)

DMC Affiliate Staff	Hutzel Hospital Department of Surgery Section of Neurosurgery (August 1991 - Present)
DMC Affiliate Staff	Detroit Receiving Hospital Department of Neurosurgery (August 1991 - Present)
DMC Affiliate Staff	Sinai-Grace Hospital Department of Neurosurgery (August 1991 - Present)
DMC Affiliate Staff	Huron Valley - Sinai Department of Neurosurgery (August 1991 - Present)
DMC Affiliate Staff	Rehabilitation Institute of Michigan (August 1991 - Present)
Medical (Adjunct) Staff	William Beaumont Royal Oak (2007-present)
Medical Staff	Southeast Michigan Surgical Hospital (2006-present)
Medical Staff	Meadowbrook Surgical Center (2009-2010)
Medical Staff	Endo Surgery Great Lakes (2009-2011)
Medical Staff	Maple Millennium Surgical Center (2010-present)
Medical Staff	Spectrum Health Grand Rapids

	(2011-present)
Medical Staff	The Lakes Surgical Center (2012-present)
Medical Staff	Specialty Surgical Center (2015- present)
Medical Staff	Executive Surgical Center (2016-present)

C3. ADMINISTRATIVE APPOINTMENTS

Program Director	Clinical Fellowship Neuro-Oncology, Stereotaxis, Radiosurgery, CAS and Epilepsy (August 1991 – 1996)
Program Director	Clinical Fellowship Neuro-Oncology, Stereotaxis, Radiosurgery, Gammaknife, CAS) (1996 – 2000)
Program Director	Clinical Fellowship Stereotaxis, Radiosurgery Gammanife, CAS) (2000-2005)
Medical Director	Computer assisted Surgery and Gammaknife (Jan 1996- 2005)
Director	Computer Assisted Surgery Lab (1991-2005)
Chief	Chief Neuro-Oncology,

	Stereotaxis, Radiosurgery and Epilepsy Division (1991- 2005)
Delegate	Wayn County Medical Society (1998 – Present)
President and CEO	Michigan Brain & Spine Surgery Center (2005- present)
Board of Directors/Secretary	Medical Executive Committee (MEC) Southeast Michigan Surgical Hospital (2010-present)
Board of Directors	PPPR DetroiMedicalCenter. ACP (2008 until present)
Member at Large	Medical Staff Operations Committee (MSOC) Harper/Hutzel Hospital (2006-present)
Board of Directors	Greater MichiganGammaknife William Beaumont Royal Oak (2008-2016)
Board of Directors	American Academy of Neurological and Orthopedic Surgeons (AANOS) (2010-present)
Vice-Chief of Staff	Southeast Michigan Surgical Hospital (2013-2016)

Regent of Michigan

International College of Surgeons (2013-present)

Vice President

USA Division
International College of Surgeons (2015-present)

Medical Director

Executive Surgical center
(2016-present)

D. APPOINTMENTS

Pre-Residency

Research Assistant
Department of Embryology
Catholic University
Santiago, Chile
(1973)

Research Assistant
Department of
Neurophysiology
Catholic University
Santiago, Chile
(Nine semesters: 1974 - 1978)
(Chief: J. Luco, M.D.)

Assistant (Tutor)
Department of
Physiopathology
Catholic University
Santiago, Chile
(One semester: 1976)

Research Assistant
Division of Neuro-pathology
Catholic University

Santiago, Chile
(Five semesters: 1976 - 1978)
(Chief: Benedic
Chuaqui, M.D.)

Assistant (Tutor)
Department of Neurology
Catholic University
Santiago, Chile
(Three semesters: 1977 1978)
(Chief: Jaime Court, M.D.)

Assistant (Tutor)
Department of Psychiatry
Army Hospital
Santiago, Chile
(Three semesters: (1976 –
1977)
(Chief: C. Lailahcar, M.D.)

Assistant
Department of Surgery
Division of Neurosurgery
Catholic University
Santiago, Chile
(Three semesters: (1978 -
1979)
(Chief: S. Guzman, M.D.)

During Residency

Assistant (Tutor)
Department of Neuroanatomy
(Three years: 1981 - 1983)

Assistant
Department of Neurology
(Two years: 1982 - 1983)

Assistant
Department of Neurosurgery
(Two years: 1982 - 1983)

Post Residency

Assistant
Department of Neurosurgery
Klinikum Steglitz
Freie University
Berlin, Germany
(1983 - 1986)

Attending Staff
Department of Neurosurgery
Henry Ford Hospital
Detroit, Michigan
(1990 - 1991)

Associate Professor
Department of Neurosurgery
Wayne State University
Detroit, Michigan
(1991 - 1996)

Associate Professor
Department of Radiation
Oncology
Wayne State University
Detroit, Michigan
(1995 - 1996)

Professor
Department of Neurosurgery
Wayne State University
Detroit, Michigan
(1996 - 2005)

Professor
Department of Radiation
Oncology
Wayne State University
Detroit, Michigan
(1996 - 2005)

Professor
Cancer Institute (Karmanos)
Wayne State University
Detroit, Michigan
(January 1, 2001 - 2005)

Visiting Research Professor
Department of Computer
Science and Biomedical
Engineering
Rutgers, The State University
of New Jersey, Piscataway,
New Jersey
(September 1, 2003 – 2005)

Clinical Professor Neurosurgery

Wayne State University
Voluntary status
(2007 - 2014)

Professor Neurosurgery
(Clinical)

Oakland University
William Beaumont School of
Medicine
(Dec 2010-present)

E.PROFESSIONAL MEMBERSHIP AND OTHER SOCIETIES

PROFESSIONAL MEMBERSHIP

American Academy of Neurological and Orthopedic Surgeons (AANOS)

American Academy of Pain Medicine (AAPM)

American Association for the Advancement of Science

American College of Physician Executives

American Epilepsy Society

American Medical Association (AMA)

American Medical Women's Association (AMWA)
American Society for Photogrammetry and Remote Sensing
American Society of Pain Educators
American Society of Stereotactic and Functional Neurosurgery
American Society for Laser Medicine and Surgery
Chilean Medical Association
Chilean Society of Neurological Surgery
Clinical Magnetic Resonance Society (CMRS)
Computer Society (IEEE)
Congress of Neurological Surgeons (CNS)
Deutsche Medizinische Gesellschaft (German Society of Medicine)
EUROSPINE, the Spine Society of Europe
European Society of Stereotaxic and Functional Neurosurgery
French Society for Neurosurgery (Societe Française de Neurochirurgie)
German Society of Neurological Surgery
Institute of Electrical and Electronics Engineers (IEEE)
International Society for Neurosurgical Instrument Inventors (ISNII) -
Founding Member for U.S.A.
International Stereotactic Radiosurgery Society
International College of Surgeons, United States Section
International Society for Advancement of Spine Surgery (ISSAS)

Joint Section on Stereotactic and Functional Neurosurgery. A Joint Section of the American Association of Neurological Surgeons (AANS) and Congress of Neurological Surgeons (CNS).

Joint Section on Tumors. A Joint Section of the American Association of Neurological Surgeons (AANS) and Congress of Neurological Surgeons (CNS).

Joint Section on Pain. A Joint Section of the American Association of Neurological Surgeons (AANS) and Congress of Neurological Surgeons (CNS).

Joint Section on Neurotrauma. A Joint Section of the American Association of Neurological Surgeons (AANS) and Congress of Neurological Surgeons (CNS).

Michigan Association of Neurological Surgeons

Michigan State Medical Society

The Movement Disorder Society

North American Spine Society (NASS).

National Association of Managed Care Physicians (NAMCP)

National Hispanic Medical Association

North American Pain Society

North American Spine Society (NASS)

North American Skull Base Society

North American Tumor Society

Optical Society of America

Radiation Therapy Oncology Group

Robotics and Automation Society (IEEE) (Institute of Electrical and Electronics Engineers)

Society Minimally Invasive Spine Surgery (SMISS)

Societe Francaise de NeuroChirurgie

Society for Imaging Science and Technology (SPSE)

Society for Neuro-Oncology

SPIE - The International Society for Optical Engineering

Wayne County Medical Society

Wayne County Medical Society Membership Committee (1998-99)

Wayne County Medical Society Medical Education Committee (1998-99)

Wayne County Medical Society Communication Committee (2000-01)

Wayne County Medical Society Delegate Body Committee (2000-Present)

Wayne County Medical Society Legislative Committee (2000-01)

West Berlin Medical Society

Women in Neurosurgery (WINS)

World Society of Stereotaxis

World Federation of Neurosurgical Societies (WFNS)

OTHER Memberships and Societies

Birmingham Chamber of Commerce

Detroit Athletic Club

Detroit Institute of Arts

Detroit Symphony Orchestra (DSO)

Legatus

Michigan Opera Theater (MOT)/ Board of Trustee

St Vincent de Paul/ Foundation Board Member

Troy Chamber of Commerce

West Bloomfield Chamber of Commerce

F. LICENSURES AND BOARD CERTIFICATIONS

1989: State of Michigan Medical Doctor, ID No. 407640

1988: FLEX I, FLEX II

1987: Board Certification in Neurosurgery, Chilean Neurosurgical Society.

1986: Educational Commission, Foreign Medical Graduates, Certificate No. 3580917

1986 Doctorate (Dr. Med), Freie Universitat, Berlin, Germany

1983: Certification in Surgery, Neurosurgery, Catholic University, Santiago, Chile

1983: Master's Degree in Surgery, Catholic University, Santiago, Chile

Honorary Membership to the American Academy of Neurological and Orthopedic Surgeons May 29, 2009.

Membership of the American Academy of Neurological and Orthopedic Surgeons. June 2, 2009

American Board Certification in Neurological Surgery (ABCNS)

Lucia Zamorano MD, FICS June 2017

Certificate 1005, October 25, 2009
Last Certification 2015

G.HONORS/AWARDS/ELECTED POSITIONS

2017 Top Doctor Expert Neurological Surgeon, Birmingham, MI. PR
NewsChannel, September 05, 2017

Surgeon Champion for Harper University Hospital for Michigan Spine
Surgery Improvement Collaborative (MSSIC) supported by BCBS of
Michigan, Jan 2016-present.

Committee on Medical Licensure and Discipline, MSMS Michigan State
Medical Society (2015-present)

Chair Scientific Organizing Committee 40th Annual AANOS Scientific
Meeting, June 17-18, 2016 Troy, MI

Lifetime Achievement Award presented by American Academy of
Neurological and Orthopaedic Surgery, June 12, 2015 (for her
leadership, dedication and excellence in Neurological Surgery)

VicePresident United States Section-International College of Surgeons
2015-present.

Executive Council International College of Surgeons 2014-present

Editorial Board EC Neurology, 2014- present

Executive Committee, Secretary American Academy of Neurological and
Orthopedic Surgeon, Board of Director, 2014-present

Vice-Chair CME Committee, American Academy of Neurological and
Orthopedic Surgeon, Board of Director, 2014-present

Education & Scientific Organizing SubCommittee, American Academy of
Neurological and Orthopedic Surgeon, Board of Director, 2014-present

Development Sub-Committee, American Academy of Neurological and Orthopedic Surgeon, Board of Director, 2014 to present

Journal Sub-Committee, American Academy of Neurological and Orthopedic Surgeon, Board of Director ,2014 to present

Board of Regents (Regent for Michigan) of the US Section of the International College of Surgeons 2013-present.

AMA Advisory Task Force Committee of ICS-US (2013-present)

Development Committee of ICS-US (2013-present)

Qualifications and Interim Council of ICS-US (2013-present)

Editorial Board Spine Line (2013-2016)

Evidence-based Guideline Development Committee of NASS (North American Spine Society (2013-2016)

Performance Measurement Committee of NASS (North American Spine Society (2013- present)

Professional, Economic and Regulatory Committee (PERC) of of NASS (North American Spine Society (2013- 2016)

Delegate Body of the Wayne County Medical Society of Southeast Michigan

WCMSSM Executive Council (2013-2014)

American Academy of Neurological and Orthopedic Surgeon, Board of Director, 2010- Present

Board of Directors/Secretary Medical Executive Committee (MEC), Southeast Michigan Surgical Hospital, (2010-present)

Board of Directors, PPPR Detroit Medical Center, (2008 until present)

Member at Large, Medical Staff Operations Committee (MSOC)

Harper/Hutzel Hospital, (2006-present)

Board of Directors, Greater Michigan Gammaknife, William Beaumont Royal Oak, (2008-present)

Board of Directors, American Academy of Neurological and Orthopaedic Surgeons (AANOS), (2010-present)

Delegate Wayne County Medical Society to MSMS from Geographic District three (1999 - Present)

Wayne County Medical Society, Delegate (1998 – Present)

Editorial Board of Photomedicine and Laser Surgery. 2010- present.

Honorary Membership to the American Academy of Neurological and Orthopedic Surgeons, May 29, 2009- Present.

Editorial Board Robotics in Surgery. 2003- Present

Board of Director of the American Society for Stereotaxis and Neurosurgery of AANS (American Association of Neurological Surgeons) and CNS (Congress of Neurological Surgeons) 1996-until 2000, re-elected 2 terms.

Delegate from FLANC (Latin American Fed of Societies of NS) to WFNS (World Federation of Neurosurgical Societies, 1998- Present.

Image Guided Surgery Task Force, a sub-group of the Joint Section of Stereotactic and Functional Neurosurgery, Co-Chair, 1996 - Present

Image Guided Surgery, Editorial Board, and 1994 - Present

Minimally Invasive Neurosurgery, Editorial Board, 1994 - Present

Virtual Reality in Medicine, Editorial Board, 1994 - Present

International Society for Stereotactic Radiosurgery, Editorial Board, 1994 - Present

Board member of International Journal for Minimally Invasive

Neurosurgery, 1994 – Present

Board of Director of the International Society for Neurosurgical Instrument Inventors, 1994 - 1996

American Medical Association: Physician Recognition Award, 1994 - 1996

American Medical Association: Physician Recognition Award, 1991 - 1993

The American Society for Stereotactic and Functional Neurosurgery, Board of Directors 1992 - 1996

Neurological Research, International Editorial Board, 1990 - Present

American Medical Association: Physician Recognition Award, 1994 - 1996

American Medical Association: Physician Recognition Award, 1991 – 1993

First Prize, Tumor Section, Congress of Neurological Surgeons (CNS) Zamorano L, Esam El-Khatib, Ramiro Perez-de la Torre, Falah Shamsa, Kenneth Levin, James Fontanesi, Sandra Kugelman, Ferenando Diaz, Brachtherapy with I-125 Implants in the Up-Front Management of Primary Malignant Non-GBM, Congress of Neurological Surgeons Annual Meeting, September 23-28, 2000, San Antonio, Texas

First Prize: Zamorano L, Yakar D, Dujovny M, Sheenan M, Kim J: Interstitial I-125 Irradiation for High Grade Gliomas: Advantage of Permanent Over Temporary Implantation. Congress of Neurological Surgeons. Orlando, Florida, October 1991

Honor Mention: Zamorano L, Dujovny M: A Neurosurgical Image Guided Localizing Unit. Congress of Neurological Surgeons. Orlando, Florida, October 1991

Deutsche Akademische Austauschdienst Fellowship, Germany, 1983 - 1986

Award XXVII, Annual Congress of American College of Surgeons, 1983

Award IX, Chilean Congress of Gastroenterology, 1982

Award LIV, Chilean Congress of Surgery, 1981

Medical School of Chile Award; given to the best medical student in the country, 1979

Catholic University Medical School Award; given by Catholic University to the best medical student of 1979

Prize to the best scientific work presented at the First Congress of Medical Students, Santiago, Chile, 1978

Award for best grade point average on the University Admission Examination, Chile, 1972.

H.SCIENTIFIC CONSULTANT

Consultant to the Neurological Devices Panel of the Medical Devices Advisory Committee, Center for Devices and Radiological Health, Food and Drug Administration, FDA (1993-present)

Prior:

Fischer, Leibinger & Zeiss, Freiburg, Germany

Zeiss, Germany

Kark Storz, Germany

Aeusculap, Germany

Codman, Randolph, MA

Cedara (ISG), Canada

Medtronics

Neuromate, France

I. PROFESSIONAL ACTIVITIES/SOCIETIES COMMITTEES

Committee on Medical Licensure and Discipline, MSMS Michigan State Medical Society (2015-present)

AMA Advisory Task Force Committee of ICS-US (2013-present)

Development Committee of ICS-US (2013-present)

Qualifications and Interim Council of ICS-US (2013-present)

Regent of Michigan for ICS (2013-present)

Evidence-based Guideline Development Committee of NASS (North American Spine Society (2013-2016)

Performance Measurement Committee of NASS (North American Spine Society (2013- 2016)

Professional, Economic and Regulatory Committee (PERC) of of NASS (North American Spine Society (2013- present)

Delegate Body of the Wayne County Medical Society of Southeast Michigan

WCMSSM Executive Council (2013-2014)

Board of Regents of the US Section of the International College of Surgeons (2013-present)

Education Sub-Committee of the American Academy of Neurological and Orthopedic Surgeons (AANOS) (2011-present).

Vice-Chairman Fund Raising Sub-Committee of the American Academy of Neurological and Orthopedic Surgeons (AANOS) (2011-present)

Scientific Organizing Sub-Committee of the American Academy of Neurological and Orthopedic Surgeons (AANOS) (2011-present Board of Director American Academy of Neurological and Orthopedic Surgeons (AANOS) (2010-present).

Consultant to the Neurological Devices Panel of the Medical Devices Advisory Committee, Center for Devices and Radiological Health, Food and Drug Administration, FDA (1993-present).

Consultant Department of Defense DOD (1998-present)

Consultant NASA (1999- present)

Principal Investigator - Radiation Therapy Oncology Group (RTOG 93-05), "A Phase III Trial comparing the use of radiosurgery followed by conventional radiotherapy with BCNU to conventional radiotherapy with BCNU for supratentorial glioblastoma multiforme."

J. HOSPITAL/UNIVERSITY COMMITTEES

Medical Director	Executive Surgical Center (2016-present)
Board of Directors/Secretary	Medical Executive Committee (MEC) Southeast Michigan Surgical Hospital (2010-present)
Board of Directors	PPPR Detroit MedicalCenter.ACP (2008 until present)
Member at Large	Medical Staff Operations Committee (MSOC) Harper/Hutzel Hospital (2006-present)

Board of Directors

Greater Michigan
Gammaknife William
Beaumont Royal Oak
(2008-2016)

Greater Gammaknife Michigan (GKMK) William Beaumont Hospital
Royal Oak. Management, 2009-2016

Medical Staff Operations Committee (MSOC) Harper/Hutzel Hospital
Member at Large (2006-present)

Human Investigation Committee/IRB Wayne state University (1999-
2004)

ICU Committee Meeting - Harper Hospital - Representative for the
Department of Neurosurgery - 1992 - 2005

Corporate Quality Improvement Committee - Representative for the
Department of Neurosurgery - 1992 - 2005

Quality Improvement Chair Person for the Department of Neurosurgery
for Harper Hospital - 1992 – 2005

Pain Advisory Committee - Representative for the Department of
Neurosurgery - 1992 - 2005

Pharmacy and Therapeutics Committee - Harper Hospital - Member
1993-2005

Cancer Committee Member - Harper Hospital - Member (1992-2005)

Tissue/Invasive Procedure Subcommittee - Harper Hospital - Member
1993-2005

Institute of Gerontology - Wayne State University/Associate Faculty -
1994 - 2005

Neurosurgery Computer Committee - Chairperson - 1994 – 2003

Radiology Steering Committee and Vision Team - DMC - 1995 - 2002

Human Investigation Committee, Medical 02 Institutional Review Board - Wayne State University - October 1, 2000 - September 30, 2001

Committee on Cancer Care and Cancer Committee, Karmanos Cancer Institute, Combined committee – 2000-2003

K. SCIENTIFIC SESSION CHAIRMANSHIP

Midas Rex, Detroit, June 1986

Midas Rex, Dearborn, June 1988

Midas Rex, Traverse City, June 1989

Image Guided Stereotactic Workshop, Detroit, May 1989

International Symposium on Stereotactic Radiosurgery, Miami, Florida, December 1989

International Society for Optical Engineering (SPIE), Los Angeles, California, January 1990

Moderna Tecnologia en Neurocirugia. Stereotaxia con Imagen, Zaragoza, Spain, January 1990

Image Guided Stereotaxis, Detroit, May 1990

Midas Rex, Traverse City, Michigan, June 1990

OE LASE'91, International Society for Optical Engineering (SPIE), Los Angeles, California, January 1991.

OE LASE'91, International Society for Optical Engineering (SPIE), Los Angeles, California, January 1992

OE LASE'91, International Society for Optical Engineering (SPIE), Los Angeles, California, January 1993

OE LASE'91, International Society for Optical Engineering (SPIE), Los Angeles, California, January 1994

1994 Joint Annual Meeting German and North American Skull Base Societies, Lake Buena Vista, Florida, February 1994.

(Afar 1994 they are included under meeting participation)

L. PUBLICATIONS-JOURNALS

L1. Peer Reviewed Journal Publications

1. Zamorano L, Barros C: Spermatic capacitation in hamster. Ann Chil Soc Biol 17:34-39, 1974.
2. Fernandez H, Zamorano L: Axoplasmic progression: a differential blocking. Ann Chil Soc Biol 18:54-59, 1975.
3. Luco J, Zamorano L: A model on learning. Ann Chil Soc Biol 18:72-75, 1975.
4. Ramirez B, Zamorano L: Neurofibrillar degeneration induced by AlCl₃ applied stereotactically in the hypoglossus nucleus. Ann Chil Soc Biol 19:46-49, 1976.
5. Zamorano L, Fernandez H, Luco J: Experiment on neurofibrillar degeneration: a model to study Alzheimer disease. Ann Chil Soc Biol 20:23-28, 1977.
6. Zamorano L, Fernandez H, Luco J: Muscular alterations induced by the stereotactical injection of AlCl₃ in the hypoglossus nucleus. Ann Chil Soc Biol 21:56-61, 1978.
7. Zamorano L, Chuaqui B: Pathogenesis of malformations of the central nervous system. Rev Med Chile 107:77-79, 1979.
8. Zamorano L, Donoso R, Fernandez H: Trophic function of the neuron: muscular alterations induced by CITO-B injection in the motor nerve. Rev Med Chile 107:64-68, 1979.

9. Zamorano L, Chuaqui L: Teratogenic periods of the principal malformations of the central nervous system. *Virchows Arch Anat Pathol Histol* 384:1-19, 1979.
10. Mendez J, Torrealba G, del Villar S, Zamorano L: Vasospasm in subarachnoidal hemorrhage: A clinical and angiographic correlation. *Acta Neurol Latinoam* 26:27-31, 1980.
11. Zamorano L: Prognostic factors in cerebral palsy. *Cuadernos de Neurologia Universidad Catolica* 17:26-38, 1981.
12. Zamorano L, Leon P, Llanos O, Guzman S: Pancreatic pseudocyst. *Rev Chil Cirugia* 34:427-432, 1982.
13. Guzman S, Zamorano L, Leon P, Rahmer A, Zuniga A, Llanos O: Pancreatic pseudocyst. *Rev Chil Cirugia* 35:432-435, 1983.
14. Zamorano L, Cubillos L: Biliar ileus. *Rev Chil Cirugia* 35:245-247, 1983.
15. Cubillos L, Zamorano L: One hundred cases of choledoco-duodenum anastomosis. *Rev Chil Cirugia* 36:67-78, 1984.
16. Donoso V, Zamorano L, Gazitua R: Hypocaloric intravenous solutions in postoperated patients. *Rev Med Chil* 112:32-35, 1984.
17. Mendez J, Zamorano L, Tagle P, del Villar S: Neurovascular decompression in trigeminus neuralgia. *Rev Chil Neuropsich.* 22:73-76, 1984.
18. Tagle P, Zamorano L, del Villar S: Chronic subdural hematoma: treatment and prognosis. *Rev Chil Neuropsich.* 22:155 -158, 1984.
19. Zamorano L, Dujovny M, Malik GM, Mehta B: Factors affecting measurements in computed tomography-guided stereotactic procedures. *Appl Neurophysiol* 50: 53-56, 1987.

20. Zamorano L, Dujovny M, Malik GM, Mehta B, Yakar D: Multiplanar CT-guided stereotaxis and I-125 interstitial radiotherapy: image-guided tumor volume assessment, planning, dosimetric calculations, stereotactic biopsy and implantation of removable catheters. *Appl Neurophysiol* 50:281-286, 1987.
21. Flynn MJ, Mehta B, Dujovny M, Lacey L, Zamorano L, Clark JB, Block RW: Holographic demonstration of cerebral vascular and microvascular topography. *Radiology* 165), 404, 1987.
22. Zamorano L, Chavantes MC, Dujovny M, et al: MRI stereotaxis: an indirect method of transposition of MRI-generated data into CT multiplanar images. *Medical Physics and Biomedical Engineering* 33:40-42, 1988.
23. Zamorano L, Dujovny M, Malik GM, Yakar D, Flynn M: Estereotaxia y radioterapia intersticial guiada por tomografía computarizada multiplanar. *Rev Chil Neurocirugia* 2: 15-20, 1988.
24. Zamorano L, Katanick D, Dujovny M, Yakar D, Malik GM, Ausman JI: Tumor recurrence vs radionecrosis: an indication for multitrajectory serial stereotactic biopsies. *Acta Neurochir* 46:90-93, 1989.
25. Zamorano L, Martinez-Coll A, Dujovny M: Transposition of image-defined trajectories into arc-quadrant centered stereotactic systems. *Acta Neurochir* 46:109-111, 1989.
26. Zamorano L, Dujovny M, Malik GM, Yakar D, Flynn M: Estereotaxia y radioterapia intersticial guiada por tomografía computarizada multiplanar. *Rev Chil Neurocirugia* 2:15-20, 1989.
27. Zamorano L, Dujovny M, Ausman JI: 3D-2D multiplanar stereotactic planning system: hardware and software configuration. *Applications of Digital Image Processing* 1153: 552-567, 1989.
28. Zamorano L, Dujovny M, Chavantes MC, Bauer-Kirpes B, Yakar D, Sheenan M, Malik GM, Ausman JI: Three dimensional

and multiplanar tomographic image processing for neurosurgical planning and automation. Modern Technologies Applied to Medical Practice. (Ed) Roy Porter. SPIE 1321: 111-236, 1989.

29. Zamorano L, Dujovny M, Ausman JI: Three-dimensional/two-dimensional multiplanar stereotactic planning system: hardware and software configuration. Applications of Digital Image Processing XII, SPIE 1153: 552-567, 1989.
30. Zamorano L, Dujovny M, Chavantes MC, Bauer-Kirpes B, Yakar D, Sheenan M, Malik GM, Ausman JI: Three dimensional and multiplanar tomographic image processing for neurosurgical planning and automation. In Proceedings: Modern Technologies applied to Medical Practice. (Ed) Roy Porter. SPIE 1321: 111-236, 1989.
31. Zamorano L, Dujovny M, Chavantes MC, Malik GM, Ausman JI: Image-guided stereotactic centered craniotomy and laser resection of solid intracranial lesions. Stereotact Funct Neurosurg 54-55:398-403, 1990.
32. Zamorano L, Chavantes MC, Dujovny M, Malik GM, Ausman JI: Endoscopic laser stereotaxis: indication for cystic or intraventricular lesion. Laser Surgery, SPIE 1200: 253-271, 1990.
33. Zamorano L, Chavantes MC, Dujovny M, Malik GM, Ausman JI: Three-dimensional image-guided stereotactic resection of intracranial lesions. Laser Surgery, SPIE 1200: 280-300, 1990.
34. Zamorano L, Chavantes MC, Dujovny M, Malik GM, Ausman JI: Image-guided endoscopic laser stereotaxis (ELS). Stereotact Funct Neurosurg 54-55: 421, 1990.
35. Zamorano L, Dujovny M, Mehta B, Yakar D, Malik GM: Image-guided stereotaxis: our experience in 345 consecutive cases. Stereotact Funct Neurosurg 54-55:422, 1990.
36. Zamorano L, Dujovny M, Chavantes MC, Block R, Flynn M: Z-D multipurpose neurosurgical image-guided localizing unit. Stereotact Funct Neurosurg 54-55:498, 1990.

37. Zamorano L, Dujovny M, Flynn M, Ausman JI: 3D-2D multiplanar workstation for neurosurgical stereotactic planning. *Stereotact Funct Neurosurg* 54-55:499, 1990.
38. Chavantes MC, Zamorano L, Vinas FC, Dujovny M, Dragovic L: Experimental in vivo study of laser tissue interaction on the brain: influence of gaseous environment. *Progress in Biomedical Optics*, SPIE 1202: pp. 324-333, 1990.
39. Zamorano L, Chavantes MC, Dujovny M, Malik GM, Ausman JI: Endoscopic laser stereotaxis: indication for cystic or intraventricular lesion. *Laser Surgery*, SPIE 1200: 253-271, 1990.
40. Zamorano L, Chavantes MC, Dujovny M, Malik GM, Ausman JI: Three-dimensional image-guided stereotactic resection of intracranial lesions. *Laser Surgery*, SPIE 1200: 280-300, 1990.
41. Zamorano L, Dujovny M, Dong A, Kadi AM: Computer assisted surgical planning and automation of laser delivery system. *Progress in Biomedical Optics. Three Dimensional Bioimaging Systems and Lasers in The Neurosciences*, SPIE (ed) Boggan JE, Cerullo LJ, Smith LC, Katzier A, 1428: 59-74, 1991.
42. Chavantes MC, Vinas FC, Zamorano L, Dujovny M, Dragovic: Influence of helium, oxygen, nitrogen, and room air environment in determining Nd-YAG laser brain-tissue interaction. *Progress in Biomedical Optics. Three Dimensional Bioimaging Systems and Lasers in The Neurosciences*, SPIE (ed) Boggan JE, Cerullo LJ, Smith LC, Katzier A, 1428: 13-22, 1991.
43. Zamorano L, Dujovny M: Z-D multipurpose neurosurgical image-guided localizing unit: Experience in 103 consecutive cases of open stereotaxis. *Progress in Biomedical Optics. Three Dimensional Bioimaging Systems and Lasers in The Neurosciences*, SPIE (ed) Boggan JE, Cerullo LJ, Smith LC, Katzier A, 1428: 30-51, 1991.
44. Chavantes MC, Zamorano L: Current and future use of lasers in vascular neurosurgery. *Progress in Biomedical Optics*.

Three Dimensional Bioimaging Systems and Lasers in The Neurosciences, SPIE (ed) Boggan JE, Cerullo LJ, Smith LC, Katzier A, 1428, pp. 99-127, 1991.

45. Sadasivan B, Ma H, Dujovny M, Ausman JI, Zamorano L, Dragovic L: The anterior cavernous sinus space. Acta Neurochirurgica, Springer Verlag 108:154-158, 1991.
46. Zamorano L: Use of sculpted contact fibers, Nd:YAG in neurosurgical applications. Clinical Laser Monthly, pp. 185-186, 1991.
47. Mahmood A, Dujovny M, Chason JI, Zamorano L: Sturge-Weber-Dimtri disease? In association with an astrocytoma. Acta Neurochirurgica, Springer Verlag 110:87-89, 1991.
48. Zamorano L, Bauer-Kirpes B, Dujovny M, Malik GM, Ausman JI: Application of multimodality imaging stereotactic localization in the surgical management of vascular lesions. Acta Neurochirurgica, Springer Verlag 52:67-68, 1991.
49. Ausman JI, Diaz FG, Dujovny M, Sadasivan B, Ohaegbulam S, Zamorano L: Vascular lesions in the sellar region. Surgery of the Sellar Region and Paranasal Sinuses. M. Samii (ed), Springer-Verlag, Berlin, pp. 490-493, 1991..
50. Dujovny M, Ausman JI, Ohaegbulam S, Diaz FG, Holzer F, Zamorano L, Sadasivam B: Microsurgical anatomy of the intracavernous carotid artery and its branches. Surgery of the Sellar Region and Paranasal Sinuses. M. Samii (ed), Springer-Verlag, Berlin, pp. 149-153, 1991.
51. Sadasivan B, Dujovny M, Ma S, Zamorano L, Mirchandani HG, Ohaegbulam SC, Ausman JI: Microanatomical basis for cavernous sinus surgery. Surgery of the Sellar Region and Paranasal Sinuses. M. Samii (ed), Springer-Verlag, Berlin, pp. 479-483, 1991.

52. Zamorano L, Dujovny M, Dong A, Kadi AM: Computer-assisted neurosurgery: simulation and automation. *Stereotact Funct Neurosurg* 59: 15-122, 1992.
53. Zamorano L, Ausman JI, Chorni D, Dujovny M: Stereotactic management of midline brain lesions. *Stereotact Funct Neurosurg* 59 :142-150, 1992.
54. Zamorano L, Yakar D, Dujovny M, Sheehan M, Kim J: Permanent iodine-125 implant and external beam radiation therapy for the treatment of malignant brain tumors. *Stereotact Funct Neurosurgery* 59: 183-192, 1992.
55. Vinas FC, Zamorano L, Dujovny M, Zhao J, Hodgkinson D, Ho K, Ausman JI: In vivo and in vitro study of the lesions produced with a computerized radiofrequency system. *Stereotact Funct Neurosurgery* 58 :121-133, 1992.
56. Zamorano L, Dujovny M, Chavantes MC: A neurosurgical image-guided localizing unit for open stereotaxis. *Stereotact Funct Neurosurgery* 58: 149-151, 1992.
57. Zamorano L, Chavantes MC, Dujovny M, Ausman JI: Stereotactic endoscopy. *Stereotact Funct Neurosurgery* 58: 151-153, 1992.
58. Zamorano L, Yakar D, Dujovny M, Sheehan M, Kim J: Interstitial temporary implantation of high-activity I-125 sources for malignant glioma and brain metastases. *Stereotact Funct Neurosurgery* 59:182-183, 1992.
59. Zamorano L, Chavantes MC: Use of sculpted contact fibers and Nd-YAG laser in image-guided neurosurgery. *Acta Neurochirurgica*, Springer Verlag 117: 103-104, 1992.
60. Zamorano L, Yakar D, Dujovny M: Interstitial I-125 irradiation for malignant brain tumours: advantage of permanent implant (PI) over temporary implants (TI). *Acta Neurochirurgica*, Springer Verlag 117: 116-117, 1992.

61. Zamorano L, Chavantes MC, Dujovny M, Malik GM, Ausman JI: Stereotactic endoscopic interventions in cystic and intraventricular brain lesion. Acta Neurochirurgica, Springer Verlag 54: 69-76, 1992.
62. Zamorano L, Dujovny M, Chavantes MC, Plotts MJ-Sharplan Lasers Inc.: Use of sculpted contact fibers and the Nd-YAG laser in neurosurgical applications. SPIE Vol. 1643: 92-115, 1992.
63. Zamorano L, Kadi AM, Jiang Z: Computer assisted resection of brain lesions. Proceedings of Laser Surgery: Advanced Characterization, Therapeutics, and Systems. SPIE 1643: 123-137, 1992.
64. Chavantes MC, Pasqualucci CA, Zamorano L: Histological study of excimer laser on carotid artery. SPIE 1643: 147-156, 1992.
65. Zamorano L, Yakar D, Dujovny M et al. Permanent Iodine 125 and external beam radiation therapy in the treatment of malignant brain tumors. Stereotactic Funct. Neurosurgery.59: 183-192. 1992
66. Zamorano L, Chavantes MC: Use of sculpted contact fibers and the Nd-YAG laser in image guided neurosurgery. Clinical Application of Modern Imaging Technology. SPIE 1894: 164-176, 1993.
67. Zamorano L, Dujovny M, Chavantes C, Plotts: Use of sculpted contact fibers and the Nd:YAG laser in neurosurgical applications. SPIE 1643: 92-122, 1993.
68. Zamorano L, Chavantes MC, Moure F: Neuroendoscope laser stereotaxis for cystic and intraventricular lesions. Clinical Application of Modern Imaging Technology. SPIE 1894: 187-199, 1993.
69. Moure F, Zamorano L: Computer assisted volumetric resections of intracranial lesions. Clinical Application of Modern Imaging Technology. SPIE 1894: 260-278, 1993.

70. Jiang Z, Zamorano L, Kadi AM: Neurological surgery planning system. Clinical Application of Modern Imaging Technology. SPIE 1894: 248-259, 1993.
71. Kadi AM, Zamorano L, Jiang Z, Nolte LP: Intraoperative real-time localization of brain tumors. Clinical Application of Modern Imaging Technology. SPIE 1894: 279-291, 1993.
72. Kadi AM, Zamorano L, Jiang Z: Stereotactic brain surgery: instrumentation, automation, and image guidance. Clinical Application of Modern Imaging Technology. SPIE 1894: 216-228, 1993.
73. Zamorano L, Jiang Z: Computer- assisted stereotactic neurological surgery: pre-planning and on-site real-time operating control and simulation system. Clinical Application of Modern Imaging Technology. SPIE 1894: 229-247, 1993.
74. Verma N, Zamorano L: Resolution of intractability of seizure disorder following the presurgical work-up. Journal of Epilepsy 6: 122-123, 1993.
75. Zamorano L, Nolte LP, Kadi AM, Jiang Z: Interactive intraoperative localization using an infrared-based system. Neurological Research 15-5: 290-298, 1993.
76. Gaspar L, Fernandez P, Zamorano L, Warmelink C, Yaker D, Heilbrun L: Permanent I-125 implant therapy with and without external beam radiation in malignant glioma: clinical features and survival. Radiology 189:346-348, 1993.
77. Zamorano L, Chavantes MD, Moure F: Neuroendoscope laser stereotaxis for cystic and intraventricular lesions. SPIE Vol. 1894: 187-199, 1993.
78. Kadi AM, Zamorano L, Jiang Z: Stereotactic brain surgery: instrumentation, automation, and image guidance. SPIE Vol. 1894: 216-228, 1993.
79. Jiang Z, Zamorano L, Kadi AM: Neurological surgery planning system. SPIE Vol. 1894: 248-259, 1993.

80. Castro-Moure F, Zamorano L: Computer-assisted volumetric resections of intracranial lesions. SPIE Vol. 1894: 260-278, 1993.
81. Kadi AM, Zamorano L, Jiang Z, Lutz N: Intraoperative real-time localization of brain tumors. SPIE Vol. 1894: 279-291, 1993.
82. Zamorano L, Jiang Z., Kadi AM, Diaz FG: Computer-assisted laser volumetric resection of intracranial lesions. Clinical Applications of Modern Imaging Technology II. SPIE Vol. 2132-12: 104-137, 1994.
83. Zamorano L, Kadi AM, Jiang Z., Nolte LP: Use of an infrared system for intraoperative digitization of laser and surgical instruments. Clinical Applications of Modern Imaging Technology II. SPIE Vol. 2132-11: 90-103, 1994.
84. Zamorano L, Chavantes MC, Moure F, Diaz FG: Endoscopic laser stereotaxis: management of brain lesions. Clinical Applications of Modern Imaging Technology II. SPIE Vol. 2132-05: 13-51, 1994.
85. Zamorano L, Chavantes MC, Moure F: Endoscopic stereotactic interventions in the treatment of brain lesions. Acta Neurochirurgica, Springer Verlag 61:92-97, 1994.
86. Zamorano L, Kadi AM, Jiang Z, Diaz FG: Zamorano-Dujovny multipurpose neurosurgical image-guided localizing unit: experience in 866 consecutive cases of 'Open Stereotaxis.' Stereotactic Functional Neurosurgery 63:45-51, 1994.
87. Zamorano L, Nolte LP, Kadi AM, Jiang Z: Interactive intraoperative localization using an infrared-based system. Stereotactic Functional Neurosurgery 63:84-88, 1994.
88. Fernandez P, Zamorano L, Gasper L, Yakar D, Heilbrun L: Permanent implant therapy with concurrent external beam radiation in the up-front treatment of malignant gliomas. Stereotactic Functional Neurosurgery 63:287, 1994.

89. Moure F, Zamorano L, DeSouza E, Gaspar L, Diaz FG: Stereotactic resection versus radiosurgery: alternative in AVM management. *Stereotactic Functional Neurosurgery* 63:291, 1994.
90. Zamorano L, Jiang Z, Grosky W, Kadi AM, Diaz FG: Telepresence and virtual reality in computer-assisted neurological surgery: basic theory and a prototype. *Virtual Reality and Medicine: The Cutting Edge*, Vol. 1, No. 1 pp. 63-66, 1994.
91. Moure, F, Zamorano L, Jiang Z, Kadi AM: Computer-assisted volumetric resections of intracranial lesions. *Neurological Research. Clinical Applications of Modern Imaging Technology*. SPIE Vol. 2132, 1994.
92. Zamorano L, Jiang Z, Kadi AM: Computer-assisted neurosurgery system: Wayne State University hardware and software configuration. *Computerized Medical Imaging and Graphics*, Elsevier Science Ltd (ed), Vol. 18, No. 4., pp. 257-271, 1994.
93. Nolte LP, Zamorano L, Langlotz F, Jiang Z, Wang Q, Berlemann U: A novel approach to image guided spine surgery. *SPIE Vol. 2359*: 564-573, 1994.
94. Jiang Z, Zamorano L, Grosky W, Kadi M, Diaz FG: Telepresence and virtual reality in computer-assisted neurological surgery: basic theory and a prototype. *SPIE Vol. 2359*,: 574-594, 1994.
95. Zamorano L, Jiang Z, Kadi M: Computer-assisted neurosurgery system: Wayne State University hardware and software configuration. *Computerized Medical Imaging and Graphics*, Vol. 18, No. 4, pp. 257-271, Elsevier Science, 1994.
96. Gaspar L, Zamorano L, Shamsa F, Han I, Warmelink C, Garcia L, Yakar D: Permanent Iodine-125 implant in malignant glioma. *Endocurietherapy/Hyperthermia Oncology*, Vol. 11, pp. 193-200, 1995.

97. Nolte LP, Zamorano L, Jiang Z, Wang Q, Langlotz F, Berlemann U: Image-guided insertion of transpedicular screws: a laboratory set-up. *Spine* 20(4):497-500, 1995.
98. Zamorano L, Jiang Z, Grosky W, Kadi AM, Diaz FG: Telepresence and virtual reality in computer-assisted neurological surgery: basic theory and a prototype. *Journal of Virtual Reality in Medicine* 1:54-59, 1995.
99. Buciu R, Zamorano L, Jiang Z, Kadi AM, Palmer A, Diaz FG: Interactive computer-assisted surgery for skull base lesions. *Skull Base Surgery* 5:3, 1995.
100. Fernandez P, Zamorano L, Yakar D, Gaspar L, Warmelink C: Permanent iodine-125 implants in the up-front treatment of malignant gliomas. *Neurosurgery* 36-3:467-473, 1995.
101. Zamorano L: Infrared tracking system guides brain surgery: technical applications in patient care. *Neuroscience Forum*, 5-1:7-9, 1995.
102. Zamorano L: Interface solutions are the critical links in computer-assisted neurosurgery. *Meen*, Vol. 35, No. 4, 1995.
103. Nolte LP, Visarius H, Arm E, Langlotz F, Schwarzenbach O, Zamorano L: Computer-aided fixation of spinal implants. *Journal of Image Guided Surgery* 1:88-93, 1995.
104. Nolte LP, Zamorano L, Visarius H, Berlemann U, Langlotz F, Arm E, Schwarzenbach O: Clinical evaluation of a system for precision enhancement in spine surgery. *Clinical Biomechanics*, Vol. 10, No. 6.: 293-303, 1995.
105. Nolte LP, Zamorano L, Arm E, Visarius H, Jiang Z, Berlerman U, Schwarzenbach O: Image-guided computer assisted spine surgery: a pilot study on pedicle screw fixation. *American Society for Stereotactic and Functional Neurosurgery*, Vol. 66 (1-3): 108-117, 1996.

106. Jiang Z, Grosky W, Zamorano L, Nolte LP, Kadi AM: Immersive database system and virtual patient. Journal of Virtual Reality in Medicine, Fall/Winter, Vol, pp. 20-25, 1996.
107. Jiang Z, Grosky W, Zamorano L: Immersive database - concepts and preliminary study. Journal of Medicine and Virtual Reality, Fall/Winter, 1: 20-25, 1996.
108. Zamorano L, Lis-Planells M, Jiang Z, Nolte L, Kadi AM, Diaz FG: Vascular malformations of the brain: surgical management using interactive image guidance. Neurosurgery Clinics of North America, 7: 201-214, 1996.
109. Vinas FC, Zamorano L, Lis-Planells M, Buciuc R, Diaz FG: Interactive intraoperative localization during the resection of intraventricular lesions. Minimally Invasive Neurosurgery 39. 65-70, 1996.
110. Nolte L, Zamorano L, Arm E, Visarius H, Jiang Z, Berleman U, Schwarzenbach: Image-guided computer-assisted spine surgery: A pilot study on pedicle screw fixation. American Society for Stereotactic and Functional Neurosurgery, Part II, 66: 108-117, 1996.
111. Vinas FC, Zamorano L, Buciuc R, Li QH, Shamsa F, Jiang Z, Diaz FG: Comparison of application accuracy between a stereotactic frame and a semi-permanent fiducial system for frameless stereotaxis. Acta Neurochirurgica, Springer Verlag, 1996.
112. Li QH, Holdener HJ, Zamorano L, King P, Jiang Z, Diaz FG: Computer-assisted insertion of pedicle screws. Lecture Notes in Computer Science 1131. Eds by Karl Heinz Höhne and Ron Kikinis, pp 571-581, 1996.
113. Zamorano L, Gaspar L, Garcia L, Buciuc R, Warpelink C, Ezzell, G: Stereotactic radiosurgery: implementation of a radiosurgical center and initial clinical experience on 66 patients. Stereotactic and Functional Neurosurgery, 66:54, 1996.

114. Zamorano L, Kadi AM, Buciuc R, Diaz FG: ZD multipurpose neurosurgical localizing unit: experience with 600 cases. *Stereotactic and Functional Neurosurgery*, 66:150, 1996.
115. Zamorano L, Chavantes C, Buciuc R, Diaz FG: Interactive laser stereotaxis: management of brain lesions. *Stereotactic and Functional Neurosurgery*, 66:151, 1996.
116. Zamorano L, Kadi AM, Jiang Z, Diaz FG: Intraoperative localization of a hand-held laser instrument using an infrared-based system. *Stereotactic and Functional Neurosurgery*, 66:152, 1996.
117. Zamorano L, Lis-Planells M, Garcia L, and Diaz FG: Interactive computer-assisted resection of arteriovenous malformations and cavernous angiomas using an infrared system. *Stereotactic and Functional Neurosurgery*, 66:152, 1996.
118. Zamorano L, Buciuc R, Aronin P, Ham S, Caragine S, Canady A, Diaz FG: Interactive-image-guided surgery in pediatric neurosurgery using an infrared-based system. *Stereotactic and Functional Neurosurgery*, 66:154, 1996.
119. Zamorano L, Kadi AM, Jiang Z, Diaz FG: A computer-assisted neurosurgical suite: design and implementation. *Stereotactic and Functional Neurosurgery*, 66:155, 1996.
120. Melgar MA, Zamorano L, Jiang Z, Guthikonda M, Gordon V, Diaz FG: Three dimensional magnetic resonance angiography in the planning of aneurysm surgery. *Computer Aided Surgery*, Vol. 2 (1), pp. 11-23, 1997.
121. Zamorano L, Vinas FC, Buciuc R, Jiang Z, Li QH, Diaz FG: Use of an open stereotactic ring for neurosurgical procedures. *Minimally Invasive Neurosurgery* 40: 79-82, r 1997.
122. Nolte L, Zamorano L, Arm E, Visarius H, Jiang Z, Berlerman U, Schwarzenbach O: Image-guided computer-assisted spine surgery: a pilot study on pedicle screw fixation. *Stereotactic and Functional Neurosurgery*, 66:108, 1997.

123. Fernandez P, Zamorano L, Nolte LP, Jiang Z, Kadi AM, Diaz FG: Interactive image guidance in skull base surgery using an opto-electronic device. Skull Base Surgery 7: 15-21, 1997.
124. Zamorano L, Vinas FC, Mueller R-A, Jiang Z, Chugani H, Fuerst D, Muzik O, Mangner T, Diaz FG: [¹⁵O]-Water PET and intraoperative brain mapping: a comparison in localization accuracy of eloquent cortex. Advances in Stereotactic and Functional Neurosurgery 12: 50-65, Springer Verlag, 1997.
125. Jiang Z, Zamorano L, Muzic O, Li QH, Popescu A, Diaz FG: Consistency analysis for digitized three-dimensional Talariach's co-planner stereotactic atlas of the human brain. SPIE 2976: 214-221, 1997.
126. Jiang Z, Grosky W, Zamorano L, Muzic O, Diaz FG: Intraoperative virtual brain counseling. SPIE 2976: 222-235, 1997.
127. Jiang G, Zamorano L, Li QH, Popescu A, Diaz FG: Information control for image-guided surgery: method and implementation. SPIE 2976: 236-245, 1997.
128. Li QH, Jiang Z, Zamorano L, Buciuc R, Vinas FC, Diaz FG: Comparison of application accuracy of frame-based and frameless surgical localization systems and affecting factors. SPIE 2976: 194-204, 1997.
129. Vinas FC, Zamorano L, Mueller RA, Jiang Z, Chugani H, Fuerst D, Muzik O, Mangner T, Diaz FG: [¹⁵O]-Water PET intraoperative brain mapping: a comparison in localization accuracy of eloquent cortex. Neurological Research Vol. 19: 601-608, 1997.
130. Chuba P, Aronin P, Bhambhani K, Eichenhorn M, Zamorano L, Cianci P, Muhlbauer M, Porter A, Fontanesi J: Hyperbaric oxygen therapy for radiation-induced brain injury in children. Journal of American Cancer Society 80: 2005-2012, 1997.

131. Li QH, Zamorano L, Jiang Z, Holdener H, King P, Diaz FG: Interactive image guided surgery - The experience of Wayne State University. ASME - Advances in BioEngineering, 36: 251-252, 1997.
132. Zamorano L, Matter A, Saenz A, Buciuc R, Diaz FG: Interactive image-guided resection of cerebral cavernous malformations. Computer Aided Surgery 2: 327-332, 1997.
133. Zamorano L, Saenz A, Matter A, Buciuc R, Gaspar L, Fontanesi J, Garzon A, Diaz FG: Radiosurgical treatment of meningiomas. Stereotactic and Functional Neurosurgery 69: 156-161, 1997.
134. Vinas FC, Zamorano L, Buciuc R, Li QH, Shamsa F, Jiang Z, Diaz FG: Application accuracy study of a semi-permanent fiducial system for frameless stereotaxis. Computer Aided Surgery, Vol. 2 (5): 257-263, 1997.
135. Saenz A, Zamorano L, Matter A, Buciuc R, Diaz FG: Interactive image-guided surgery of the pineal region. Minimally Invasive Neurosurgery, Vol. 41, pp. 27-30, 1998.
136. Zamorano L, Matter A, Saenz A, Buciuc R, Gaspar L, Fontanesi J, Garzon A, Diaz FG: Radiosurgery for cerebral arteriovenous malformations. Journal of Radiosurgery1, No. 3: 225-231, 1998.
137. Zamorano L, Matter A, Saenz A, Portillo G, Diaz FG: Interactive image-guided surgical resection of intracranial arteriovenous malformations. Computer Aided Surgery 3:57-63, 1998.
138. Zamorano L, Matter A, Saenz A, Buciuc R, Gaspar L, Fontanesi J, Shamsa F, Garzon A, Diaz FG: Radiosurgical treatment of brain metastases. Journal of Radiosurgery, 1 (4): 257-262, 1998.
139. Zamorano L, Matter A, Juan C, Benedetti, Diaz F: Computer Assisted Resection of Cerebral Cavernous Angiomas: American Society for Laser Medicine and Surgery pp.37-40. 1999.

140. Zamorano L, Matter A, Diaz FG: Interactive image guided resection of cerebral arteriovenous malformations. *Lasers in Surgery and Medicine*10: 13-14, 1998.
141. Vinas FC, Zamorano L, Jiang Z, Diaz FG: Role of image guided surgery in the resection of intraventricular lesions. *Lasers in Surgery and Medicine* 10: 14-16, 1998.
142. Vinas FC, Holdener H, Zamorano L, King PK, Li QH, Jiang Z, Diaz FG: Use of Interactive -Intraoperative Guidance during Vertebrectomy and Anterior Spinal Fusion with Instrumental Fixation: Technical Note. *Minimally Invasive Neurosurgery*, Vol. 41 (3): 166-171, 1998.
143. Zamorano L, Matter A, Vinas FC, Muller R, Jiang Z, Chugani H, Diaz FG: Poster - (15O)-water PET and intraoperative brain mapping: A comparison in the localization of eloquent cortex. *NeuroImage*10: 55-65, 1998.
144. Zamorano L, Vinas FC, Matter A, Buciuc R, Diaz FG: Role of intraoperative functional mapping in the optimization of surgical outcome. *NeuroImage* 10: 72-75, 1998.
145. Matter A, Barger G, Zamorano L, Gaspar L, DiCarli M, Davis L, Diaz FG: Thallium 201 SPECT and F-18 fluorodeoxyglucose PET in the differential diagnosis of brain tumor recurrence vs radiation necrosis after permanent I-125 implantation. *NeuroImage* 10: 77-80, 1998.
146. Chuba P, Zamorano L, Hamre M, Bhambhani K, Canady A, Guys M, Matter A, Portillo G, Chung-bin S, Fontanesi J: Permanent I-125 Brainstem Implants in Children. *Childs Nervous System*, 1998.
147. Portillo G, Zamorano L, Chuba P, Bhambhani K: I-125 Permanent Implants in the Treatment of Infants with Malignant Brain Tumors: Case Report and Literature Review. *Child's Neurology*, 1998.

148. Matter A, Zamorano L, Chuba P, Perez R, Portillo G, Gaspar L, Shamsa F, Diaz FG: Permanent Iodine-125 Implants in the Treatment of Pediatric Brain Tumors. *Pediatric Neurosurgery*, 1998.
149. Zamorano L, Vinas FC, Jiang Z, Diaz FG: Use of Surgical Wands in Neurosurgery. *Adv. Tech. Stand. Neurosurg* 24: 77-128, 1998.
150. Jiang Z, Zamorano L, Yan X, Li Q, Gong J, Diaz F: Multi-Volume Rendering with Intermediate Image and Opacity Shade Fusion. *Medical Imaging*, pp 3335-3401, 1998.
151. Gong J, Zamorano L, Jiang Z, Nolte LP, Diaz F: Restricted Surface Matching: A New Registration Method for Medical Image. *Medical Imaging*, pp 3338-4105, 1998.
152. Li QH, Zamorano L, Jian ZW, Gong J, Diaz FG: Influence of Different Medical Images on the Application Accuracy during Image-Guided Surgery. *Medical Imaging*, pp 3658-3728, 1999.
153. Videtic GMM, Gaspar L, Zamorano L, Tekyi-Mensah S, Garzon A, Levin K, Diaz FG: Treatment of Brainstem Lesions Using Gamma Knife Radiosurgery. *Journal of Radiosurgery* 2: 135-139, 1999.
154. Videtic GMM, Gaspar L, Zamorano L, Fontanesi J, Levin K, Kupsky W, Mensah SM: Use of the RTOG Recursive Partitioning Analysis to Validate the Benefit of Iodine-125 Implants in the Primary Treatment of Malignant Gliomas. *Int. J Radiation Oncology Biol. Phys.* 45: 687-682, 1999.
155. Videtic GMM, Levin K, Zamorano L, Kupsky, W: Adjuvant Gamma Knife Radiosurgery for a Resected Suprasellar Pituitary Adenoma with Atypical Immunohistochemistry: Case Report. *Journal of Radiosurgery*, Vol 2: 1999
156. Videtic GMM, Gaspar L, Zamorano L, Mensah ST, Garzon A, Levin K, Diaz F: Gamma Knife Radiosurgery for Brain Stem Lesion: The Wayne State University Experience: *Journal of Radiosurgery*, Vol 2: 135-139, 1999

157. Li, Q, Zamorano L, Jiang Z, Gong J, Pandya A, Perez R, Diaz F: Effect of Optical Digitizer Selection on the Application accuracy of a Surgical Localization System A Quantitative Comparison between the OPTOTRAK and FlashPoint Tracking Systems: Computer Aided Surgery, 4:314-321, 1999.
158. Gasper L, Zamorano L, Shamsa F, Fontanesi J, Ezzell G, Yakar D: Permanent Iodine-125 Implants for Recurrent Malignant Gliomas. Int .J: Radiat.Oncol.Biol.Phys. 43: 977-982, 1999.
159. Videtic GM, Gaspar LE, Zamorano L, Fontanesi J, Levin KJ, Kupsky WJ, Tekyi-Mensah S. Use of the RTOG recursive partitioning analysis to validate the benefit of Iodine-125 implants in the primary treatment of malignant gliomas. Int. J. Radiat.Oncol. Biol. Phys. 45:687-692. 1999.
160. Vinas F, Zamorano L, Diaz FG: Permanent I-125 interstitial radiation therapy in the treatment of non-GBM high-grade gliomas. Journal of Radiosurgery 3: 91-98, 2000.
161. Zamorano L, Vinas F, Chuba P, Matter A, Gaspar, L, Portillo G, Shamsa F, Diaz F: Permanent Iodine-125 Implants in the Treatment of Low-Grade Gliomas. Journal of Radiosurgery, 3: 147-154, 2000.
162. Vinas F, Zamorano L, Gaspar L, Matter A, Shamsa F, Diaz FG: Permanent I-125 interstitial radiation therapy in the treatment of non-GBM high grade gliomas. Journal of Radiosurgery 3: 91-98, 2000.
163. Videtic GM, Gaspar LE, Zamorano L, Stitt LW, Fontanesi J, Levin KJ. Implant Volume a prognostic variable in Brachytherapy decision making for malignant Gliomas stratified by the RTOG recursive partitioning analysis. Int. J. Radiat. Oncol. Biol. Phys. 15: 963-968, 2001.
164. Mehta M, Yung WK, Bullard D, Barger G, Choucair A, Gillin M, Grossman S, Guha A, Hammond ME, Michalski J, Prados M,

- Provins S, Scott C, Zamorano L; Radiation Therapy Oncology Group. Radiation Therapy Oncology Group. Research Plan 2002-2006. Brain Tumor Committee. Int J Radiat Oncol Biol Phys. 2001;51(3 Suppl 2):11-8.
165. Laura Hernandez MD, Zamorano L, Andrew Sloan MD, James Fontanesi MD, Simon Lo MD, Kenneth Levin MD, Qinghang Li PhD, and Fernando Diaz MD, PhD. Gamma Knife Radiosurgery Treatment of Renal Cell Carcinoma Brain Metastases. J Neurosurg. 97: 489-493, 2002.
166. Zamorano L, Gonzalez Martinez J, Hernandez L, Sloan A, Levin K, Lo S, Li Q, Diaz F: Gamma Knife Radiosurgery for Intracranial Metastatic Melanoma – A 6 year experience. J Neurosurg. 97: 494–498, 2002.
167. Levin K, Youssef EF, Sloan A, Patel R, Zabad RK, Zamorano L: Gamma Knife Radiosurgery in Patients with Advanced Breast Cancer Undergoing Bone Marrow Transplant. J Neurosurg. 97, 663-665, 2002.
168. Li Q, Zamorano L, Pandya A, Perez R, Gong J, Diaz F: The Application Accuracy of the NeuroMate Robot – A Quantitative Comparison with Frameless and Frame-Based Surgical Localization Systems. Computer Aided Surgery 7:90-98, 2002.
169. Gonzalez-Martinez J, Guthikonda M, Vellutini E, Zamorano L, Li Q, Kupski W, Diaz F: Intradural Invasion of Chordoma: Two Case Reports. Skull Base: An interdisciplinary Approach 12: 155-161, 2002.
170. Gonzalez-Martinez JA, Zamorano L, Li QH, Diaz FG. Interactive image-guided management of colloid cysts of the third ventricle. Minim Invasive Neurosurg. 46(4):193-7, 2003
171. Zamorano L. Permanent iodine-125 interstitial radiation therapy in the treatment of non-GBM high-grade gliomas. Stereotactic and Functional Neurosurgery, Vol. 81, No. 1-4, pp 10-17, 2003.

172. Gonzalez-Martinez JA, Zamorano L, Li QH, Diaz FG. Interactive image-guided management of colloid cysts of the third ventricle. *Minim Invasive Neurosurg.* 46(4):193-7, 2003
173. Zamorano L. Permanent iodine-125 interstitial radiation therapy in the treatment of non-GBM high-grade gliomas. *Stereotactic and Functional Neurosurgery*, Vol. 81, No. 1-4, pp 10-17, 2003.
174. Zamorano L, Qinghang L, Tekyi-Mensah S, Gaspar L, Fontanesi J, Levin K, Permanent Iodine-125 Interstitial Radiation Therapy in the Treatment of Non-Glioblastoma multiforme High-Grade Gliomas. *Stereotactic and Functional Neurosurgery*, 2003;81: pp 10-17.
175. Daryan L, Alam M, Zamorano L, Kaur G, “Enhancing Intraoperative Visualization for Neurosurgery Using Augmented Reality Technology”. *MICAAI 2004 proceedings*.
176. Gulsheen Kaur, Lucia Zamorano, Vipin Chaudhary, King Yang, Weisong Shi, Farshad Fotouhi, Ishwar Sethi, William Grosky, Jignesh Patel, Yi Lu Murphey. “Biomedical Computing Center for Image-guided Applications”. *MICAAI 2004 proceedings*.
177. Jong B. Lee, Jingwen Hu, Liying Zhang, King H. Yang, Albert I. King, and Lucia Zamorano. “Investigation of gravity-induced brain shift based on a three- dimensional finite element model of the human brain”. *MICAAI 2004 proceedings*.
178. Hanping Lufei, Weisong Shi, Lucia Zamorano. “Communication Optimization for Image Transmission in Computer- Assisted Surgery”. *MICAAI 2004 proceedings*.
179. Michael Morse, Jignesh Patel, William Grosky, Lucia Zamorano. “Hitting the Bulls-eye with the Target Tree”. *Proceedings of the 30th VLDB Conference*.
180. Zamorano L, Li Q, Jain S, Kaur G, Robotics in neurosurgery: state of the art and future technological challenges. *Int J Medical Robotics & Computer Assisted Surgery* April 2004; 1 (1): pp 7-

22.

181. Lee J, Hu J, Zhang L, Yang K, King A, Zamorano L . “A parametric study on gravity-induced brain shifting using a three-dimensional FE model of the human brain”. 2004 ASME International Mechanical Engineering Congress and RD&D Expo November 13-19, 2004
182. Lufei H, Shi W, Zamorano L “On the Effects of Bandwidth Reduction Techniques in Distributed Applications”. Conference on Embedded And Ubiquitous Computing, 2004: 796-806.
183. Zamorano L, Li Q, Jain S, Kaur G “Robotics in neurosurgery: state of the art and future technological challenges”. The International Journal of Medical Robotics & Computer Assisted Surgery 20 April 2004; 1(1):7-22.
184. Alam M, Daryan L, Kaur G, Zamorano L “An Augmented Reality System to Enhance Intraoperative Visualization for Computer Assisted Neurosurgery”. The 13th annual MMVR conference, 2004
185. Daryan L, Alam M, Zamorano L, Kaur G “An Augmented Reality System to enhance Intraoperative Visualization for Computer Assisted Neurosurgery”. Congress of Neurological Surgeons, 2004.
186. Jain S, Zamorano L, Dr Med, Kaur G, Grosky W, Morse M “Hierarchical Brain Tree (HBT): A Comprehensive Organization of Structures of the Human Brain”. Congress of Neurological Surgeons, October 16 - 21, 2004.
187. Lee J, Hu J, Zhang L, Yang K, King A, Zamorano L. “Investigation of gravity-induced brain shift based on a three-dimensional finite element model of the human brain”. Congress of Neurological Surgeons, October 16 - 21, 2004.
188. Li Q, Marchese E, Pandya A, Zamorano L, “Quantitative comparison between the heads-up-display and common monitor in endoscopic neurosurgery”. CARS 2004: 1288.

189. Zamorano L, Li Q: Robotics in Neurosurgery: State of the Art and Future Technological Challenges. Journal of Medical Robotics and Computer Assisted Surgery. 1(1):1-16; 2004.
190. Lufei H, Shi W, Zamorano L "Communication Optimization for Image Transmission in Computer-Assisted Surgery". Congress of Neurological Surgeons, October 16 - 21, 2004
191. Souhami L, Seiferheld W, Brachman D, Podgorsak EB, Werner-wasik M, Lustig R, Schultz CJ, Sause W, Okunieff P, Buckner J, Zamorano L, Mehta MP, Curran WJ Jr.: Randomized comparison of stereotactic radiosurgery followed by conventional radiotherapy with carmustine to conventional radiotherapy with carmustine for patients with glioblastoma multiforme: report of Radiation Therapy Oncology Group 93-05 protocol. Int J Radiat Oncol Biol Phys. 2004 Nov 1; 60(3):853-60.
192. Sehgal V, Delproposto Z, Haddar D, haacke EM, Sloan AE, Zamorano L, barger G, Hu J, Xu J, Prabhakaran K, Elangovan I, Neelavalli J, reichenback J. Susceptibility-weighted imaging to visualize blood products and improve tumor contrast in the study of brain masses. J Magn Reson Imaging. 2006 Jul; 24(1):41-51

L2. Non Peer Reviewed Journal Publications/Proceedings

1. Zamorano L, Dujovny M, Ausman JI, Diaz FG, Berman K, Mirchandani H: Microsurgical anatomy of the posterior part of the cavernous sinus: neurovascular relationships. Proceeding of the Eighth European Congress of Neurosurgery. Barcelona, Spain, 1987.
2. Sadasivan B, Zamorano L, Dujovny M, Ma S, Diaz FG, Ausman JI, Mirchandani H: The microanatomical basis for cavernous sinus surgery. Proceedings of the Am Assoc Neurol Surg, 1988.
3. Zamorano L, Dujovny M, Malik, GM, Yakar D, Mehta B, Shibli F: Multiplanar CT-guided stereotactic I-125 interstitial radiotherapy for malignant brain tumor. Proceedings of the Am Assoc Neurol Surg, 1988.

4. Zamorano L, Dujovny M, Ausman JI, Mirchandani, H, Sadasivan B, Diaz FG: Microsurgical anatomy of the posterior clinoid regions: an operative approach to the posterior part of the cavernous sinus. Proceedings of the Am Assoc Neurol Surg, 1988.
5. Sadasivan B, Zamorano L, Dujovny M, Ma S, Diaz FG, Ausman JI, Mirchandani H: The anterior cavernous sinus space. Proceedings of the Am Assoc Neurol Surg, 1988.
6. Zamorano L, Katanik D, Dujovny M, Yakar D, Ausman JI, Malik GM: Tumor recurrence vs radionecrosis after resection and high-dose localized external radiotherapy in malignant gliomas: importance of stereotaxis in the differential diagnosis. Proceedings of the Am Assoc Neurol Surg, 1988.
7. Zamorano L, Dujovny M, Malik GM, Yakar D, Mehta B, Flynn M: Transposition of imaging 3-dimensional data into stereotactic space and computer assisted interstitial radiotherapy dosimetry. Proceedings of the Am Assoc Neurol Surg, 1988.
8. Dujovny M, Zamorano L, Flynn M, Mehta B, Lacey L, Ausman JI: Holography display of cerebral microvascular anatomy. Proceedings of the Am Assoc Neurol Surg, 1988.
9. Zamorano L, Dujovny M, Chavantes MC, Malik GM, Ausman JI: Fiberoptic neuroendoscopy and Nd-YAG laser interfaced to imaging guided stereotaxis: a technical note. Proceedings of the Am Assoc Neurol Surg, 1988.
10. Zamorano L, Dujovny M, Chavantes MC, Shibli F, Malik GM, Ausman JI: Surgical treatment of brain metastases from lung cancer in the elderly. Proceedings of the Am Assoc Neurol Surg, 1988.
11. Dujovny M, Zamorano L, Flynn MJ, Mehta B, Lacey L, Ausman JI: Holography display of cerebral microvascular anatomy. Proceedings of the Ninth International Symposium for Cerebral Ischemia, Detroit, Michigan, 1988.
12. Zamorano L, Dujovny M, Malik GM, Flynn M, Block R: Adaptation of a stereotactic system for 3-D multiplanar image-guided stereotaxis.

- Proceedings of the Eighth Meeting of the European Society for Stereotactic and Functional Neurosurgery. Budapest, Hungary, 1988.
13. Zamorano L, Chavantes MC, Dujovny M, Malik GM, Ausman JI: Neuroendoscopic image-guided stereotactic. Proceedings of the Eighth Meeting of the European Society for Stereotactic and Functional Neurosurgery. Budapest, Hungary, 1988.
 14. Zamorano L, Katanick D, Dujovny M, Yakar D, Malik GM: Recurrence vs Radionecrosis: an indication for multi-trajectory serial stereotactic biopsies. Proceedings of the Eighth Meeting of the European Society for Stereotactic and Functional Neurosurgery. Budapest, Hungary, 1988.
 15. Zamorano L, Dujovny M, Malik GM, Mehta B: Transposition of MRI data into multiplanar 3D CT stereotaxis. Proceedings of the Eighth Meeting of the European Society for Stereotactic and Functional Neurosurgery. Budapest, Hungary, 1988.
 16. Zamorano L, Dujovny M, Yakar D, Malik GM, Mehta B: Multiplanar-imaging guided stereotactic brachytherapy. Proceedings of the Eighth Meeting of the European Society for Stereotactic and Functional Neurosurgery. Budapest, Hungary, 1988.
 17. Zamorano L, Dujovny M, Martinez-Coll A, Malik GM: Transposition of image-defined trajectories into arch-quadrant stereotactic systems. Proceedings of the Eighth Meeting of the European Society for Stereotactic and Functional Neurosurgery. Budapest, Hungary 1988.
 18. Zamorano L, Dujovny M, Sadasivan B: Microsurgical anatomy of the cranial nerves. Proceedings of the International Symposium on Cranial Base Surgery. Pittsburgh, Pennsylvania, 1988.
 19. Sadasivan B, Ma S, Dujovny M, Zamorano L, Ausman JI: Microanatomical basis of cavernous sinus surgery. Proceedings of the Base of Skull Symposium, Pittsburgh, Pennsylvania, 1988.
 20. Dujovny M, Ohaegbulam S, Holzer F, Zamorano L, Diaz FG, Ausman JI, Mirchandani H: Microsurgical anatomy of intracavernous

- ICA. Proceedings of the Base of Skull Symposium, Pittsburgh, Pennsylvania, 1988.
21. Zamorano L, Dujovny M, Malik GM, Flynn M, Block R: Adaptation of a stereotactic system for 3D multiplanar image guided stereotaxis. Proceedings of the Congress Neurological Surgeons. Seattle, Washington, 1988.
 22. Zamorano L, Dujovny M, Ausman JI, Diaz FG, Mirchandani H, Sadasivan B: Microsurgical anatomy of the cranial nerves in the cavernous sinus. Proceedings of the Am Assoc Neurol Surg. Washington, D.C., 1989.
 23. Zamorano L, Dujovny M, Mehta B, Yakar D, Malik GM: Image guided stereotaxis: our experience on 345 consecutive cases. Proceedings of the Tenth Meeting of the World Society for Stereotactic and Functional Neurosurgery. Japan, 1989.
 24. Zamorano L, Chavantes MC, Dujovny M, Malik GM, Ausman JI: Image-guided endoscopic laser stereotaxis. Proceedings of the Tenth Meeting of the World Society for Stereotactic and Functional Neurosurgery. Japan, 1989.
 25. Zamorano L, Dujovny M, Flynn M, Ausman JI: 3D-2D multiplanar workstation for neurosurgical stereotactic planning. Proceedings of the Tenth Meeting of the World Society for Stereotactic and Functional Neurosurgery. Japan, 1989.
 26. Zamorano L, Dujovny M, Chavantes MC, Block R, Flynn M: Z-D multi-purpose neurosurgical image-guided localizing unit. Proceedings of the Tenth Meeting of the World Society for Stereotactic and Functional Neurosurgery. Japan, 1989.
 27. Zamorano L, Chavantes MC, Dujovny M, Malik GM, Mehta B: Image-guided stereotactic centered craniotomy and laser resection of solid intracranial lesions. Proceedings of the Tenth Meeting of the World Society for Stereotactic and Functional Neurosurgery. Japan, 1989.
 28. Zamorano L, Dujovny M, Malik GM, Chavantes MC, Kannengenti R: Surgical treatment of brain metastasis: results of 370 patients.

- Proceedings of the Ninth International Congress of Neurological Surgery. New Delhi, India, 1989.
29. Zamorano L, Chavantes MC, Dujovny M, Malik GM, Mehta B: Stereotactic craniotomy and laser resection of solid intracranial lesions. Proceedings of the Ninth International Congress of Neurological Surgery. New Delhi, India, 1989.
 30. Zamorano L, Dujovny M, Mehta B, Yakar D, Malik GM: Image-guided stereotaxis: our experience on 345 consecutive cases. Proceedings of the Ninth International Congress of Neurological Surgery. New Delhi, India, 1989.
 31. Zamorano L, Katanik D, Dujovny M, Yakar D, Malik GM: Hyperfractionated high dose localized external radiotherapy after surgical resection of malignant gliomas: survival analysis. Proceedings of the Ninth International Congress of Neurological Surgery. New Delhi, India, 1989.
 32. Zamorano L, Dujovny M, Chavantes MC, Block R, Flynn M: Multipurpose neurosurgical image-guided localizing unit. Proceedings of the Ninth International Congress of Neurological Surgery. New Delhi, 1989.
 33. Zamorano L, Chavantes MC, Dujovny M, Malik GM, Ausman JI: Endoscopic laser stereotaxis (ELS): our indication for cystic or intraventricular lesion. Proceedings of the Ninth International Congress of Neurological Surgery. New Delhi, India, 1989.
 34. Zamorano L, Dujovny M, Flynn M, Ausman JI: 3D-2D multiplanar neurosurgical stereotactic planning workstation. Proceedings of the Ninth International Congress of Neurological Surgeons. New Delhi, India, 1989.
 35. Zamorano L, Dujovny M, Flynn M, Ausman JI: 3D-2D multiplanar workstation for neurosurgical stereotactic planning. Proceedings of the Congress of Neurological Surgery. Atlanta, Georgia, 1989.
 36. Zamorano L, Dujovny M, Chavantes MC, Malik GM, Ausman JI: Image guided stereotactic centered craniotomy and resection of deep

- solid intracranial tumors. Proceedings of the Congress of Neurological Surgeons. Atlanta, Georgia, 1989.
37. Zamorano L, Dujovny M: Z-D multipurpose stereotactic unit. Proceedings of the International Symposium on Stereotactic Surgery and Workshop. Miami, Florida, 1989.
 38. Zamorano L: Technology requirement for computer aided neurosurgery. Technology Requirements for Biomedical Imaging (Strategic Defense Initiative Technology Applications Symposium) 66-68, 1991
 39. Warmelink C, Gaspar L, Ezzel G, Zamorano L, Wierzbicki J: The Dosimetric limitations of palladium-103 in permanent implants of brain tumors. Proceedings of the 16th Annual Mid-Winter Meeting of the American Endocurietherapy Society 4-31:99, 1993.
 40. Gaspar L, Fernandez P, Zamorano L, Warmelink C, Yakar D, Heilbrun L: Permanent I-125 implant in malignant glioma. Proceedings of the 16th Annual Mid-Winter Meeting of the American Endocurietherapy Society 5-36:106, 1993.
 41. Gaspar L, Zamorano L, Garcia L, Shamsa F, Waremelink C, Yakar D: Permanent I-125 interstitial implants for the initial treatment of malignant gliomas. Proceedings of the American Radium Society's 76th Annual Meeting 62:32, 1994.
 42. Gaspar L, Zamorano L, Shamsa F, Han I, Alekhteyar C, Garcia L, Yakar D: Permanent iodine-125 implant in malignant glioma. Proceedings of the American Society for Therapeutic Radiology and Oncology, San Francisco, CA, pp. 193-200, 1995.
 43. Zamorano L, Kadi M, Buciuc R, Diaz FG: ZD multipurpose neurosurgical localizing using unit: Experience with 600 cases. Proceedings of the Meeting of the American Society for Stereotactic and Functional Neurosurgery, Part II, Vol. 66, pp. 150, 1996.
 44. Zamorano L, Chavantes C, Buciuc R, Diaz FG: Interactive laser stereotaxis: Management of brain lesions. Proceedings of the Meeting of the American Society for Stereotactic and Functional Neurosurgery, Part II, Vol. 66, pp. 151, 1996.

45. Zamorano L, Kadi M, Jiang Z, Diaz FG: Intraoperative localization of a hand-held laser instrument using an infrared-based system. Proceedings of the Meeting of the American Society for Stereotactic and Functional Neurosurgery, Part II, Vol. 66, pp. 152, 1996.
46. Zamorano L, Lis-Planells M, Garcia L, Diaz FG: Interactive computer-assisted resection of arteriovenous malformations and cavernous angiomas using an infrared system. Proceedings of the Meeting of the American Society for Stereotactic and Functional Neurosurgery, Part II, Vol. 66, pp. 152, 1996.
47. Zamorano L, Buciuc R, Aronin P, Ham S, Caragine L, Canady A, Diaz FG: Interactive image-guided surgery in pediatric neurosurgery using an infrared-based system. Proceedings of the Meeting of the American Society for Stereotactic and Functional Neurosurgery, Part II, Vol. 66, pp. 154, 1996.
48. Aref A, Zamorano L, Purser S, Fontanesi J, Jacobs JR: Computer-aided brachytherapy for advanced head and neck carcinoma. Proceedings of American Society of Head and Neck Surgery, JSO (ed), 1996.
49. Zamorano L: Malignant brain tumors can strike anyone. Another Perspective, Vol. 2, No. 2, 1997.
50. Jiang Z, Zamorano L, Li QH, Gong J, Diaz FG: Technology and human errors in image-guided surgeries. SPIE Proceedings, OptoWest Bios 98, San Jose, CA, Jan. 28, 1998.
51. Li QH, Zamorano L, Jiang Z, Vinas FC, Diaz FG: The application accuracy of the frameless implantable marker system and analysis of related affecting factors. Medical Image Computing and Computer-Assisted Intervention – MICCAI'98, pp. 253-260. Proceedings of First International Conference, Cambridge, MA, USA, Oct. 1998.
52. Matter A, Zamorano L, Benedetti J, Vinas FC, Diaz FG: Interactive Image-Guided Neurosurgery using a Robotic Microscope Integrated with an Infrared-Based System. The Mount Sinai Journal of Medicine, 1998.

53. Gong J, Zamorano L, Li Q, Diaz F: Cost Function Construction in Multi-Modalities Medical Image Registration With Adaptive Restricted Surface Matching: Medical Imaging 1999.
54. Gong J, Zamorano L, Quinghang L, Diaz F: Intro-operative Neuro-navigation and Surgeon Interface: Medical Imaging 1999.
55. Zamorano L, Ramiro Perez-de la Torre, Laurie Gaspar, Falah Shamsa, Sandra Kozlo, Fernando Diaz: Brachytherapy With I125 permanent Implants in the Up-Front Management of primary Non-GBM Malignant Gliomas. 49th Annual Meeting of the Congress of Neurological Surgeons; Boston, Massachusetts, pp325 – 326, 1999.
56. Qinghang Li, Zamorano L, Ramiro Perez, Jianxing Gong, Abhilash Pandya, Fernando Diaz: Endoscopic Transnasal, Transseptal, and Transsphenoidal Approach for Pituitary tumors Guided by Infrared Tracking System. 49th Annual Meeting of the Congress of Neurological Surgeons; Boston, Massachusetts; pp325 – 326, 1999.
57. Ramiro Perez de la Torre, L. Zamorano, Li Qing Hang, A. Pandya, J. Gong, F. Diaz: Robotic System (MKM) Interfaced To Infrared System In Stereotactic Neurosurgery. Experience At Wayne State University. 49th Annual Meeting of the Congress of Neurological Surgeons; Boston, Massachusetts; pp 509, 1999.
58. Jianxing Gong, Zamorano L: Tradeoff Analysis of Medical Image Registration Strategy. 49th Annual Meeting of the Congress of Neurological Surgeons; Boston, Massachusetts; pp 519-520, 1999
59. Qinghang Li, Zamorano L, Jianxing Gong, Abhilash Pandya, Fernando Diaz: The Effects of OPTOTRAK and FlashPoint Tracking Systems on the Guided Surgery. 49th Annual Meeting of the Congress of Neurological Surgeons; Boston, Massachusetts; pp 604, 1999
60. George England, Zamorano L, Laurie Gaspar, Geoffery Barger, Kenneth Levine, Fernando Diaz: Use of the Gamma Knife for the Treatment of Recurrent Astrocytomas Grade 1V (GBM). 49th Annual Meeting of the Congress of Neurological Surgeons; Boston, Massachusetts; pp 605, 1999.

61. Zamorano L, George England, Laurie Gaspar, Fernando Diaz: Diffuse Whit Matter Ischemic Changes and Radiation necrosis in Radiosurgery: Delayed Complications in Patients Followed more than Five Years. 49th Annual Meeting of the Congress of Neurological Surgeons; Boston, Massachusetts; pp 606, 1999.
62. Jianxing Gong, Zamorano L: Registration of Universal Instruments for Advanced Neuronavigation System. 49th Annual Meeting of the Congress of Neurological Surgeons; Boston, Massachusetts; pp 608, 1999.
63. Ramiro Perez-de la Torre, Zamorano L, Laurie Gaspar, Falah Shamsa, Sandra Kozlo, Fernando Diaz: Brachytherapy with I-125 Implants In The Up-Front Management Of Primary Glioblastoma Multiforme. 49th Annual Meeting of the Congress of Neurological Surgeons; Boston, Massachusetts; pp 649, 1999.
64. Torre R. de la Perez, MD, Zamorano L. G. England, MD, F. Diaz, PhD: Radiosurgical Treatment of Trigeminal Neuralgia: The Wayne State University Experience: American Association of Neurological Surgeons Annual Meeting (AANS), San Francisco, California, April 8-13; pp 92, 2000.
65. Qinghang LI, MD, PhD, Zamorano L, Jianxing Gong, PhD, Abhilash Pandya, MS, Fernando Diaz, MD, PhD: The Application Accuracy of Different Registration Methods in Frameless Computer-Assisted Surgery: American Association of Neurological Surgeons Annual Meeting (AANS), San Francisco, California, April 8-13, pp 125, 2000.
66. Ramiro Perez-de la Torre, MD, Zamorano L., George England, MD, Fernando G. Diaz, MD, PhD: Correlation between Anatomical Functional Areas and Neurological Outcome in Brain Lesion Resection: Results in 315 patients with Awake Craniotomy: American Association of Neurological Surgeons Annual Meeting (AANS), San Francisco, California, April 8-13, 2000; pp 128.
67. Zamorano L, Esam Elkhatib, MD, Ramiro Perez-de la Torre, MD, Falah Shamsa, PhD, Sandra Kozlo, BSN, RN, Fernando Diaz, MD, PhD: Brachytherapy with Iodine-125 Permanent Implants in the Up-Front Management of Non-Glioblastoma Multiforme Malignant

- Gliomas: American Association of Neurological Surgeons Annual Meeting (AANS), San Francisco, California, April 8-13, 2000; pp 185.
68. Ramiro Perez-de la Torre, MD, Zamorano L, Laurie Gaspar, MD, Falah Shamsa, PhD, Sandra Kozlo, BSN, RN, Fernando Diaz, MD, PhD: Brachytherapy with Iodine-125 Implants in the Up-Front Management of Primary Glioblastoma Multiforme: American Association of Neurological Surgeons Annual Meeting (AANS), San Francisco, California, April 8-13, 2000; pp 188.
 69. Ramiro Torre, MD, Zamorano L, Esam Elkhatib, MD, Laurie E. Gaspar, MD, Falah Shamsa, PhD, J. Fontanesi, MD, Gary E. Ezzel, PhD and Daniel A. Yakar, MD, Sandra Kozlo, BSN, RN, Fernando Diaz, MD, PhD: Permanent Iodine Implant for Recurrent Malignant Gliomas: American Association of Neurological Surgeons and Congress of Neurological Surgeons (AANS/CNS Section on Tumors): San Francisco, California, April 13-14, 2000; pp 120.
 70. George England, MD, Zamorano L, Gaspar, MD, G. Barger, MD, F. Diaz, MD, PhD: American Association of Neurological Surgeons and Congress of Neurological Surgeons (AANS/CNS Section on Tumors): San Francisco, California,; pp 120, 2000.
 71. George England, MD, Zamorano L, Andrew Sloan, MD, Laurie Gaspar, MD: Heather Maki, RN, Fernando Diaz, MD, PhD: Gamma Knife Treatment of Brain Metastases: American Association of Neurological Surgeons and Congress of Neurological Surgeons (AANS/CNS Section on Tumors): San Francisco, California; pp 120, 2000.
 72. Zamorano L, Esam Elkhatib, MD, Ramiro Perez-de la Torre, MD, Falah Shamsa, Phd, Sandra Kozlo, RN, Fernando Diaz, MD, PhD: Brachytherapy with I125 Implants in the Up-Front Management of Non-GBM Malignant Gliomas: American Association of Neurological Surgeons and Congress of Neurological Surgeons (AANS/CNS Section on Tumors): San Francisco, California; pp 120, 2000.
 73. Qinghang LI, MD, PhD, Zamorano L, Janxing Gong, PhD, Abhilash Pandya, MS, Fernanco Diaz, Md, PhD: The Application Accuracy of Different Registration Methods in Frameless Computer-Assisted Surgery, (AANS): San Francisco, California, pp125, 2000.

74. Ramiro Perez-de la Torre, MD, Zamorano L, George England MD, Fernando G. Diaz, MD, PhD: Correlation between Anatomical Functional Areas and Neurological Outcome in Brain Lesion Resection: Results in 315 Patients with Awake Craniotomy, (AANS): San Francisco, California, pp128, 2000.
75. Zamorano L, Esam Elkhatib, MD, Ramiro Perez-de la Torre, MD, Falah Shamsa, PhD, Sandra Kozlo, BSN, RN, Fernando Diaz, MD, PhD: Brachytherapy with Iodine-125 Permanent Implants in the Up-Front Management of Non-Glioblastoma Multiforme Malignant Gliomas, (AANS): San Francisco, California, pp 185, 2000.
76. Ramiro Perez-de la Torre, MD, Zamorano L, Laurie Gaspar, MD, Falah Shamsa, PhD, Sandra Kozlo, BSN, RN, Fernando Diaz, MD, PhD: Brachytherapy with Iodine-125 Implants in the Up-Front Management of Primary Glioblastoma Multiforme, (AANS): San Francisco, California, pp 188, 2000.
77. Pandya, Q. H. Li, Zamorano L, D. Perez-de la Torre The Application Accuracy of the Neuromate Robot ---- A Quantitative Comparison with Frameless Infrared and Frame Based Surgical Localization Systems, COAS USA 2000, Pittsburg, Pennsylvania,, pp 261-267, 2000.
78. Pandya A, L. Zamorano: The Development and Human Factors Analysis of Advanced 3-D Visualization for Telepresence, Bioastronautics Investigator's Workshop, January 17-19, 2001, Galveston, Texas.
79. Pandya A, L. Zamorano: Towards Using Augmented Reality for Neurosurgery, The 9th Annual Medicine Meets Virtual Reality Conference, January 24-27, 2001, Newport Beach, California.
80. Zamorano: Modern Epilepsy Surgery in Adults, 5th International Congress on Minimally Invasive Neurosurgery, (oral) March 12-15, 2001, Cairo, Egypt, pp 14.
81. Zamorano: Neurosurgery, 5th International Congress on Minimally Invasive Neurosurgery, (oral) March 12-15, 2001, Cairo, Egypt, pp 54.

82. Zamorano: Immunotherapy in Brain Tumors, 5th International Congress on Minimally Invasive Neurosurgery, March 12-15, 2001, Cairo, Egypt, pp 88.
83. Zamorano L: Advanced Neurosystems, 5th International Congress on Minimally Invasive Neurosurgery, March 12-15, 2001, Cairo, Egypt, pp 94.
84. Zamorano L: IGS & Functional and Functional Mapping in Malignant Glioma, 5th International Congress on Minimally Invasive Neurosurgery, March 12-15, 2001, Cairo, Egypt., pp 99
85. Perez R, Zamorano L, Elkhatib E, England G, Li Q, Diaz F: Interactive Image-Guided Surgery in the Resection of Cerebral Cavernous Angioma, 2001 AANS Annual Meeting, Toronto, Ontario, Canada, April 21-26, 2001.
86. England G, Zamorano L, Sloan A, Diaz F: Gamma Knife Treatment of Multiple Brain Metastasis by Number, 2001 AANS Annual Meeting, Toronto, Ontario, Canada, April 21-26, 2001, pp 116
87. Perez R, Zamorano L, Elkhatib E, Martinez J, Keiser M, Levin K, Diaz F: Gamma Knife Radiosurgery for Trigeminal Neuralgia, AANS Annual Meeting, Toronto, Ontario, Canada April 21-26, 2001, pp 141
88. Li Q, Zamorano L, Pandya A, Gong J, Elkhatib E, Perez R, Diaz F: The Application Accuracy of the NeuroMate Robot System, AANS Annual Meeting, Toronto, Ontario, Canada, April 21-26, 2001, pp 94
89. Perez R, Zamorano L, Elkhatib E, Martinez J, Shamsa F, Diaz F: Interactive Image-Guided Surgery in Malignant Gliomas: Clinical Outcomes and Analysis of Complications, AANS Annual Meeting, Toronto, Ontario, Canada,) April 21-26, 2001, pp195
90. Martinez J, Zamorano L, Elkhatib E, Perez R, Marino R, Diaz F: Dual Pathology in Lesional Epilepsy: Etiological Considerations, AANS Annual Meeting, Toronto, Ontario, Canada, April 21-26, 2001, pp 206
91. Perez R, Zamorano L, Elkhatib E, Martinez J, Fontanesi, Levin K, Shamsa F, Kozlo S, Diaz F: I-125 Permanent Implants in the

- Management of Primary Glioblastoma Multiforme, AANS Annual Meeting, Toronto, Ontario, Canada, April 21-26, 2001, pp 224
92. Perez R, Zamorano L, Elkhatib E, Martinez J, Mensa S, Fontanesi J, Levin K, Diaz F: I-125 Permanent Implant in the Management of Recurrent Non-Glioblastoma Multiforme Malignant Gliomas, AANS Annual Meeting, Toronto, Ontario, Canada, April 21-26, 2001, pp 225
 93. Elkhatib E, Zamorano L, Perez R, Martinez J, Levin K, Fontanesi J, Shamsa F, Diaz F: Brachytherapy with I-125 Permanent Implant in the Management of Recurrent Glioblastoma Multiforme: Survival Analysis, AANS Annual Meeting, Toronto, Ontario, Canada, (poster) April 21-26, 2001, pp 226
 94. England G, Zamorano L, Sloan A, Diaz F: AANS Annual Meeting, Toronto, Ontario, Canada, (poster) April 21-26, 2001, pp 233
 95. Zamorano L: Radiosurgery in the Multidisciplinary Management of Metastases, 5th International Stereotactic Radiosurgery Society Congress, Las Vegas, Nevada, June 10-13, 2001
 96. Zamorano L: Interactive Image-Guidance and Brain Navigation, Neuromodulation: Defining the Future, Cleveland Clinic, Cleveland, Ohio, June 8-10, 2001, pp.4
 97. Abhilash Pandya, Zamorano L (PI), MD, Mohammad Siadat, MS, Qinghang Li, MD, Ph.D., Jason Gong, Ph.D. and James Maida, MS, IAIR, Nassau Bay Hilton, Nassau, June 19-22, 2001, pp. 8.
 98. Zamorano L, Technical Advances in Tumour Surgery, "Neuronavigation and Brain Tumours" World Federation of Neurosurgical Societies, Sydney, Australia, September 16-20, 2001, pp. 12.
 99. Zamorano L, Image Guided Neurosurgery, World Federation of Neurosurgical Societies, Sydney, Australia, September 16-20, 2001, pp. 9.
 100. Zamorano, Image Guided Neurosurgery, World Federation of Neurosurgical Societies, Sydney, Australia, September 16-20, 2001, pp. 10.

101. L Zamorano, Women in Neurosurgery, World Federation of Neurosurgical Societies, Sydney, Australia, September 16-20, 2001, pp. 11.
102. J Gonzalez-Martinez, L Zamorano, R De la Torre, Q Li, E Elkhatib, A Pandya, M Keiser, F Diaz, Association of anatomical functional areas and neurological outcome in malignant gliomas: Results in 145 patients with awake craniotomy, World Society for Stereotactic and Functional Neurosurgery, Adelaide, Australia, September 11-14, 2001, pp. 9.
103. I Germano, K Foley, R Bucholz, R Maciunas, C Mascott, H Nauta, W Tobler, K Manwaring, L Zamorano, S Gonzalez-Arias, G Barnett, Image-Guided Cranial Surgical Navigation (Practical Courses), Congress of Neurological Surgeons 51st Annual Meeting, San Diego, California, September 29 – October 4, 2001, pp 62.
104. L Zamorano, Q Li, M Keiser, J Martinez, F Diaz, Outcomes in Image-guided Neurosurgery, Congress of Neurological Surgeons 51st Annual Meeting, San Diego, California, September 29 – October 4, 2001, pp 134.
105. Gonzalez-Martinez J, Zamorano L, De la Torre R, Elkhatib E, Pandya A, Li Q, Keiser M, Diaz F. Interactive Image-Guided Endoscopic Management of Collid Cysts: A Clinical Outcome Study, Congress of Neurological Surgeons 51st Annual Meeting, San Diego, California, September 29 – October 4, 2001.
106. Gonzalez-Martinez, J, Zamorano L, De la Torre R, Li Q, Keiser M, Diaz F. Association of anatomical Functional areas and neurological outcome in malignant gliomas: Results in 145 patients with awake craniotomy, Congress of Neurological Surgeons 51st Annual Meeting, San Diego, California, September 29 – October 4, 2001.
107. Gonzalez-Martinez J, Zamorano L, Fontanesi J, Sloan A, Elkhatib E, De la Torre R, Garzon s, Pandya A, Li, H, Keiser M, Diaz F. Prognostic Factor Analysis for Melanoma Brain Metastases Treated Radiosurgery, Congress of Neurological Surgeons 51st Annual Meeting, San Diego, California, September 29 – October 4, 2001.

108. Gonzalez-Martinez J, Gordon V, Zamorano L, Elkhatib E, De la Torre R, Garzon S, Pandya A, Li H, Keiser M, Diaz F. The Effect of Stereotactic Radiosurgery on Epilepsy Associated with Arteriovenous Malformation: A Clinical Outcome Study, Congress of Neurological Surgeons 51st Annual Meeting, San Diego, California, September 29 – October 4, 2001.
109. Gonzalez-Martinez J, Gordon V, Zamorano L, Elkhatib E, De la Torre R, Garzon S, Lodej M, Pandya A, Li H, Keiser M, Diaz F. Stereotactic Radiosurgery for Arteriovenous Malformations of the Brain: The Experience of Wayne State University, Congress of Neurological Surgeons 51st Annual Meeting, San Diego, California, September 29 – October 4, 2001.
110. Zamorano L, Qinghang Li, Abhilash Paqndya, Jianxing Gong. Interactive Image-Guided Neurosurgery with the Stryker Wireless Navigation System, Congress of Neurological Surgeons 51st Annual Meeting, San Diego, California, September 29 – October 4, 2001.
111. Zamorano L, Laura Hernandez, Abhilash Pandya, Qinghang Li, Web-Base Teaching Tools for Computer Assisted Neurosurgery for Residents and Fellows of Stereotactic and Radio Neurosurgery, Wayne State University, David Adamany Undergraduate Library, 3rd Annual TLTR Conference, March 7, 2002
112. Jorge Martinez MD, Zamorano L MD, Ramiro De la Torre MD, Qinghang Li PhD, Fernando Diaz MD (Detroit, MI). Association of Anatomical Functional Areas and Neurological Outcome in Malignant Gliomas: Results in 145 Patients Undergoing Awake Craniotomy, AANS 2002 Annual Meeting, April 6-11, 2002, Chicago, Illinois.
113. Zamorano L MD, Qinghang Li PhD, Abhilash Pandya, MS, Jianxing Gong, PhD, Fernando Diaz, MD (Detroit, MI), Interactive Image-Guided Neurosurgery With the Stryker Wireless Navigation System, AANS 2002 Annual Meeting, April 6-11, 2002, Chicago, Illinois.
114. Jianxing Gong, PhD, Zamorano L, MD Qinghang Li, PhD, Abhilash Pandya, MS, Fernando Diaz, MD (Detroit, MI), Development of Universal Instrumentation for Advanced Neuronavigation System, AANS 2002 Annual Meeting, April 6-11, 2002, Chicago, Illinois.

115. Jianxing Gong, MD Zamorano L, MD, Qinghang Li, PhD, Abhilash Pandya, MS, Fernando Diaz, MD (Detroit, MI), Improvement of Safety for Surgical Navigation Instrument: 5-Year Experience at Wayne State University, AANS 2002 Annual Meeting, April 6-11, 2002, Chicago, Illinois.
116. Zamorano L, MD Qinghang Li, PhD, Jorge Martinez, MD, Abhilash Pandya, MS, Jianxing Gong, PhD, Fernando Diaz, MD (Detroit, MI), Medical Robotics in Open Neurosurgery, AANS 2002 Annual Meeting, April 6-11, 2002, Chicago, Illinois.
117. Jorge Martinez, MD, Zamorano L, MD, Andy Sloan, MD, James Fontanesi, MD, Kenneth Levin, MD, Qinghang Li, PhD Fernando Diaz, MD (Detroit, MI), Prognostic Factor Analysis for Melanoma Brain Metastases Treated With Radiosurgery, AANS 2002 Annual Meeting, April 6-11, 2002, Chicago, Illinois.
118. Qinghang Li, MD, PhD, Zamorano L, MD Jianxing Gong, PhD Abhilash Pandya, MS Fernando Diaz, MD (Detroit, MI), Brain Deformation During Image-Guided Stereotactic Biopsy. A Case Report, AANS 2002 Annual Meeting, April 6-11, 2002, Chicago, Illinois.
119. Laura Hernandez, MD Zamorano L, MD Andy Sloan, MD Kenneth Levin, MD James Fontanesi, MD Qinghang Li, PhD Fernando Diaz, MD (Detroit, MI), Gamma Knife Surgery for Brain Metastases, AANS 2002 Annual Meeting, April 6-11, 2002, Chicago, Illinois.
120. Laura hernandes, MD, Zamorano L, MD, Michael Higgins, MD, James Fontanesi, MD, Qinghang Li, PhD, Fernando Diaz, MD (Detroit, MI), Gamma Knife Surgery for Renal Cell Carcinoma Brain Metastases, AANS 2002 Annual Meeting, April 6-11, 2002, Chicago, Illinois.
121. Zamorano L, MD Qinghang Li, PhD Fernando Diaz, MD (Detroit, MI), Outcomes Analysis in Image-Guided Neurosurgery, AANS 2002 Annual Meeting, April 6-11, 2002, Chicago, Illinois.
122. Zamorano L, MD James Fontanesi, MD Kenneth Levin, MD Qinghang Li, PhD Fernando Diaz, MD (Detroit, MI), Permanent Iodine-125 Interstitial Radiation Therapy in the Treatment of Non-GBM High-

Grade Gliomas, AANS 2002 Annual Meeting, April 6-11, 2002, Chicago, Illinois.

123. Jorge A. Gonzalez-Martinez, MD, PhD (Cleveland Heights, OH) Ramiro Perez de la Torre, MD Zamorano L, MD Qinghang Li, PhD Falah Samsha, PhD Fernando Diaz, MD, PhD (Detroit, MI) Outcome of Awake Craniotomy and Functional Mapping Surgery of Eloquent Brain Lesions. (Oral Presentation) (Preuss Award), AANS 2002 Annual Meeting, April 6-11, 2002, Chicago, Illinois.
124. Jorge A. Gonzalez-Martinez MD, Zamorano L MD, Ramiro Perez MD, Essam Elkhatib MD, Qing Hang Li PhD, James Fontanesi MD, Fernando G Diaz MD. Brachytherapy: Acceptable treatment for recurrent Glioblastoma Multiforme (GBM), Role in the treatment of primary GBM is still a matter of debate, (Oral Presentation) AANS/CNS Section on Tumors: Fifth Biennial Satellite Symposium. AANS 2002 Annual Meeting, April 6-11, 2002, Chicago, Illinois.
125. Bruce E. Pollock, Kenneth F. Casey, Robert Nugent, Zamorano L, Samuel Hassenbusch, Trigeminal (workshop), AANS/CNS Section on Pain, Interventional Therapies in Neurosurgical Pain Management, AANS 2002 Annual Meeting, April 6-11, 2002, Chicago, Illinois.
126. Jorge A Gonzalez-Martinez, MD PhD , Ramiro Perez de la Torre, MD, Zamorano L, MD, Dr Med, Qinhang Li, PhD, Essam Elkhatib, MD, James Fontanesi, MD, Fernando G. Diaz, MD, PhD Survival Comparison between Conventional External Beam Irradiation with and Without I-125 Brachytherapy “Boost” for Primary Glioblastoma Multiforme using Recursive Partitioning Analysis Classes, AANS 2002 Annual Meeting, April 6-11, 2002, Chicago, Illinois.

M. PUBLICATIONS BOOKS/ CHAPTERS IN BOOKS

1. Zamorano L, Dujovny M, Ausman JI, Diaz FG, Berman S, Mirchandani H: Microsurgical anatomy of the posterior clinoid region. Suzuki J (ed), Advances in Surgery for Cerebral Stroke, Springer Verlag, pp. 541-544, 1988.

2. Zamorano L, Dujovny M, Yakar D, Malik GM, Chavantes MC, Mehta B: Multiplanar image guided stereotactic brachytherapy with iodine-125. *Neurosurgery: State of the Art Reviews*, Peter Dyck (ed), Philadelphia, Hanley and Belfus, Inc., 4:95-103, 1989.
3. Zamorano L, Chavantes MC, Dujovny M, Malik GM: Image-guided stereotactic resection of intracranial lesions: endoscopic and laser technique. *Neurosurgery: State of the Art Reviews*, Peter Dyck (ed), Philadelphia, Hanley and Belfus, Inc., 4:105-118, 1989.
4. Sadasivan B, Ma S, Dujovny M, Zamorano L, Ohaegbulam S, Dragovic L, Ausman JI: The microsurgical anatomy of the cavernous sinus. Sugita K, Shibuya M (eds), *Intracranial Aneurysms & Arteriovenous Malformations*. Nagoya University COOP Press, Nagoya, Japan, pp. 177-186, 1991.
5. Dujovny M, Ausman JI, Ohaegbulam S, Diaz FG, Holzer F, Zamorano L, Sadasivam B: Microsurgical anatomy of the intracavernous carotid artery and its branches. *Surgery of the Sellar Region and Paranasal Sinuses*. M. Samii (ed), Springer-Verlag, Berlin, pp. 149-153, 1991.
6. Ausman JI, Diaz FG, Dujovny M, Sadasivan B, Ohaegbulam S, Zamorano L: Vascular lesions in the sellar region. *Surgery of the Sellar Region and Paranasal Sinuses*. M. Samii (ed), Springer-Verlag, Berlin, pp. 490-493, 1991.
7. Sadasivan B, Dujovny M, Ma S, Zamorano L, Mirchandani HG, Ohaegbulam SC, Ausman JI: Microanatomical basis for cavernous sinus surgery. *Surgery of the Sellar Region and Paranasal Sinuses*. M. Samii (ed), Springer-Verlag, Berlin, pp. 479-483, 1991.
8. Zamorano L, Dujovny M: Multidimensional tomographic image processing for surgical planning of meningiomas. *Meningiomas and Their Surgical Management*, H.H. Schmidek (ed), W.B. Saunders Company, Philadelphia, Pennsylvania, pp. 163-170, 1991.
9. Zamorano L, Chavantes MC, Dujovny M, Malik M, Ausman JI: Endoscopic laser stereotaxis (E.L.S.): indication for cystic or intraventricular lesions. *Modern Neurosurgery 2*, M. Brock, A.K. Banerji, M. Sambasivan (eds), pp. 265-274, 1991.

10. Zamorano L, Bauer-Kirpes B, Dujovny M, Yakar D: Dose planning for interstitial irradiation. *Computers in Stereotactic Surgery*. Patrick Kelly (ed), Blackwell Scientific Publications, Inc., pp. 280-291, 1992.
11. Zamorano L, Bauer-Kirpes B, Dujovny M, Yakar D: Dose planning for interstitial radiation. *Computers in Stereotactic Neurosurgery*, Blackwell Scientific Publications, Chap. 21, pp. 279-291, 1992.
12. Zamorano L, Nolte LP, Kadi AM, Jiang Z: Modification of stereotactic frame guidance arcs using optical encoder verniers. *The Interactive Image Guided Neurosurgery*, AANS Publications Committee, Robert J. Maciunas, MD (ed), Chap. 8, pp. 97-103, 1993.
13. Zamorano L, Nolte LP, Jiang Z, Kadi AM: Image-guided neurosurgery: frame-based and frameless approaches. *Neurosurgical Operative Atlas*, S.S. Rengachary, R.H. Wilkins (eds), Williams & Wilkins, Vol. 3, pp. 403-422, 1993.
14. Garcia D, Zamorano L, Welsh D: High dose rate brachytherapy in the treatment of malignant gliomas. *Textbook of High Dose Rate Brachytherapy*, Subir Nag (ed), Futura Publishing Company, Chapter 8, pp. 215-235, 1994.
15. Zamorano L, Chavantes MC, Dujovny M: Cirugia estereotaxica de las malformacions arteriovenosas y hematomas intracerebrales profundos. "Enfermedades Cerebrovasculares Isquemias y Hemorragicas." *Publicaciones Tecnicas Mediterraneo*, Jorge Mendez and Ramon C. Leiguarda (eds), pp. 587-592, 1994.
16. Chavantes MC, Zamorano L: Aplicacion del laser en patologia cerebrovascular. "Enfermedades Cerebrovasculares Isquemias y Hemorragicas." *Publicaciones Tecnicas Mediterraneo*, Jorge Mendez and Ramon C. Leiguarda (eds), pp. 593-599, 1994.
17. Zamorano L, Chavantes MC, Moure F: Endoscopic stereotactic interventions in the treatment of brain lesions. *Acta Neurochirurgica*, Springer Verlag, 61:92-97 1994.
18. Zamorano L, Lis-Planells M, Jiang Z, Nolte LP, Kadi AM, Diaz FG: Interactive image-guided resection of vascular malformations. *Image*

- Guided Neurosurgery: Clinical Applications of Interactive Surgical Navigation, McGraw Hill, G. Barnet (ed), 1995.
19. Nolte LP, Zamorano L, Arm E, Visarius H, Jiang Z, Berlerman U, Schwarzenbach O: Image-guided computer assisted spine surgery: a pilot study on pedicle screw fixation. *Stereotactic and Functional Neurosurgery*, pp. 1-19, 1995.
 20. Zamorano L, Chavantes C, Jiang Z, Kadi AM: Stereotactic neuroendoscopy. *Concepts in Neurosurgery*, Vol. 7, pp. 49-65, 1995.
 21. Nolte LP, Zamorano L, Arm E, Visarius H, Jiang Z, Berleman U, Schwarzenbach O: Image-guided computer assisted spine surgery: a pilot study on pedicle screw fixation. *American Society for Stereotactic and Functional Neurosurgery*, S. Karger, Basel, Vol. 66, pp. 108-117, 1996.
 22. Zamorano L, Lis-Planells M, Jiang Z, Nolte LP, Kadi AM, Diaz FG: Vascular malformations of the brain: surgical management using interactive image guidance. *Clinical Frontiers of Interactive Image-Guided Neurosurgery, Neurosurgery Clinics of North America*, Robert J. Mancunias, MD (ed), Vol. 7, No. 2, pp. 201-214, 1996.
 23. Zamorano L, Vinas FC, Jiang Z, Diaz FG: Use of surgical wands in neurosurgery. *Advances and Technical Standards in Neurosurgery*. Prof. F. Cohadon (ed)., Springer-Verlag, Vol. 24. Pgs. 78 - 95 1998.
 24. Zamorano L, Gaspar L: Low-dose-rate brachytherapy in the treatment of malignant gliomas. *Stereotactic and Functional Neurosurgery*, Gildenberg and Tasker (eds), McGraw-Hill, Inc., pp. 607-15, 1996.
 25. Zamorano L, Jiang C, Chavantes C, Diaz FG: Stereotactic and interactive image-guided neuroendoscopy. *Minimally Invasive Therapy of the Brain*, Lufkin and DeSalles (eds), Thieme, pp. 241-253, 1997.
 26. Zamorano L, Jiang C, Chavantes C, Diaz FG: Stereotactic and image-guided neuroendoscopy. *Endoscopy of the Central and Peripheral Nervous System*, King, Frazee, DeSalles (eds), Thieme, pp. 23-37, 1997.

27. Zamorano L, Vinas FC, Buciuc R, Jiang Z, Diaz FG: Advanced neurosurgical navigation using a robotic microscope integrated to an infrared based system. *Computer-Assisted Neurosurgery*, Springer-Verlag Tokyo, pp. 43-55, 1997.
28. Zamorano L, Buciuc R, Vinas F, Diaz FG: Interactive image-guided surgery using an infrared -based system. *Computer-Assisted Neurosurgery*, Springer-Verlag Tokyo, pp. 86-98, 1997.
29. Zamorano L, Jiang C, Chavantes C, Diaz FG: Stereotactic and interactive image-guided neuroendoscopy. *Advanced Neurosurgical Navigaton*, Alexander and Maciunas (eds), Thieme, , pp. 311-320, 1998.
30. Zamorano L: The Zamorano-Dujovny (ZD) Multipurpose Localizing Unit. *Advanced Neurosurgical Navigation*, Alexander and Maciunas (eds), Thieme, 19, pp. 255-266, 1998.
31. Zamorano L, Lis-Planells M, Jiang Z, Nolte L, Kadi M, Diaz FG: Vascular Malfomations. *Image-Guided Neurosurgery : Clinical Applications of Surgical Navigation*, Barnett, Roberts, Maciunas (eds), pp. 105-116, 1998.
32. Zamorano L, Perez R, Li Q: Stereotactic Volumetric Resection of Malignant Gliomas: In: *Neurosurgical Operative Atlas*, 9, pp 113-122, 2000.
33. ZamoranoL, Perez R, Diaz F: Stereotactic Surgery with the Zamorano-Dujovny Frame. *Handbook of Stereotactic and Functional Neurosurgery*, Schulder Michael (eds), Marcel Dekker, Inc, 2003, pp 35-45.
34. Zamorano L, Perez R: Movement Disorders Surgery Using the Zamorano-Dujovny Localizing System. *Handbook of Stereotactic and Functional Neurosurgery*. Schulder, Michael (eds), Marcel Dekker Inc, New York, NY, 2003, pp 363-371.
35. Zamorano L, Keiser M, Li Q, Kugelman S, Diaz F: Outcomes Analysis in Image-Guided Surgery. *Outcomes Analysis in Neurological Surgery*, Edit by Robert E Harbaugh.

36. Zamorano L, Li Q, Riew R: Robotic Applications in Neurosurgery. Robotics in Surgery: History, Current and Future Applications. Edit by Russel Faust. pp147-172, 2007

N. PARTICIPATION/GUEST LECTURER - CONGRESS, SEMINARS & COURSE

1. Zamorano L: Neurofibrillar degeneration induced by AlCl₃ in motor neurons. XIX Annual Meeting of Chilean Society of Biology. Santiago, Chile, December 1976.
2. Zamorano L: Teratogenic periods of the principal malformations of the CNS. Chilean Society of Neurophysiology. Santiago, Chile, August 1978.
3. Zamorano L: Trophic function of the neuron: muscle alterations induced by CITO-B applied in the motor nerve. Chilean Society of Neurophysiology. Santiago, Chile, August 1979.
4. Zamorano L: Cerebral palsy. Congress of Neurology, Neurosurgery, Psychiatry. Santiago, Chile, August 1979.
5. Zamorano L: Pancreatic pseudocyst. LIV Chilean Congress of Surgery. Santiago, Chile, November 1981.
6. Zamorano L: One hundred cases of choledoco-duodenum anastomosis. VII Chilean Congress of Gastroenterology. Santiago, Chile, December 1981.
7. Zamorano L: Biliar ileus. LIV Chilean Congress of Surgery. Santiago, Chile, November 1981.
8. Zamorano L: Pancreatitis and hyperlipidemia. IX Chilean Congress of Gastroenterology. Santiago, Chile, December 1982.
9. Zamorano L: Hypocaloric solutions in postoperated patients. Chilean Congress of Internal Medicine. Santiago, Chile, December 1982.

10. Zamorano L: Micotic aneurysm: case report of an unusual presentation. XXXVIII Annual Congress of Chilean Society of Neurology, Psychiatry, Neurosurgery. Santiago, Chile, November 1983.
11. Zamorano L: Intraventricular hemorrhage: surgical treatment. XXXVIII Annual Congress of Chilean Society of Neurology, Psychiatry, Neurosurgery. Santiago, Chile, November 1983.
12. Zamorano L: Neurovascular decompression in trigeminal neuralgia. XXXVIII Annual Congress of Chilean Society of Neurology, Psychiatry, Neurosurgery. Santiago, Chile, November 1983.
13. Zamorano L: Chronic subdural hematoma. XXXVIII Annual Congress of Chilean Society of Neurology, Psychiatry, Neurosurgery. Santiago, Chile, November 1983.
14. Zamorano L: Intracranial hypertension. High-risk Patients in Surgery. Course sponsored by Catholic University Medical School. Santiago, Chile, December 1983.
15. Zamorano L: Foramen magnum meningiomas. Microneurosurgery meeting. Berlin, West Germany, December 1984.
16. Zamorano L: New modalities on malignant brain tumors and brain metastasis. Course on Treatment of Brain Tumors, sponsored by Freie Universitat. Berlin, West Germany, February 1985.
17. Zamorano L: Complications of chemonucleolysis. Fourth International Meeting of the World Federation of Spine Surgeons and Spondyliatrist. Vienna, Austria, April 1985.
18. Zamorano L: Neuropediatric tumors. Neuropediatric course organized by the German Society of Neurosurgeons. Bad Nauheim, Germany, November 1985.
19. Zamorano L: Afterloading in the treatment of malignant primary brain tumors. Course organized by Krebs Forshung Gesellshaft. Mainz, West Germany, March 1986.

20. Zamorano L, Dujovny M, Malik GM, Yakar D: Interstitial stereotactic radiotherapy. Course on Advances in Neurological Surgery. Buenos Aires, Argentina, October 1986.
21. Zamorano L: Operative approaches to the cavernous sinus. Congress of Chilean Society of Neurology, Psychiatry, and Neurosurgery. November 1986.
22. Zamorano L: Microsurgical anatomy of the posterior clinoid region. Meeting of Congress of Neurological Surgeons. Dallas, Texas, May 1987.
23. Zamorano L, Dujovny M, Ausman JI, Diaz FG, Berman SK, Mirchandani HG: Operative approaches to the posterior part of the cavernous sinus: a microsurgical anatomical study. American Association of Neurological Surgeons. Dallas, Texas, May 1987.
24. Zamorano L, Dujovny M, Malik GM, Mehta B: Factors affecting measurement in CT-image guided stereotaxis. American Society for Stereotactic and Functional Neurosurgery. Montreal, Canada, June 3 - 6, 1987.
25. Zamorano L, Dujovny M, Malik GM, Yakar D, Mehta B: CT-guided stereotactical interstitial radiotherapy: technical report on tumor volume assessment and technique for reconstruction and location of radioactive seed implants. American Society for Stereotactic and Functional Neurosurgery. Montreal, Canada, June 3 - 6, 1987.
26. Zamorano L, Dujovny M, Malik GM, Yakar D: CT-guided stereotaxis and interstitial radiotherapy. Meeting of Michigan Association of Neurological Surgeons. Glen Arbor, Michigan, June 1987.
27. Zamorano L: Microsurgical approach to the posterior part of the cavernous sinus. Xth Congress of Mexican Neurosurgical Society. Monterrey, Mexico, July 1987.
28. Zamorano L: Resection of brain metastasis from lung cancer: a curable disease? Xth Congress of the Mexican Neurosurgical Society. Monterrey, Mexico, July 1987.

29. Zamorano L, Chavantes MC, Dujovny M, Malik GM, Shibli F, Chason J, Magilligan D, Diaz FG, Ausman JI: Neuroresection of brain metastasis from lung cancer: does it cure? Mexican Congress of Neurosurgery. Monterrey, Mexico, July 1987.
30. Zamorano L, Dujovny M, Malik GM, Yakar D, Mehta B: CT-guided stereotaxis and interstitial radiation therapy. X Congress of the Mexican Neurosurgical Society. Monterrey, Mexico, July 1987.
31. Ausman JI, Zamorano L, Chavantes MC, Dujovny M, Malik GM: Surgical treatment of brain metastasis from lung cancer. Eighth European Congress of Neurosurgery. Barcelona, Spain, September 1987.
32. Zamorano L: Microsurgical anatomy of the posterior clinoid process. European Meeting of Neurosurgery. Barcelona, Spain, September 1987.
33. Zamorano L: Surgical management of brain metastasis from lung cancer. European Meeting of Neurosurgery. Barcelona, Spain, September 1987.
34. Martinez-Coll A, Zamorano L, Dujovny M: Computer tomography guided stereotaxis: an adaptation system. 40th Annual Conference on Engineering in Medicine and Biology. Niagara Falls, New York, September 10 - 13, 1987.
35. Zamorano L, Chavantes MC, Dujovny M, Malik GM, Ausman JI: Surgical treatment of brain metastasis from lung cancer. Congress of Neurological Surgeons, 37th Annual Meeting. Baltimore, Maryland, October 25 - 29, 1987.
36. Zamorano L, Dujovny M, Malik GM, Yakar D, Mehta B: CT-guided stereotaxis and I-125 interstitial radiotherapy: technical report on image-guided tumor volume assessment, planning, dosimetric calculations, stereotactic biopsy and implantation of removable catheters. Congress of Neurological Surgeons, 37th Annual Meeting. Baltimore, Maryland, October 24 - 29, 1987.
37. Zamorano L, Dujovny M, Diaz FG, Ausman JI: Surgical management of aneurysms in the cavernous sinus. Congress of

- Neurological Surgeons, 37th Annual Meeting. Baltimore, Maryland, October 25 - 29, 1987.
38. Flynn MJ, Mehta B, Dujovny M, Lacey L, Zamorano L, Clark JB, Block RW: Holographic demonstration of cerebral vascular and microvascular topography. 13th Radiological Society of North America. Chicago, November 29 - December 4, 1987.
 39. Zamorano L,: Esterotaxia multiplanar y radioterapia intersticial.(Multiplanar Stereotaxis and Interstitial Radiotherapy) Trabajo de Ingreso Sociedad de Neurocirugia de Chile , November 23 - 27, 1987.
 40. Malik GM, Zamorano L, Chavantes MC, Dujovny M, Magilligan DR, Ausman JI, Shibli F: Surgical treatment of brain metastasis from lung cancer. Medical Research Society of Pakistan. Rawalpindi, Pakistan, December 1987.
 41. Zamorano L, Dujovny M, Ausman JI, Mirchandani H, Sadasivan B, Diaz FG: Microsurgical anatomy of the posterior clinoid region: An operative approach to the posterior part of the cavernous sinus. American Association of Neurological Surgeons. Toronto, Ontario, April 24 - 28, 1988.
 42. Zamorano L, Chavantes MC, Dujovny M, Malik GM, Ausman JI: Fiberoptic neuroendoscopy and Nd-Yag laser interfaced to imaging-guided stereotaxis: a technical note. Annual Meeting of the American Association of Neurological Surgeons. Toronto, Canada, April 24 - 28, 1988.
 43. Zamorano L, Dujovny M, Malik GM, Yakar D, Mehta B: Multiplanar CT-guided stereotactical I-125 interstitial radiotherapy for malignant brain tumors. Annual Meeting of the American Association of Neurological Surgeons. Toronto, Canada, April 24 - 28, 1988.
 44. Zamorano L, Katanik D, Dujovny M, Malik GM, Yakar D: Tumor recurrence versus radionecrosis after resection and high dose localized external radiotherapy in malignant gliomas. Importance of stereotaxis in the differential diagnosis. Annual Meeting of the American Association of Neurological Surgeons. Toronto, Canada, April 24 - 28, 1988.

45. Zamorano L, Dujovny M, Malik GM, Yakar D, Mehta B, Flynn M: Transposition of three-dimensional data into stereotactic space and computer assisted interstitial dosimetry. Annual Meeting of the American Association of Neurological Surgeons. Toronto, Canada, April 24 - 28, 1988.
46. Dujovny M, Zamorano L, Flynn MJ, Mehta B, Lacey L, Ausman JI: Holography display of cerebral microvascular anatomy. Annual Meeting of the American Association of Neurological Surgeons. Toronto, Canada, April 24 - 28, 1988.
47. Sadasivan B, Zamorano L, Dujovny M, Ma S, Diaz FG, Ausman JI, Marchandani H: The anterior cavernous sinus space. Annual Meeting of the American Association of Neurological Surgeons. Toronto, Canada, April 24 - 28, 1988.
48. Sadasivan B, Zamorano L, Dujovny M, Ma S, Diaz FG, Ausman JI, Marchandani H: The microanatomical basis for cavernous sinus surgery. Annual Meeting of the American Association of Neurological Surgeons. Toronto, Canada, April 24 - 28, 1988.
49. Zamorano L, Chavantes MC, Dujovny M, Shibli F, Malik GM, Ausman JI: Surgical treatment of brain metastasis from lung cancer in the elderly. Annual Meeting of the American Association of Neurological Surgeons. Toronto, Canada, April 24 - 28, 1988.
50. Zamorano L, Dujovny M, Malik GM, Mehta B: Transposition of MRI data into multiplanar and three-dimensional CT-guided stereotaxis. Eighth Meeting of the European Society for Stereotactic and Functional Neurosurgery. Budapest, Hungary, June 1 - 3, 1988.
51. Zamorano L, Chavantes MC, Dujovny M, Malik GM, Ausman JI: Neuroendoscopic image-guided stereotaxis. Eighth Meeting of the European Society for Stereotactic and Functional Neurosurgery. Budapest, Hungary, June 1 - 3, 1988.
52. Zamorano L, Katanick D, Dujovny M, Yakar D, Malik GM: Tumor recurrence versus radionecrosis: an indication for multitrajectory serial stereotactic biopsies. Eighth Meeting of the European Society

- for Stereotactic and Functional Neurosurgery. Budapest, Hungary, June 1 - 3, 1988.
53. Zamorano L, Dujovny M, Yakar D, Malik GM, Mehta B: Multiplanar image-guided stereotactic brachytherapy. Eighth Meeting of the European Society for Stereotactic and Functional Neurosurgery. Budapest, Hungary, June 1 - 3, 1988.
 54. Zamorano L, Dujovny M, Malik GM, Flynn M, Rock B: Adaptation of a stereotactic system for 3D multiplanar image-guided stereotaxis. Eighth Meeting of the European Society for Stereotactic and Functional Neurosurgery. Budapest, Hungary, June 1 - 3, 1988.
 55. Zamorano L, Dujovny M, Martinez-Coll A, Malik GM: Transposition of image-defined trajectories into arch-quadrant stereotactic systems. Eighth Meeting of the European Society for Stereotactic and Functional Neurosurgery. Budapest, Hungary, June 1 - 3, 1988.
 56. Zamorano L, Dujovny M, Chavantes MC, Malik GM, Ausman JI: Multidimensional Nd-YAG laser neuroendoscopic stereotactic planning. Annual Meeting Michigan Association of Neurological Surgeons. Traverse City, Michigan, June 17 - 19, 1988.
 57. Zamorano L, Dujovny M, Malik GM, Yakar D, Mehta B, Flynn M: CT-Guided stereotaxis and I-125 interstitial radiotherapy. Mexican Congress of Neurosurgery. Monterrey, Mexico, July 3 - 9, 1988.
 58. Chavantes MC, Zamorano L, Dujovny M, Malik GM: Management of non-small cell carcinoma brain metastasis. Eighth European Congress on Diseases of the Chest. Dublin, Ireland, July 10 - 14, 1988.
 59. Dujovny M, Zamorano L, Flynn M, Mehta B, Lacey L, Ausman JI: Holography display of cerebral microvascular anatomy. 9th International Symposium for Cerebral Ischemia. Detroit, Michigan, July 1988.
 60. Zamorano L, Chavantes MC, Dujovny M, Ausman JI: Integration of Nd-YAG laser and endoscopy to 3D image-guided stereotaxis.

- International Conference in Photodynamic Therapy and Medical Laser Applications. London, England, July 19 - 21, 1988.
61. Zamorano L, Chavantes MC, Dujovny M, Ausman JI: Use of Nd-YAG laser and multi-modalities image stereotaxis on deep-located brain tumors: a technical report. International Conference in Photodynamic Therapy and Medical Laser Applications. London, England, July 19 - 21, 1988.
 62. Chavantes MC, Zamorano L, Casey K, Dujovny M: Effect of gaseous environment on laser-tissue interaction in brain and liver. International Conference in Photodynamic Therapy and Medical Laser Applications. London, England, July 19 - 21, 1988.
 63. Zamorano L, Chavantes MC, Dujovny M, Malik GM, Ausman JI: Fiberoptic neuroendoscopy and Nd-YAG laser interfaced to imaging-guided stereotaxis. World Congress on Medical Physics and Biomedical Engineering. San Antonio, Texas, August 6 - 12, 1988.
 64. Zamorano L, Dujovny M, Malik GM, Mehta B: MRI stereotaxis: an indirect method of transposition of MRI-generated data into CT multiplanar images. World Congress on Medical Physics and Biomedical Engineering. San Antonio, Texas, August 6 - 12, 1988.
 65. Zamorano L, Dujovny M, Martinez-Coll A, Malik GM: Methodology and computer program for transposition of image-defined trajectories into arch-quadrant stereotactic devices. World Congress on Medical Physics and Biomedical Engineering. San Antonio, Texas, August 6 - 12, 1988.
 66. Zamorano L, Dujovny M, Yakar D, Malik GM, Sheehan M: Multiplanar CT interactive treatment planning and stereotactic I-125 brachytherapy. World Congress on Medical Physics and Biomedical Engineering. San Antonio, Texas, August 6 - 12, 1988.
 67. Zamorano L, Dujovny M, Flynn M, Block R: 3D multiplanar CT-guided stereotaxis: an adaptation system. World Congress on Medical Physics and Biomedical Engineering. San Antonio, Texas, August 6 - 12, 1988.

68. Dujovny M, Zamorano L, Malik GM, Yakar D, Flynn M: Alta tecnologia en el manejo de los gliomas encefalicos, Argentinan Neurosurgical Society, 30th Annual Meeting. Buenos Aires, Argentina, September 1988.
69. Zamorano L, Dujovny M, Malik GM, Flynn M: Adaptation of a stereotactic system for 3D multiplanar image-guided stereotaxis. Congress of Neurological Surgeons. Seattle, Washington, September 24 - 29, 1988.
70. Dujovny M, Ohaegbulam S, Holzer F, Ausman JI, Diaz FG, Mirchandani H, Zamorano L, Sadasivan B: Anatomical basis for microsurgery of paraclinoid aneurysm. Congress of Neurological Surgeons. Seattle, Washington, September 1988.
71. Dujovny M, Ohaegbulam S, Holzer F, Ausman JI, Diaz FG, Mirchandani H, Zamorano L, Sadasivan B: Anatomical basis for microsurgery of paraclinoid aneurysms. Congress of Neurological Surgeons. Seattle, Washington, September 24 - 29, 1988.
72. Dujovny M, Ohaegbulum S, Holzer F, Zamorano L, Diaz FG, Ausman JI, Marchandani H: Microsurgical anatomy of intracavernous ICA. International Symposium on Cranial Base Surgery. Pittsburgh, Pennsylvania, September 13 - 17, 1988.
73. Sadasivan B, Dujovny M, Zamorano L, Ausman JI: Microanatomical basis of cavernous sinus surgery. International Symposium on Cranial Base Surgery. Pittsburgh, Pennsylvania, September 13 - 17, 1988.
74. Zamorano L, Dujovny M, Sadasivan B: Microsurgical anatomy of the cranial nerves. International Symposium on Cranial Base Surgery. Pittsburgh, Pennsylvania, September 13 - 17, 1988.
75. Zamorano L, Dujovny M, Malik GM, Mehta B, Yakar D: Multiplanar multimodality image-guided stereotaxis: our experience on 200 cases. XVII Brazilian Congress of Neurosurgery. Brasilia, Brazil, September 1988.

76. Zamorano L, Dujovny M, Ausman JI, Schlanker J, Augspurger L: Multidimensional interactive surgical treatment planning. XVII Brazilian Congress of Neurosurgery. Brasilia, Brazil, September 1988.
77. Chavantes MC, Zamorano L, Dujovny M, Malik GM, Shibli F, Magilligan D, Ausman JI: Predicting factors of survival in brain metastasis from bronchogenic carcinoma. XVII Brazilian Congress of Neurosurgery. Brasilia, Brazil, September 1988.
78. Chavantes MC, Zamorano L, Dujovny M, Malik GM, Shibli F, Magilligan D, Ausman JI: Management in elderly patients with brain metastasis from lung cancer. XVII Brazilian Congress of Neurosurgery. Brasilia, Brazil, September 1988.
79. Zamorano L, Chavantes MC, Dujovny M, Malik GM, Ausman JI: Role of Nd-YAG laser neuroendoscopic multidimensional image-guided stereotaxis on cystic and intraventricular lesions. XVII Brazilian Congress of Neurosurgery. Brasilia, Brazil, September 1988.
80. Zamorano L, Chavantes MC, Dujovny M, Malik GM, Ausman JI: Role of Nd-YAG laser multidimensional image-guided stereotaxis on solid deep located intracranial tumors. XVII Brazilian Congress of Neurosurgery. Brasilia, Brazil, September 1988.
81. Chavantes MC, Zamorano L, Dujovny M, Malik GM, Shibli F, Ausman JI, Magilligan D: Factors predicting survival in lung cancer with brain metastasis. Fifty-fourth Annual Scientific Assembly of American College of Chest Physicians. Anaheim, California. October 3 - 7, 1988.
82. Chavantes MC, Zamorano L, Dujovny M, Malik GM, Yakar D, Ausman JI: A new approach for brain metastasis from lung cancer: image-guided stereotaxis and I-125 brachytherapy. Fifty-fourth Annual Scientific Assembly of American College of Chest Physicians. Anaheim, California, October 3 - 7, 1988.
83. Zamorano L, Chavantes MC, Dujovny M, Ausman JI: Nd-YAG laser image-guided stereotactic resection of brain tumors. Clinical Congress of American College of Surgeons. Chicago, Illinois, October 23 - 28, 1988.

84. Zamorano L, Chavantes MC, Dujovny M, Ausman JI: Nd-YAG laser image-guided resection of brain tumors. Clinical Congress of American College of Surgeons. Chicago, Illinois, October 23 - 28, 1988.
85. Steiner L, Betti O, Zamorano L: Round table: Stereotactic irradiation and radiosurgery. Latin American Congress of Neurosurgery. Acapulco, Mexico, November 13 - 19, 1988.
86. Zamorano L: Course: Stereotaxis in malignant brain tumors. Latin American Congress of Neurosurgery. Acapulco, Mexico, November 13 - 19, 1988. Ascher W, Fasano A, Zamorano L: Round table: Endoscopic treatment with laser. Latin American Congress of Neurosurgery. Acapulco, Mexico, November 13 - 19, 1988.
87. Zamorano L: Course: Multidimensional stereotactic planning. Latin American Congress of Neurosurgery. Acapulco, Mexico, November 13 - 19, 1988.
88. Zamorano L, Dujovny M, Ausman JI, Diaz FG, Mirchandani H, Sadasivan B: Microsurgical anatomy of the cranial nerves in the cavernous sinus. American Association of Neurological Surgeons. Washington, DC, April 1989.
89. Zamorano L, Chavantes MC, Dujovny M, Malik GM, Mehta B: Laser resective stereotaxis: a technique for solid intracranial lesions. Ninth Annual Meeting American Society for Laser Medicine and Surgery. Arlington, Virginia, April 15 - 17, 1989.
90. Zamorano L, Chavantes MC, Dujovny M, Malik GM, Ausman JI: Endoscopic-laser stereotaxis: our indication for cystic or intraventricular lesions. Ninth Annual Meeting American Society for Laser Medicine and Surgery. Arlington, Virginia, April 15 - 17, 1989.
91. Zamorano L, Dujovny M, Ausman JI, Diaz FG, Mirchandani H, Sadasivan B: Microsurgical anatomy of the cranial nerves in the cavernous sinus. American Association of Neurological Surgeons. Washington, DC, April 1989.

92. Zamorano L, Chavantes MC, Dujovny M, Malik GM, Ausman JI: Endoscopic laser stereotaxis: our indication for cystic or intraventricular lesion. American Association of Neurological Surgeons. Washington, DC, April 1989.
93. Zamorano L, Interactive 3D-2D multiplanar stereotactic planning: software and hardware configuration. Radiosurgery Symposium, University of Virginia. Charlottesville, Virginia, May 1 - 4, 1989.
94. Dujovny M, Zamorano L, Kannegenti R, Malik GM, Ausman JI: Surgical management of brain metastasis. American Association of Neurological Surgeons. Traverse City, Michigan, June 1989.
95. Zamorano L, Dujovny M, Flynn J, Ausman JI: 3-D and 2-D multiplanar workstation for image-guided stereotactic preplanning. SPIE's 33rd Annual International Symposium on Optical and Optoelectronic Applied Science and Engineering. San Diego, California, August 6 - 11, 1989.
96. Dujovny M, Zamorano L: Image guided stereotactic surgery. Mexican Neurosurgical Society. Veracruz, Mexico, August 1989.
97. Dujovny M, Zamorano L: Centered craniotomy. Mexican Neurosurgical Society. Veracruz, Mexico, August 1989.
98. Dujovny M, Sadasivan B, Zamorano L, Dragovic L: Cavernous sinus. Mexican Neurosurgical Society. Veracruz, Mexico, August 1989.
99. Zamorano L, Dujovny M, Mehta B, Yakar D, Malik GM: Image guided stereotaxis: our experience on 345 consecutive cases. Tenth Meeting of the World Society for Stereotactic and functional Neurosurgery. Maebashi, Japan, October 2 - 5, 1989.
100. Zamorano L, Chavantes MC, Dujovny M, Malik GM, Ausman JI: Image-guided endoscopic laser stereotaxis. Tenth Meeting of the World Society for Stereotactic and Functional Neurosurgery. Maebashi, Japan, October 2 - 5, 1989.
101. Zamorano L, Dujovny M, Flynn M, J. I. Ausman: 3D-2D Multiplanar workstation for neurosurgical stereotactic planning.

- Tenth Meeting of the World Society for Stereotactic and Functional Neurosurgery. Maebashi, Japan, October 2 - 5, 1989.
102. Zamorano L, Dujovny M, Chavantes MC, Block R, Flynn M: Z-D multipurpose neurosurgical image-guided localizing unit. Tenth Meeting of the World Society for Stereotactic and Functional Neurosurgery. Maebashi, Japan, October 2 - 5, 1989.
103. Zamorano L, Chavantes MC, Dujovny M, Malik GM, Mehta B: Image-guided stereotactic centered craniotomy and laser resection of solid intracranial lesion. Tenth Meeting of the World Society for Stereotactic and Functional Neurosurgery. Maebashi, Japan, October 2 - 5, 1989.
104. Zamorano L, Dujovny M, Malik GM, Chavantes MC, Kannengenti R: Surgical treatment of brain metastasis: results of 370 patients. Ninth International Congress of Neurological Surgery. New Delhi, India, October 8 - 13, 1989.
105. Zamorano L, Chavantes MC, Dujovny M, Malk GM, Mehta B: Stereotactic craniotomy and laser resection of solid intracranial lesions. Ninth International Congress of Neurological Surgery. New Delhi, India, October 8 - 13, 1989.
106. Zamorano L, Dujovny M, Mehta B, Yakar D, Malik GM. Image-guided stereotaxis: our experience on 345 consecutive cases. Ninth International Congress of Neurological Surgery. New Delhi, India, October 8 - 13, 1989.
107. Zamorano L, Katanik D, Dujovny M, Yakar D, Malik GM: Hyperfractionated high dose localized external radiotherapy after surgical resection on malignant gliomas: survival analysis. Ninth International Congress of Neurological Surgery. New Delhi, India, October 8 - 13, 1989.
108. Zamorano L, Dujovny M, Chavantes MC, Block R, FLynn M: Multipurpose neurosurgical image-guided localizing unit. Ninth International Congress of Neurological Surgery. New Delhi. India, October 8 - 13, 1989.

109. Zamorano L, Dujovny M, Flynn M, Ausman JI: 3D-2D multiplanar workstation for neurosurgical stereotactic planning. Ninth International Congress of Neurological Surgery. New Delhi, India, October 8 - 13, 1989.
110. Zamorano L, Chavantes MC, Dujovny M, Malik GM, Ausman JI: Endoscopic-laser stereotaxis (ELS): our indication for cystic or intraventricular lesion. Ninth International Congress of Neurological Surgery. New Delhi, India, October 8 - 13, 1989.
111. Zamorano L, Dujovny M, Flynn M, Ausman JI: 3D-2D multiplanar neurosurgical stereotactic planning workstation. Congress of Neurological Surgeons. Atlanta, Georgia, October 1989.
112. Zamorano L, Dujovny M, Chavantes MC, Malik GM, Ausman JI: Image-guided stereotactic centered craniotomy and resection of deep solid intracranial tumors. Congress of Neurological Surgeons. Atlanta, Georgia, October 1989.
113. Dujovny M, Zamorano L, Ausman JI: Stereotactic centered craniotomy. Advances in Neurosurgery. Buenos Aires, Argentina, October 1989.
114. Dujovny M, Zamorano L, Malik GM, Ausman JI: Brain metastasis. Advances in Neurosurgery. Buenos Aires, Argentina, October 1989.
115. Dujovny M, Sadasivan B, Zamorano L: Anatomical bases for cavernous sinus surgery. Simposium Internacional de Ciencias Neurologicas. Santiago, Chile, November 2 - 6, 1989.
116. Dujovny M, Zamorano L, Malik GM, Ausman JI: Stereotactic centered craniotomy. Simposium Internacional de Ciencias Neurologicas. Santiago Chile, November 2 - 6, 1989.
117. Dujovny M, Zamorano L: Nd-YAG stereotactic surgery. Simposium Internacional de Ciencias Neurologicas. Santiago, Chile, November 2 - 6, 1989.
118. Dujovny M, Zamorano L: 2D-3D stereotactic workstation. Simposium Internacional de Ciencias Neurologicas. Santiago, Chile, November 2 - 6, 1989.

119. Zamorano L, Dujovny M: Experience with Z-D multipurpose neurosurgical localizing unit. International Symposium on Stereotactic Radiosurgery. Miami, Florida, November 30 - December 2, 1989.
120. Zamorano L: Tomographic image processing for surgical planning and automation. Plenary session and one day short-course. MEDTECH Meeting. West Berlin, Germany, November 6 - 11, 1989.
121. Zamorano L: Three-dimensional and multiplanar image processing. INCOR Hospital, University of Sao Paulo. Brazil, January 3, 1990.
122. Zamorano L: Computerized micro and endoscopic laser resection for intracranial lesions. A. Camargo Hospital, University of Sao Paulo. Brazil, January 4, 1990.
123. Zamorano L: Tomographic image-guided stereotactic radiation therapy. A. Camargo Hospital, University of Sao Paulo. Brazil, January 4, 1990.
124. Zamorano L: Curso: Moderna Tecnologia en Neurocirugia. Zaragoza, Espana, January 18 - 21, 1990.
125. Chavantes MC, Zamorano L, Vinas FC, Dujovny M, Dragovic L: Experimental in vivo study of laser-tissue interaction on the brain: influence of gaseous environment. International Society for Optical Engineering (SPIE). Los Angeles, California, January 15 - 17, 1990.
126. Zamorano L, Chavantes MC, Dujovny M, Malik GM, Ausman JI: Endoscopic-laser stereotaxis: indication for cystic or intraventricular Lesion. International Society for Optical Engineering (SPIE). Los Angeles, California, January 15 - 17, 1990.
127. Zamorano L, Chavantes MC, Dujovny M, Malik GM, Ausman JI: Three-dimensional image-guided stereotactic resection of intracranial lesions. International Society for Optical Engineering (SPIE). Los Angeles, California, January 15 - 17, 1990.

128. Zamorano L, Chavantes MC, Dujovny M: Role of lasers and image-guided stereotaxis in the resection of intracranial lesions. American Society for Laser Medicine and Surgery. Nashville, Tennessee, April 6 - 8, 1990.
129. Zamorano L, Chavantes MC, Dujovny M, Malik GM, Ausman JI: Three-dimensional image-guided stereotactic resection of intracranial lesions. American Society for Laser Medicine and Surgery. Nashville, Tennessee, April 6 - 8, 1990.
130. Sadasivan B, Dujovny M, Zamorano L, Ausman JI, Mirchandani H, Dragovic L: The transclinoid approach for the cavernous sinus: a microanatomical and clinical study. American Association of Neurological Surgeons. Nashville, Tennessee, April 28 - May 3, 1990.
131. Zamorano L, Dujovny M, Ausman JI, Malik GM: Stereotactic diagnosis and therapeutic management of midline lesions. Michigan Association of Neurological Surgeons. Traverse City, Michigan, June 16, 1990.
132. Zamorano L, Dujovny M, Malik GM, Ausman JI: Image-guided resection/internal decompression of brain lesions. Michigan Association of Neurological Surgeons. Traverse City, Michigan, June 16, 1990.
133. Zamorano L, Dujovny M: Cirugia estereotactica diagnostica y terapeutica. Surgical Advances in Head and Neck Cancer. Mexico City, Mexico, July 11 - 14, 1990.
134. Zamorano L, Dujovny M: Radiocirugia. Surgical Advances in Head and Neck Cancer. Mexico City, Mexico, July 11 - 14, 1990.
135. Zamorano L, Dujovny M: Cirugia estereotactica diagnostica y terapeutica: Cancer de cabeza y cuello. Surgical Advances in Head and Neck Cancer. Mexico City, Mexico, July 11 - 14, 1990.
136. Zamorano L, Dujovny M: Cancer de cabeza y cuello. Surgical Advances in Head and Neck Cancer. Mexico City, Mexico, July 11 - 14, 1990.

137. Dujovny M, Zamorano L: High technology in the management of brain glioma. AANC XXX Annual Meeting. Cordoba, Argentina, September 4 - 7, 1990.
138. Yakar D, Dujovny M, Zamorano L: Interstitial radiotherapy. AANC XXX Annual Meeting. Cordoba, Argentina, September 4 - 7, 1990.
139. Dujovny M, Zamorano L: CUSA-Laser. Aspiracion Ultrasonica-CUSA-Estereotaxia Computarizada. First International Symposium. Mexico City, Mexico, September 10 - 13, 1990.
140. Dujovny M, Zamorano L: Stereotactic microsurgery, neuroendoscopy, operating room organization, and interstitial radiotherapy. Aspiracion Ultrasonica-CUSA-Estereotaxia Computarizada. First International Symposium. Mexico City, Mexico, September 10 - 13, 1990.
141. Dujovny M, Zamorano L: Image Guided Stereotaxis: a) Multiplanar/3-D planning, b) Stereotactic equipment. Aspiracion Ultrasonica-CUSA-Estereotaxia Computarizada. First International Symposium. Mexico City, Mexico, September 10 - 13, 1990.
142. Zamorano L, Chavantes MC, Dujovny M, Ausman JI: Stereotactic endoscope management of cystic and intraventricular lesions. Ninth Congress of the European Society for Stereotactic and Functional Neurosurgery. Marbella, Spain, September 16 - 20, 1990.
143. Zamorano L, Dujovny M, Chavantes MC, Malik GM, Ausman JI: Z-D multipurpose neurosurgical image-guided localizing unit: experience on 100 consecutive cases of "open stereotaxis." Ninth Congress of the European Society for Stereotactic and Functional Neurosurgery. Marbella, Spain, September 16 - 20, 1990.
144. Vinas FC, Zamorano L, Dujovny M, Dragovic L: Characteristics of lesions using a computerized radio frequency system. Ninth Congress of the European Society for Stereotactic and Functional Neurosurgery. Marbella, Spain, September 16 - 20, 1990.
145. Zamorano L, Bauer-Kirpes B, Dujovny M, Malik GM, Ausman JI: Application of multimodality imaging stereotactic localization in the surgical management of vascular lesions. Ninth Congress of the

- European Society for Stereotactic and Functional Neurosurgery.
Marbella, Spain, September 16 - 20, 1990.
146. Zamorano L, Dujovny M, Malik GM, Ausman JI: Three dimensional and multiplanar topographic image processing for neurosurgical planning and automation. Ninth Congress of the European Society for Stereotactic and Functional Neurosurgery. Marbella, Spain, September 16 - 20, 1990.
147. Zamorano L, Yakar D, Dujovny M, Sheehan M, Kim JH: High dose rate brachytherapy on malignant brain tumor: survival analysis on 68 consecutive cases. Congress of Neurological Surgeons. Los Angeles, California, October 20 - 25, 1990.
148. Zamorano L, Chavantes MC, Dujovny M, Ausman JI: Stereotactic endoscopic management of cystic and intraventricular lesions. Congress of Neurological Surgeons. Los Angeles, California, October 20 - 25, 1990.
149. Zamorano L, Bauer-Kirpes B, Dujovny M, Malik GM, Ausman JI: Application of multimodality imaging stereotactic localization in the surgical management of vascular lesions. Congress of Neurological Surgeons. Los Angeles, California, October 20 - 25, 1990.
150. Flynn MJ, Dujovny M, Lacey L, Zamorano L, Block RW, Roebuck J: Holographic demonstration of cerebral vascular and micro-vascular topography. Meeting of the Henry Ford Hospital Medical Association. Detroit, Michigan, October 18 - 20, 1990.
151. Sadasivan B, Dujovny M, Zamorano L, Ausman JI, Mirchandani H, Dragovic L: Transclinoid approach for the cavernous sinus: a microanatomical and clinical study. Meeting of the Henry Ford Hospital Medical Association. Detroit, Michigan, October 18 - 20, 1990.
152. Zamorano L, Dujovny M: Z-D multipurpose neurosurgical image-guided localizing unit: experience with 100 consecutive cases of "open stereotaxis." OE LASE'91, International Society for Optical Engineering (SPIE). Los Angeles, California, January 20 - 25, 1991.

153. Zamorano L, Dujovny M, Dong A, Kadi AM: Computer-assisted surgical planning and automation of laser delivery systems. OE LASE'91, International Society for Optical Engineering (SPIE). Los Angeles, California, January 20 - 25, 1991.
154. Chavantes MC, Zamorano L, Vinas FC, Dujovny M, Dragovic L: Influence of He, O₂, N₂, and room air environment in determining Nd-YAG laser brain-tissue interaction. OE LASE'91, International Society for Optical Engineering (SPIE). Los Angeles, California, January 20 - 25, 1991.
155. Chavantes MC, Zamorano L: Current and future use of lasers in vascular neurosurgery. OE LASE'91, International Society for Optical Engineering (SPIE). Los Angeles, California, January 20 - 25, 1991.
156. Dujovny M, Sadasivan B, Ausman JI, Zamorano L: Anterior cavernous sinus space. North American Skull Base Society. Lake Buena Vista, Florida, February 27 - March 3, 1991.
157. Dujovny M, Sadasivan B, Ausman JI, Zamorano L, Mirchandani H, Dragovic L: The transcranial approach for cavernous sinus: a microanatomical and clinical study. North American Skull Base Society. Lake Buena Vista, Florida, February 27 - March 3, 1991.
158. Vinas FC, Zamorano L, Dujovny M, Dragovic L: Lesions produced with radiofrequency waves. Importance of the use of a computerized generator. XXIV Latinoamerican Congress of Neurosurgery. Miami, Florida, March 17 - 23, 1991.
159. Zamorano L, Yague L, Dujovny M, Yakar D, Sheehan M, Kim JH: Radioterapia intersticial estereotactica de tumores cerebrales con implants permanentes de I-125. XXIV Latinoamerican Congress of Neurosurgery. Miami, Florida, March 17 - 23, 1991.
160. Dujovny M, Zamorano L: Stereotactic workshop. American Association of Neurological Surgeons. New Orleans, Louisiana, April 20 - 25, 1991.
161. Chavantes MC, Zamorano L, Dujovny M, Ausman JI: A neurosurgical image-guided localizing unit for "open stereotaxis."

- American Association of Neurological Surgeons. New Orleans, Louisiana, April 20 - 15, 1991.
162. Zamorano L, Yakar D, Dujovny M, Sheenan M, Kim M, Ausman JI: I-125 permanent implant and external beam radiation therapy for the treatment of malignant astrocytoma. American Association of Neurological Surgeons. New Orleans, Louisiana, April 20 - 25, 1991.
163. Zamorano L, Dujovny M, Dong A, Kadi AM, Ausman JI: Computer-assisted neurosurgery: simulation and automation. American Society for Laser Medicine and Surgery, Tenth Annual Meeting. San Diego, California, April 29 - May 1, 1991.
164. Chavantes MC, Zamorano L, Dujovny M, Ausman JI: Stereotactic endoscopy: a new prototype. American Society for Laser Medicine and Surgery, Tenth Annual Meeting. San Diego, California, April 29 - May 1, 1991.
165. Vinas FC, Zamorano L, Dujovny M, Dragovic L: Characteristics of lesions using a computerized radiofrequency system. American Society for Stereotactic and Functional Neurosurgery. Pittsburgh, Pennsylvania, June 16 - 19, 1991.
166. Zamorano L, Dujovny M, Dong A, Kadi AM: Computer-assisted neurosurgery: simulation and automation. Proceedings of the Meeting of the American Society for Stereotactic Functional Neurosurgery. Pittsburgh, Pennsylvania, June 16 - 19, 1991. Stereotact Funct Neurosurg 59:115-122, 1992.
167. Zamorano L, Ausman JI, Chorni D, Dujovny M: Stereotactic management of midline brain lesions. Proceedings of the Meeting of the American Society for Stereotactic and Functional Neurosurgery. Pittsburgh, Pennsylvania, June 16 - 19, 1991. Stereotact Funct Neurosurg 59:142-150, 1992.
168. Zamorano L, Yakar D, Dujovny M, Sheehan M, Kim J: Permanent iodine-125 implant and external beam radiation therapy for the treatment of malignant brain tumors. Proceedings of the Meeting of the American Society for Stereotactic and Functional Neurosurgery, Pittsburgh, Pennsylvania, June 16-19, 1991. Stereotact Funct Neurosurgery 59: 183-192, 1992.

169. Vinas FC, Zamorano L, Dujvony M, Zhao JZ, Hodgkinson D, Ho KL, Ausman JI: In vivo and in vitro study of the lesions produced with a computerized radiofrequency system. Proceedings of the Meeting of the American Society for Stereotactic and Functional Neurosurgery. Pittsburgh, Pennsylvania, June 16 - 19, 1991. Stereotact Funct Neurosurgery 58:121-133, 1992.
170. Zamorano L, Dujovny M, Chavantes MC: A neurosurgical image-guided localizing unit for open stereotaxis. Proceedings of the Meeting of the American Society for Stereotactic and Functional Neurosurgery. Pittsburgh, Pennsylvania, June 16 - 19, 1991. Stereotact Funct Neurosurgery 58:149 (abstract), 1992.
171. Zamorano L, Chavantes MC, Dujovny M, Ausman JI: Stereotactic endoscopy. Proceedings of the Meeting of the American Society for Stereotactic and Functional Neurosurgery. Pittsburgh, Pennsylvania, June 16 - 19, 1991. Stereotact Funct Neurosurgery 58:151, 1992.
172. Zamorano L, Yakar D, Dujvony M, Sheehan M, Kim JH: Interstitial temporary implantation of high-activity I-125 sources for malignant glioma and brain metastases. Proceedings of the Meeting of the American Society for Stereotactic and Functional Neurosurgery. Pittsburgh, Pennsylvania, June 16 - 19, 1991. Stereotact Funct Neurosurgery 59:182 (abstract), 1992.
173. Zamorano L, Dujovny M, Ngoyi A, Vinas FC, Ausman JI: Stereotactic management of midline lesions. Ninth European Congress of Neurosurgery. Moscow, USSR, June 1991.
174. Zamorano L, Dujovny M, Dong A, Kadi AM, Ausman JI: Computer assisted neurosurgery: Simulation and automation. Ninth European Congress of Neurosurgery. Moscow, USSR, June 1991.
175. Zamorano L, Yakar D, Dujovny M, Sheenan M, Kim JH, Ausman JI: I-125 permanent implant and external beam radiation therapy for treatment of malignant astrocytoma. Ninth European Congress of Neurosurgery. Moscow, USSR, June 1991.

176. Dujovny M, Zamorano L, Taha L, Krivoy J, Ausman JI: Stereotactic resection of intracranial lesions. Ninth European Congress of Neurosurgery. Moscow, USSR, June 1991.
177. Zamorano L, Dujovny M, Chavantes MC, Ausman JI: A neurosurgical image-guided localizing unit. Ninth European Congress of Neurosurgery. Moscow, USSR, June 1991.
178. Zamorano L: Stereotactic neurosurgery. XII Mexican Congress of Neurological Surgery. Puerto Vallarta, Jal. Mexico, August 17 - 22, 1991.
179. Zamorano L: Stereotactic management of midline lesions. XII Mexican Congress of Neurological Surgery. Puerto Vallarta, Jal. Mexico, August 17 - 22, 1991.
180. Zamorano L: Requirements for the installation of a radiosurgery suite. XII Mexican Congress of Neurological Surgery. Puerto Vallarta, Jal. Mexico, August 17 - 22, 1991.
181. Zamorano L, Dujovny M, Chavantes MC, Ausman JI: Stereotactic endoscopic management of cystic and intraventricular lesions. Congress of Neurological Surgeons. Orlando, Florida, October 26 - 31, 1991.
182. Zamorano L, Dujovny M: A neurosurgical image-guided localizing unit. Congress of Neurological Surgeons. Orlando, Florida, October 26 - 31, 1991.
183. Dujovny M, Zamorano L, Ngoyi A, Ausman JI, Malik GM: Stereotactic management of midline lesions. Congress of Neurological Surgeons. Orlando, Florida, October 26 - 31, 1991.
184. Dujovny M, Sadasivan B, Zamorano L, Ausman JI, Dragovic L, Mirchandani HG: The anterior cavernous sinus space. Congress of Neurological Surgeons. Orlando, Florida, October 26 - 31, 1991.
185. Zamorano L, Chavantes MC, Vinas FC, Dragovic L, Dujovny M: HE, O₂, N₂ and room air. Congress of Neurological Surgeons. Orlando, Florida, October 26 - 31, 1991.

186. Vinas FC, Zamorano L, Dujovny M, Ausman JI: Characteristics of lesions using a computerized radiofrequency system. Congress of Neurological Surgeons. Orlando, Florida, October 26 - 31, 1991.
187. Zamorano L, Yakar D, Dujovny M, Sheenan M, Kim JH: Interstitial I-125 irradiation for high-grade gliomas: advantages of permanent over temporary implantation. Congress of Neurological Surgeons. Orlando, Florida, October 26 - 31, 1991.
188. Lu Y, Zamorano L, Schlosser S, Dong A: Automatic detection of brain lesion boundaries. International Society for Optical Engineering (SPIE). Newport Beach, California, February 23 - 27, 1992.
189. Zamorano L: Practical clinic (workshop) in principles, techniques, and instrumentation in stereotactic surgery. The Annual Meeting of the American Association of Neurological Surgeons. San Francisco, California, April 11 - 16, 1992.
190. Zamorano L, Kadi AM: Stereotactic articulated surgical arm (poster). The Annual Meeting of the American Association of Neurological Surgeons. San Francisco, California, April 11 - 16, 1992.
191. Zamorano L, Moure F, Dujovny M: Stereotactic resections of intracranial lesions (poster). The Annual Meeting of the American Association of Neurological Surgeons. San Francisco, California, April 11 - 16, 1992.
192. Zamorano L, Yakar D, Dujovny M: Survival and quality of life after permanent implantation of I-125 for the treatment of primary malignant gliomas (poster). The Annual Meeting of the American Association of Neurological Surgeons. San Francisco, California, April 11 - 16, 1992.
193. Zamorano L, Dujovny M, Chavantes MC, Plotts, M: Use of sculpted contact fibers and the Nd-YAG laser in neurosurgical applications. American Society for Laser Medicine and Surgery, Inc. Lake Buena Vista, Florida, May 17 - 19, 1992.

194. Zamorano, L: Image-guided endoscopic surgery around the skull base and cerebral midline (workshop). First International Skull Base Congress. Hannover, Germany, June 14 - 20, 1992.
195. Zamorano, L: Stereotactic endoscopic intervention using the Chavantes/Zamorano system. Neuroendoscopy Faculty Training. St. Louis, Missouri, August 13 - 14, 1992.
196. Zamorano, L: "Hands-On" stereotactic surgery and radiosurgery workshop. In cooperation with UCLA Departments of Neurosurgery, Radiation Oncology, and the Medical Center. Los Angeles, California, August 20 - 22, 1992.
197. Zamorano L, Chavantes MC: Use of sculpted contact fibers and Nd-YAG laser in image-guided neurosurgery. 10th Congress of European Society for Stereotactic and Functional Neurosurgery. Stockholm, Sweden, September 2 - 5, 1992.
198. Zamorano L: Interstitial I-125 irradiation for malignant brain tumors: advantage of permanent implants (PI) over temporary implants (TI). 10th Congress of European Society for Stereotactic and Functional Neurosurgery. Stockholm, Sweden, September 2 - 5, 1992.
199. Zamorano, L: Practical workshop in "Three dimensional digitizers in neurosurgery." Congress of Neurological Surgeons. Washington, DC, October 31 - November 5, 1992.
200. Zamorano, L: Presiding course director of "State of the Art and Future Approaches to Brain Tumors." 1992 Michigan State Medical Society. Dearborn, Michigan, November 18, 1992.
201. Zamorano L, Chavantes MC, Moure F, Diaz FG: Endoscopic stereotactic interventions on brain lesions. Third Annual Meeting of Neuroendoscopy Workshop and Symposium. Vancouver, Canada, December 5 - 6, 1992.
202. Zamorano L, Kadi AM: Stereotactic brain surgery: instrumentation, automation, and image guidance. International Society for Optical Engineering (SPIE) - BioMedical Optics 93. Los Angeles, California, January 16 - 22, 1993.

203. Zamorano L, Jiang Z: Computer assisted stereotactic neurological surgery pre-planning and on-site real-time operating control and simulation system. International Society for Optical Engineering (SPIE) - BioMedical Optics 93. Los Angeles, California, January 16 - 22, 1993.
204. Zamorano L, Chavantes MC: Use of sculpted contact fibers and Nd-YAG laser in image-guided neurosurgery. International Society for Optical Engineering (SPIE) - BioMedical Optics 93. Los Angeles, California, January 16 - 22, 1993.
205. Castro-Moure F, Zamorano L: Stereotactic resections of intracranial lesions. International Society for Optical Engineering (SPIE) - BioMedical Optics 93. Los Angeles, California, January 16 - 22, 1993.
206. Chavantes MC, Zamorano L: Neuroendoscope laser stereotaxis improves the outcome of cystic lesions in neurosurgical patients. International Society for Optical Engineering (SPIE) - BioMedical Optics 93. Los Angeles, California, January 16 - 22, 1993.
207. Zamorano L, Chavantes MC: Use of sculpted contact fibers and Nd-YAG laser in image-guided neurosurgery. Jerusalem Symposium on Surgery of the Skull Base and Adjacent Midline Region. Jerusalem, Israel, March 21 - 26, 1993.
208. Chavantes MC, Zamorano L, Moure F, Diaz FG: Endoscope laser stereotaxis (ELS) in the management of intracranial lesions. Jerusalem Symposium on Surgery of the Skull Base and Adjacent Midline Region. Jerusalem, Israel, March 21 - 26, 1993.
209. Zamorano, L: Applications of laser microsurgical technique in computer-assisted brain surgery. Jerusalem Symposium on Surgery of the Skull Base and Adjacent Midline Region. Jerusalem, Israel, March 21 - 26, 1993.
210. Fernandez P, Zamorano L, Nolte LP, Kadi AM, Jiang Z, Diaz FG: Application of intraoperative digitalization in skull base surgery. Jerusalem Symposium on Surgery of the Skull Base and Adjacent Midline Region. Jerusalem, Israel, March 21 - 26, 1993.

211. Zamorano L, Chavantes MC: Use of sculpted contact fibers and Nd: YAG laser in image-guided neurosurgery. Thirteenth Annual Meeting, American Society for Laser Medicine and Surgery, Inc. New Orleans, Louisiana, April 18 - 20, 1993.
212. Fernandez P, Zamorano L, Nolte LP, Jiang Z, Kadi AM: Skull base applications of a stereotactic opto-electronic frameless system. Thirteenth Annual Meeting, American Society for Laser Medicine and Surgery, Inc. New Orleans, Louisiana, April 18 - 20, 1993.
213. Chavantes MC, Zamorano L, Moure F, Diaz FG: Endoscope laser stereotaxis in the management of intracranial lesions. Thirteenth Annual Meeting, American Society for Laser Medicine and Surgery, Inc. New Orleans, Louisiana, April 18 - 20, 1993.
214. Zamorano L, Jiang Z, Kadi AM: Stereotactic image-guided laser ablation of brain lesions (poster). Thirteenth Annual Meeting, American Society for Laser Medicine and Surgery, Inc. New Orleans, Louisiana, April 18 - 20, 1993.
215. Zamorano L, Jiang C, Kadi AM, Nolte LP: Intraoperative real-time localization of laser probes (poster). Thirteenth Annual Meeting, American Society for Laser Medicine and Surgery, Inc. New Orleans, Louisiana, April 18 - 20, 1993.
216. Zamorano L, Yakar D, Vaneerat R, Diaz, FG: Interstitial I-125 irradiation for malignant brain tumor: advantage of permanent implants (PI) over temporary implants (TI) (poster). The 61st Annual Meeting, American Association of Neurological Surgeons. Boston, Massachusetts, April 24 - 29, 1993.
217. Zamorano L, Kadi AM, Jiang C, Diaz FG: Design of a neurosurgical suite for computer-assisted surgery (poster). The 61st Annual Meeting, American Association of Neurological Surgeons. Boston, Massachusetts, April 24 - 29, 1993.
218. Jiang C, Zamorano L, Kadi AM, Diaz FG: The new concept of computer-assisted neurosurgery and prototype (poster). The 61st Annual Meeting American Association of Neurological Surgeons. Boston, Massachusetts, April 24 - 29, 1993.

219. Zamorano L, Chavantes MC, Moure F, Diaz FG: Endoscopic laser stereotaxis: our experience in 152 consecutive cases (poster). The 61st Annual Meeting American Association of Neurological Surgeons. Boston, Massachusetts, April 24 - 29, 1993.
220. Zamorano L, Chavantes MC, Diaz FG: Use of sculpted contact fibers and Nd-YAG laser in image-guided neurosurgery (poster). The 61st Annual Meeting American Association of Neurological Surgeons. Boston, Massachusetts, April 24 - 29, 1993.
221. Moure F, Zamorano L, Jiang Z, Kadi AM, Diaz FG: Stereotactic intraoperative ultrasonography: a technical note (poster). The 61st Annual Meeting American Association of Neurological Surgeons. Boston, Massachusetts, April 24 - 29, 1993.
222. Zamorano L, Kadi AM, Jiang Z, Diaz FG: Computer-assisted brain surgery: instrumentation, automation, and image guidance. The 61st Annual Meeting American Association of Neurological Surgeons. Boston, Massachusetts, April 24 - 29, 1993.
223. Fernandez P, Zamorano L, Yakar D, Vaneerat R, Diaz FG: Permanent iodine-125 implant in the up-front treatment of malignant gliomas: report of 58 cases (poster). The 61st Annual Meeting American Association of Neurological Surgeons. Boston, Massachusetts, April 24 - 29, 1993.
224. Fernandez P, Zamorano L, Nolte LP, Kadi AM, Jiang Z, Diaz FG: Application of intraoperative digitalization in skull base surgery (poster). The 61st Annual Meeting American Association of Neurological Surgeons. Boston, Massachusetts, April 24 - 29, 1993.
225. Zamorano L: Practical Clinic V. Three-dimensional stereotactic digitizers in neurosurgery: principles, techniques, and instrumentation. The 61st Annual Meeting American Association of Neurological Surgeons. Boston, Massachusetts, April 24 - 29, 1993.
226. Zamorano L: Practical Clinic XIV. Stereotactic surgery: principles, techniques, and instrumentation. The 61st Annual Meeting American Association of Neurological Surgeons. Boston, Massachusetts, April 24 - 29, 1993.

227. Zamorano L: Practical Clinic XX. Stereotactic surgery: principles, techniques, and instrumentation. The 61st Annual Meeting American Association of Neurological Surgeons. Boston, Massachusetts, April 24 - 29, 1993.
228. Zamorano L: Practical Clinic XXII. Neuroendoscopy: indications, techniques, and instrumentation. The 61st Annual Meeting American Association of Neurological Surgeons. Boston, Massachusetts, April 24 - 29, 1993.
229. Zamorano L: Surgical treatment of epilepsy. Sociedad de Cirugia Neurologica del Estado de Sonora. Hermosillo, Sonora, May 5 - 8, 1993.
230. Zamorano L: Minimal invasive techniques in neurosurgery. 1st International Congress on Minimal Invasive Techniques in Neurosurgery. Wiesbaden, Germany, June 15 - 19, 1993.
231. Zamorano L, Fernandez P, Gaspar L, Yakar D: Permanent I-125 implant in the upfront treatment of malignant gliomas: report of 58 Cases. 1st Congress of the International Stereotactic Radiosurgery Society. Stockholm, Sweden, June 16 - 19, 1993.
232. Yakar D, Zamorano L: Interstitial I-125 irradiation for malignant brain tumor: advantage of permanent implant over temporary implants. 1st Congress of the International Stereotactic Radiosurgery Society. Stockholm, Sweden, June 16 - 19, 1993.
233. Zamorano L, Gaspar L, Moure F, Warmelink C: Stereotactic radiosurgery: implementation of radiosurgical center & initial clinical experience on 32 patients. 1st Congress of the International Stereotactic Radiosurgery Society. Stockholm, Sweden, June 16 - 19, 1993.
234. Zamorano L, Fernandez P, Gaspar L, Yakar D: Permanent I-125 implant in the upfront treatment of malignant gliomas: report of 58 cases. 1st Congress of the International Stereotactic Radiosurgery Society. Stockholm, Sweden, June 16 - 19, 1993.

235. Zamorano L, Gaspar L, Moure F, Wareelink C: Implementation of radiosurgical center and initial clinical experience on 32 patients. MANS Meeting. Mackinac Island, Michigan, June 25 - 27, 1993.
236. Moure F, Zamorano L, Kadi AM, Jiang Z, Diaz FG: Microsurgical image-guided computer assisted resection of subcortical lesions. MANS Meeting. Mackinac Island, Michigan, June 25 - 27, 1993.
237. Zamorano L: Practical course - Frameless stereotaxis and intraoperative navigation. Congress of Neurological Surgeons 43rd Annual Meeting. Vancouver, B.C., October 2 -7, 1993.
238. Zamorano L: Practical course - Neuro-endoscopy: applications, principles, and techniques. Congress of Neurological Surgeons 43rd Annual Meeting. Vancouver, B.C., October 2 - 7, 1993.
239. Zamorano L, Chavantes MC, Moure F, Diaz FG: Endoscopic laser stereotaxis: experience in 160 consecutive cases. Congress of Neurological Surgeons 43rd Annual Meeting. Vancouver, B.C., October 2 - 7, 1993.
240. Zamorano L, Kadi AM, Jiang Z, Diaz FG: Zamorano-Dujovny multipurpose neurosurgical localizing unit: experience with 600 cases. Congress of Neurological Surgeons 43rd Annual Meeting. Vancouver, B.C., October 2 - 7, 1993.
241. DeSouza EC, Jiang Z, Moure F, Zamorano L, Diaz FG: Use of anatomic atlas in computer-assisted neurosurgery. Congress of Neurological Surgeons 43rd Annual Meeting. Vancouver, B.C., October 2 - 7, 1993.
242. Moure F, Zamorano L, Jiang Z, Kadi AM, Diaz FG: Computer-assisted volumetric resections of intracranial lesions. Congress of Neurological Surgeons 43rd Annual Meeting. Vancouver, B.C., October 2 - 7, 1993.
243. Fernandez P, Zamorano L, Nolte LP, Kadi AM, Jiang Z, Diaz FG: Application of intraoperative digitization to skull base surgery. Congress of Neurological Surgeons 43rd Annual Meeting. Vancouver, B.C., October 2 - 7, 1993.

244. Zamorano L, Nolte LP, Kadi AM, Jiang Z, Diaz FG: Use of an infrared system for intraoperative digitization. The XIth Meeting of the World Society for Stereotactic and Functional Neurosurgery. Ixtapa, Mexico, October 11 - 15, 1993.
245. Zamorano L, DeSouza E, Gaspar L, Diaz FG: Stereotactic resection vs radiosurgery: alternative in AVM management. The XIth Meeting of the World Society for Stereotactic and Functional Neurosurgery. Ixtapa, Mexico, October 11 - 15, 1993.
246. Zamorano L, Kadi AM, Jiang Z, Diaz FG: ZD multipurpose neurosurgical localizing unit: experience with 600 cases. The XIth Meeting of the World Society for Stereotactic and Functional Neurosurgery. Ixtapa, Mexico, October 11 - 15, 1993.
247. Fernandez P, Zamorano L, Gaspar L, Yakar L, Yakar D, Heilbrun L: Permanent I-125 implant therapy with concurrent external beam radiation in the up-front treatment of malignant gliomas. The XIth Meeting of the World Society for Stereotactic and Functional Neurosurgery. Ixtapa, Mexico, October 11 - 15, 1993.
248. Zamorano L: Round table critical discussant on low and high grade cerebral Gliomas. The Xth International Congress of Neurological Surgery. Acapulco, Mexico, October 17 - 22, 1993.
249. Zamorano L: Speaker for breakfast seminar on brachytherapy. The Xth International Congress of Neurological Surgery. Acapulco, Mexico, October 17 - 22, 1993.
250. Zamorano L: Moderator for video lunch seminar on image-guided stereotaxis. The Xth International Congress of Neurological Surgery. Acapulco, Mexico, October 17 - 22, 1993.
251. Zamorano L: Round table critical discussant on image-guided stereotactic surgery. The Xth International Congress of Neurological Surgery. Acapulco, Mexico, October 17 - 22, 1993.
252. Warmelink C., Gaspar L., Ezzel G., Zamorano L, Wierzbicki J: The dosimetric limitations of palladium-103 in permanent implants of brain tumors. Proceedings of the 16th Annual Mid-Winter Meeting of the American Endocurietherapy Society , 4-31:99. December 1993.

253. Gaspar L., Fernandez P., Zamorano L, Warmelink C., Yakar D., Heilbrun L: Permanent I-125 implants in malignant glioma. Proceedings of the 16th Annual Mid-Winter Meeting of the American Endocurietherapy Society 5-36:106. December 1993.
254. Jiang Z, Zamorano L, Grosky WI: Virtual reality and tele-presence neurosurgery basic theory and a prototype. Virtual Reality Vienna 1993. Vienna, Austria, December 1 - 3, 1993.
255. Zamorano L, Jiang Z, Diaz FG, Kadi AM, Nolte LP: Use of an infrared system for intraoperative digitization of laser and surgical instruments in skull base surgery. Fifth Annual Meeting of North American Skull Base Societies. Disney's Grand Floridian Beach Resort, Lake Buena Vista, Florida, February 19 - 23, 1994.
256. Zamorano L, Fernandez P, Nolte LP, Kadi AM, Jiang Z, Diaz FG: Application of intraoperative digitization of skull base surgery. Fifth Annual Meeting of North American Skull Base Societies. Disney's Grand Floridian Beach Resort, Lake Buena Vista, Florida, February 19 - 23, 1994.
257. Zamorano L, Chavantes MC, Diaz FG: Endoscope laser stereotaxis in the management of intracranial lesions. Fifth Annual Meeting of North American Skull Base Societies. Disney's Grand Floridian Beach Resort, Lake Buena Vista, Florida, February 19 - 23, 1994.
258. Zamorano L: Practical clinic 102, neuroendoscopy: indications, techniques, and instrumentation. The 62nd Annual Meeting of American Association of Neurological Surgeons. San Diego, California, April 9 - 14, 1994.
259. Zamorano L: Practical clinic 106, 3-D stereotactic digitizers. The 62nd Annual Meeting of American Association of Neurological Surgeons. San Diego, California, April 9 - 14, 1994.
260. Zamorano L: Practical clinic 118, stereotactic surgery: principles, techniques and instrumentation. The 62nd Annual Meeting of American Association of Neurological Surgeons. San Diego, California, April 9 - 14, 1994.

261. Zamorano L, Lis-Planells M, Garcia L, Gaspar L, Diaz FG: Stereotactic resection or radiosurgery in the management of vascular lesions (poster). The 62nd Annual Meeting of American Association of Neurological Surgeons. San Diego, California, April 9 - 14, 1994.
262. Zamorano L, Kadi AM, Jiang Z, Diaz FG: Zamorano-Dujovny multipurpose neurosurgical localizing unit: experience with 600 cases (poster). The 62nd Annual Meeting of American Association of Neurological Surgeons. San Diego, California, April 9 - 14, 1994.
263. Jiang Z, Zamorano L: Tele-presence neurosurgery: basic theory and prototype (poster). The 62nd Annual Meeting of American Association of Neurological Surgeons. San Diego, California, April 9 - 14, 1994.
264. Zamorano L, Kadi AM, Jiang Z, Diaz FG: Design of a neurosurgical suite for computer-assisted surgery (poster). The 62nd Annual Meeting of American Association of Neurological Surgeons. San Diego, California, April 9 - 14, 1994.
265. Smith LA, Zamorano L, Diaz FG: Infrared localization of temporal and extratemporal epilepsy (poster). The 62nd Annual Meeting of American Association of Neurological Surgeons. San Diego, California, April 9 -14, 1994.
266. Zamorano L, Jiang Z, Kadi AM, Diaz FG: Computer-assisted laser volumetric resection of intracranial lesions (poster). The 62nd Annual Meeting of American Association of Neurological Surgeons. San Diego, California, April 9 - 14, 1994.
267. Zamorano L, Smith LA, Lis-Planells M, Jiang Z, Kadi AM, Diaz FG: Use of an anatomical atlas in computer-assisted neurosurgery (poster). The 62nd Annual Meeting of American Association of Neurological Surgeons. San Diego, California, April 9 - 14, 1994.
268. Zamorano L, Garcia L, Gaspar L, Yakar D, Heilbrun L, Diaz FG: Permanent I-125 implant therapy with concurrent external beam radiation in the up-front treatment of malignant gliomas (poster). The 62nd Annual Meeting of American Association of Neurological Surgeons, San Diego, California, April 9 - 14, 1994.

269. Zamorano L, Nolte LP, Kadi AM, Jiang Z, Diaz FG: Use of an infrared system for intraoperative image localization of laser and surgical instruments (poster). The 62nd Annual Meeting of American Association of Neurological Surgeons. San Diego, California, April 9 - 14, 1994.
270. Gaspar L, Zamorano L, Garcia L, Shamsa F, Waremeling C, Yakar D: Permanent I-125 interstitial implants for the initial treatment of malignant gliomas. Proceedings of the American Radium Society's 76th Annual Meeting, p. 32(62). April 1994.
271. Gaspar L, Zamorano L, Yakar D, Garcia L, Shamsa F, Waremeling C, Yakar D: Permanent I-125 interstitial implants for the primary treatment of malignant gliomas. Sixth Canadian Neuro-Oncology Meeting. Lake Louise, Alberta, Canada, May 1994.
272. Smith LA, Zamorano L, Moure F, Diaz FG: Stereotactic biopsy in the treatment of HIV and AIDs brain lesions. 1994 Annual Summer Meeting of the Michigan Association of Neurological Surgeons. Grand Traverse Resort, Traverse City, Michigan, June, 10 - 12, 1994.
273. Smith LA, Zamorano L, and Diaz FG: Infrared localization of temporal and extratemporal lobe epilepsy. 1994 Annual Summer Meeting of the Michigan Association of Neurological Surgeons. Grand Traverse Resort, Traverse City, Michigan, June, 10 - 12, 1994.
274. Lis-Planells M, Zamorano L, Garcia L, Gaspar L, Warelink C, Diaz FG: Stereotactic resection or radiosurgery. 1994 Annual Summer Meeting of the Michigan Association of Neurological Surgeons. Grand Traverse Resort, Traverse City, Michigan, June 10 - 12, 1994.
275. Zamorano L, Gaspar L, Warelink C: Stereotactic radiosurgery: implementation of radiosurgical center and initial clinical experience on 66 patients. 1994 Annual Summer Meeting of the Michigan Association of Neurological Surgeons. Grand Traverse Resort, Traverse City, Michigan, June 10 - 12, 1994.
276. Garcia L, Zamorano L, Shamsa F, Gaspar L, Diaz FG: Stereotactic interstitial brachytherapy with permanent iodine-125 implant in the up-front treatment of malignant gliomas. 1994 Annual Summer

- Meeting of the Michigan Association of Neurological Surgeons. Grand Traverse Resort, Traverse City, Michigan, June 10 - 12, 1994.
277. Zamorano L, Image guided neuroendoscopy: The Fourth Annual UCLA Medical Center Hands-On Workshop on Minimally Invasive Therapy of the Brain. Santa Monica, California, August 25 - 27, 1994.
278. Nolte LP-P, Zamorano L, Berlemann U, Schwarzenbach O: A novel approach to spine surgery. European Spine Society. Madrid, Spain, September 8 - 10, 1994.
279. Zamorano L: Tele-presence and virtual reality in computer assisted neurological surgery. Virtual Reality and Medicine: The Cutting Edge. New York Hilton, September 9 - 11, 1994.
280. Nolte LP, Zamorano L: A novel approach to spine surgery. BMT-Kongress 94. Rostock, September 22 - 24, 1994.
281. Garcia L, Zamorano L, Shamsa F, Gaspar L, Diaz FG: Stereotactic intersittal brachytherapy with permanent iodine-125 implant in the up-front treatment of malignant gliomas. Congress of Neurological Surgeons Annual Meeting. Chicago, Illinois, October 1 - 6, 1994.
282. Smith LA, Zamorano L, Verma N, Diaz, FG: Role of stereotactic depth and intraoperative recording to define surgical treatment of focal epilepsy. Congress of Neurological Surgeons Annual Meeting. Chicago, Illinois, October 1 - 6, 1994.
283. Smith LA, Zamorano L, Diaz FG: Stereotactic biopsy in the treatment of HIV and AIDs brain lesions. Congress of Neurological Surgeons Annual Meeting. Chicago, Illinois, October 1 - 6, 1994.
284. Kadi AM, Zamorano L, Jiang Z, Diaz FG: Computer assisted neurosurgical suite, design and implementation. Congress of Neurological Surgeons Annual Meeting. Chicago, Illinois, October 1 - 6, 1994.
285. Buciu R, Zamorano L, Lis-Planells M, Jiang Z, Kadi, AM: Infrared localization in skull base surgery. Congress of Neurological Surgeons Annual Meeting. Chicago, Illinois, October 1 - 6, 1994.

286. Zamorano L, Kadi AM, Buciuc R, Diaz FG: ZD multipurpose neurosurgical localizing unit: experience with 600 cases. Congress of Neurological Surgeons Annual Meeting. Chicago, Illinois, October 1 - 6, 1994.
287. Zamorano L, Chavantes MC, Buciuc R, Diaz FG: Endoscopic laser stereotaxis: management of brain lesions, "Tumor Section Session." Congress of Neurological Surgeons Annual Meeting. Chicago, Illinois, October 1 - 6, 1994.
288. Zamorano L: Panelist in breakfast seminar 225 "intraoperative functional mapping." Congress of Neurological Surgeons Annual Meeting. Chicago, Illinois, October 1 - 6, 1994.
289. Zamorano L: Frameless stereotactic surgery course 016. Congress of Neurological Surgeons Annual Meeting. Chicago, Illinois, October 1 - 6, 1994.
290. Zamorano L: Cerebral neuroendoscopy "Current and Future technology for minimally invasive and telepresence surgery (multidisciplinary)." American College of Surgeons, 80th Annual Clinical Congress. Chicago, Illinois, October 9 - 14, 1994.
291. Zamorano L: Decision making in patients with brain tumors and AVM/image guidance and brain mapping in the optimization for surgical procedures. User's Group Meeting. Tucson, Arizona, November 3 - 4, 1994.
292. Zamorano L, Interactive image-guided neurosurgery. Seventh Annual Fall Meeting of the Arizona Neurosurgical Society. November 5, 1994.
293. Buciuc R, Zamorano L, Jiang Z, Kadi AM, Palmer A, Diaz, FG: Interactive computer assisted surgery for skull base lesions. North American Skull Base Society, Sixth Annual Meeting. Naples, Florida, February 18 - 21, 1995.
294. Zamorano L, Lis-Planells M, Buciuc R, Jiang Z, Kadi AM: Interactive computer assisted resection of intraventricular lesions.

- North American Skull Base Society, Sixth Annual Meeting. Naples, Florida, February 18 - 21, 1995.
295. Jiang Z, Zamorano L, Kadi AM, Diaz FG: Real-time 3D visualization from surgeon's perspective based on intraoperative localization of both patient and surgeon. North American Skull Base Society, Sixth Annual Meeting. Naples, Florida, February 18 - 21, 1995.
296. Zamorano L, Buciu R, Aronin P, Ham S, Caragine L, Canady A, Diaz FG: Interactive image guided surgery in pediatric neurosurgery using an infrared based system. 1995 Quadrennial Meeting of the American Society for Stereotactic and Functional Neurosurgery. Marina del Rey, California, March 8 - 11, 1995.
297. Zamorano L, Kadi AM, Jiang Z, Diaz, FG: Intraoperative localization of hand-held laser instrument using an infrared-based system. 1995 Quadrennial Meeting of the American Society for Stereotactic and Functional Neurosurgery. Marina del Rey, California, March 8 - 11, 1995.
298. Zamorano L, Diaz FG, Vaicys C: Complications after stereotactic procedure using computer assisted image guidance and infrared intraoperative localization. 1995 Quadrennial Meeting of the American Society for Stereotactic and Functional Neurosurgery. Marina del Rey, California, March 8 - 11, 1995.
299. Zamorano L, Kadi AM, Buciu R, Diaz FG: ZD multipurpose neurosurgical localizing unit: experience with 600 cases. 1995 Quadrennial Meeting of the American Society for Stereotactic and Functional Neurosurgery. Marina del Rey, California, March 8 - 11, 1995.
300. Zamorano L, Smith LA, Verma N, Diaz FG: Role of stereotactic depth and intraoperative recording to define surgical treatment of focal epilepsy. 1995 Quadrennial Meeting of the American Society for Stereotactic and Functional Neurosurgery. Marina del Rey, California, March 8 - 11, 1995.
301. Zamorano L, Gaspar L, Garcia L, Buciu R, Warmelink C, Ezzell G: Stereotactic radiosurgery: implementation of a radiosurgical center

- and initial clinical experience on 66 patients. 1995 Quadrennial Meeting of the American Society for Stereotactic and Functional Neurosurgery. Marina del Rey, California, March 8-11, 1995.
302. Zamorano L, Smith LA, Diaz FG: Stereotactic biopsy in the treatment of HIV and AIDs brain lesions. 1995 Quadrennial Meeting of the American Society for Stereotactic and Functional Neurosurgery. Marina del Rey, California, March 8 - 11, 1995.
303. Zamorano L, Gaspar L, Yakar D, Shamsa F, Buciuic R, Diaz FG: Permanent iodine-125 implants in primary malignant glioma. 1995 Quadrennial Meeting of the American Society for Stereotactic and Functional Neurosurgery. Marina del Rey, California, March 8 - 11, 1995.
304. Zamorano L, Kadi AM, Jiang Z, Diaz FG: Computer assisted neurosurgical suite, design and implementation. 1995 Quadrennial Meeting of the American Society for Stereotactic and Functional Neurosurgery. Marina del Rey, California, March 8 - 11, 1995.
305. Zamorano L, Chavantes MC, Buciuic R, Diaz FG: Interactive laser stereotaxis: management of brain lesions. 1995 Quadrennial Meeting of the American Society for Stereotactic and Functional Neurosurgery. Marina del Rey, California, March 8 - 11, 1995.
306. Zamorano L, Lis-Planells M, Garcia L, Diaz FG: Interactive computer assisted resection of arteriovenous malformation and cavernous angiomas using infrared system. 1995 Quadrennial Meeting of the American Society for Stereotactic and Functional Neurosurgery. Marina del Rey, California, March 8 - 11, 1995.
307. Zamorano L, Gaspar L, Garcia L, Yakar D, Buciuic R, Shasma F, Diaz FG: Permanent iodine 125 implants for recurrent malignant gliomas. 1995 Quadrennial Meeting of the American Society for Stereotactic and Functional Neurosurgery. Marina del Rey, California, March 8 - 11, 1995.
308. Zamorano L, Nolte LP, Jiang Z, Wang Q, Langlotz F: Image guided computer assisted spine surgery: a pilot study on spinal pedicle fixation. 1995 Quadrennial Meeting of the American Society for

Stereotactic and Functional Neurosurgery. Marina del Rey, California, March 8 - 11, 1995.

309. Zamorano L, Chavantes MC, Buciuc R, Diaz FG: Interactive endoscope laser stereotaxis: management of cystic and intraventricular lesions. 15th Annual Meeting of the American Society for Laser Medicine and Surgery. Sheraton Harbor Island Resort, San Diego, California, April 2 - 4, 1995.
310. Buciuc R, Zamorano L, Aronin P, Ham S, Caragine L, Canady A, Diaz FG: Interactive image guided surgery in pediatric neurosurgery using an infrared based system. 15th Annual Meeting of the American Society for Laser Medicine and Surgery. Sheraton Harbor Island Resort, San Diego, California, April 2 - 4, 1995.
311. Kadi AM, Zamorano L, Jiang Z, Diaz FG: Intraoperative tracking of surgical microscope and laser using infrared-based system. 15th Annual Meeting of the American Society for Laser Medicine and Surgery. Sheraton Harbor Island Resort, San Diego, California, April 2 - 4, 1995.
312. Kadi AM, Zamorano L, Jiang Z, Diaz, FG: Intraoperative localization of hand-held laser instrument using an infrared-based system. 15th Annual Meeting of the American Society for Laser Medicine and Surgery. Sheraton Harbor Island Resort, San Diego, California, April 2 - 4, 1995.
313. Zamorano L: Interactive image guided neurosurgery. The American Association of Neurological Surgeons 63RD Annual Meeting. Orlando, Florida, April 22 - 27, 1995.
314. Zamorano L: Stereotactic surgery: principles, techniques and instrumentation. The American Association of Neurological Surgeons 63RD Annual Meeting. Orlando, Florida, April 22 - 27, 1995.
315. Zamorano L, Gaspar L, Garcia L, Yakar D, Buciuc R, Diaz FG: Permanent iodine-125 implant in primary malignant glioma. The American Association of Neurological Surgeons 63RD Annual Meeting. Orlando, Florida, April 22 - 27, 1995.

316. Zamorano L, Nolte LP, Jiang Z, Wang Q, Langlotz F, Diaz FG: Image guided computer assisted spine surgery - a pilot study on spinal pedicle fixation. The American Association of Neurological Surgeons 63RD Annual Meeting. Orlando, Florida, April 22 - 27, 1995.
317. Zamorano L, Diaz FG, Jiang Z, O'Connor CK: 3-D visualization in the planning of aneurysm surgery. The American Association of Neurological Surgeons 63RD Annual Meeting. Orlando, Florida, April 22 - 27, 1995.
318. Kadi MA, Zamorano L, Jiang Z, Diaz FG: Design and implementation of a neurosurgical suite for interactive computer-assisted surgery. The American Association of Neurological Surgeons 63RD Annual Meeting. Orlando, Florida, April 22 - 27, 1995.
319. Zamorano L, Smith LA, Verma N, Diaz FG: Role of stereotactic depth electrode and intraoperative recording to define surgical treatment of focal epilepsy. The American Association of Neurological Surgeons 63RD Annual Meeting. Orlando, Florida, April 22 - 27, 1995.
320. Zamorano L, Gaspar L, Garcia L, Yakar D, Buciu R, Shasma F, Diaz FG: Permanent iodine-125 implants for recurrent malignant gliomas. The American Association of Neurological Surgeons 63RD Annual Meeting. Orlando, Florida, April 22 - 27, 1995.
321. Purser S, Duclos M, Aref A, Zamorano L, Mathog R, Fontanesi J, Jacobs J: A new brachytherapy technique for advanced head and neck cancer. American Society of Head and Neck Surgery Combined Otolaryngology Spring Meeting. Palm Desert, California, May 2, 1995.
322. Zamorano L: Interactive image-guided neurosurgery. Technology Transfer in Image-Guided Therapy. Bethesda, Maryland, May 30 - June 1, 1995.
323. Zamorano L: Interactive image guided neurosurgery and functional mapping. Virtual Reality in Medicine and Developers' Expo. Cambridge, Massachusetts, June 1 - 4 1995.

324. Zamorano L, Lis-Planells M, Buciuc R, Jiang Z, Kadi MA: Interactive computer assisted resection of intraventricular lesions. Michigan Association of Neurological Surgeons. Boyne Harbor Inn, Harbor Springs, Michigan , June 9 - 11, 1995.
325. Zamorano L, Gaspar L, Garcia L, Yakar D, Buciuc R, Shasma F, Diaz FG: Permanent iodine-125 implants for recurrent malignant gliomas. Michigan Association of Neurological Surgeons. Boyne Harbor Inn, Harbor Springs, Michigan , June 9 - 11, 1995.
326. Zamorano L, Gaspar L, Yakar D, Shamsa F, Buciuc R, Diaz FG: Permanent iodine-125 implant in primary malignant glioma. Michigan Association of Neurological Surgeons. Boyne Harbor Inn, Harbor Springs, Michigan , June 9 - 11, 1995.
327. Zamorano L, Gaspar L, Yakar D, Shamsa F, Buciuc R, Diaz FG: Permanent iodine-125 implant in primary malignant glioma. 2nd Congress of the International Stereotactic Radiosurgery Society. Boston, Massachusetts, June 14 - 17, 1995.
328. Vaishampayan N, Zamorano L, Aronin P, Gaspar L, Canady A, Lattin P, Ezzell G, Yakar D, Chungbin S, Fontanesi J: Permanent I-125 interstitial implant for low grade astrocytoma in a pediatric population. 2nd Congress of the International Stereotactic Radiosurgery Society. Boston, Massachusetts, June 14 - 17, 1995.
329. Zamorano L: Applications of stereotactic and navigational techniques. Joint International Congress on Minimally Invasive Techniques in Neurosurgery and Otolaryngology. Pittsburgh, Pennsylvania, June 17 - 20, 1995.
330. Zamorano L: Computer assisted management of intracranial tumor; biopsy, resection, brachytherapy and radiosurgery. Joint International Congress on Minimally Invasive Techniques in Neurosurgery and Otolaryngology. Pittsburgh, Pennsylvania, June 17 - 20, 1995.
331. Zamorano L: Stereotactic and navigational techniques in neurosurgery and otolaryngology. Joint International Congress on Minimally Invasive Techniques in Neurosurgery and Otolaryngology. Pittsburgh, Pennsylvania, June 17 - 20, 1995.

332. Zamorano L: RTOG 93-05: A phase III trial comparing the use of radiosurgery followed by conventional radiotherapy with BCNU for supratentorial glioblastoma multiforme. Philadelphia, Pennsylvania, July 21 - 23, 1995.
333. Jacobs J, Zamorano L, Jiang Z, Kadi AM: Interactive interoperative localization as an aid to skull base surgery. Conjoint Symposium On Contemporary Head And Neck Reconstruction. Chicago, Illinois, July 27 - 30, 1995.
334. Zamorano L: Breakfast Seminar. Functional stereotaxis: pallidotomy for parkinson disease. Mexican Congress of Neurological Surgery. Ixtapa, Mexico, July 24 - 26, 1995.
335. Zamorano L: Course: how to plan craniotomies. 3D stereotactic craniotomy and functional mapping. Mexican Congress of Neurological Surgery. Ixtapa, Mexico, July 24 - 26, 1995.
336. Zamorano L: Plenary session: minimally invasive surgery. Functional stereotactic surgery. Mexican Congress of Neurological Surgery. Ixtapa, Mexico, July 24 - 26, 1995.
337. Zamorano L: Interactive image-guided neurosurgery. Dominican Republic Neurosurgical Society Conference. Santa Domingo, Dominican Republic, August 9 - 12, 1995.
338. Zamorano L: Brachytherapy in malignant brain tumors. Dominican Republic Neurosurgical Society Conference. Santa Domingo, Dominican Republic, August 9 - 12, 1995.
339. Zamorano L, Gaspar L, Yakar D, Buciuc R, Diaz FG: Permanent iodine-125 implant in primary malignant gliomas. Congress of Neurological Surgeons 45th Annual Meeting. San Francisco, California, October 14 - 19, 1995.
340. Zamorano L, Gaspar L, Shamsa F, Buciuc R, Ezzell GA, Garcia L, Diaz FG: Permanent iodine-125 implants for recurrent malignant gliomas. Congress of Neurological Surgeons 45th Annual Meeting. San Francisco, California, October 14 - 19, 1995.

341. Roberts WA, Ezzell GA, Zamorano L, Gaspar L, Canady A, Aronin P, Fontanesi J: A study of relocatable stereotactic immobilization precision. Congress of Neurological Surgeons 45th Annual Meeting. San Francisco, California, October 14 - 19, 1995.
342. Zamorano L: Course: augmentative procedures for pain control. Congress of Neurological Surgeons 45th Annual Meeting. San Francisco, California, October 14 - 19, 1995.
343. Zamorano L: Moderator: malignant tumors session. Leksell Gamma Knife Society 7th International Meeting. Island of Lana'i, Hawaii, November 4 - 12, 1995.
344. Li QH, Holdener HJ, Zamorano L, King P, Jiang Z, Diaz FG: Computer assisted insertion of pedical screw. Detroit Trauma Symposium. Detroit, Michigan, November 7 - 9, 1995.
345. Zamorano L, Smith LA, Jiang Z, Kadi AM, Vinas FC: Interactive image guidance in temporal and extratemporal epilepsy. American Epilepsy Society. Baltimore, Maryland, December 1 - 6, 1995.
346. Zamorano L: Image guided neurosurgery: a neurosurgeons prospective. International Winter Congress on Minimally Invasive Techniques in Neurosurgery, Otolaryngology and Radiology. Aspen, Colorado, March 16 - 20, 1996.
347. Zamorano L: Present status of interactive image guided neurosurgery. International Winter Congress on Minimally Invasive Techniques in Neurosurgery, Otolaryngology and Radiology. Aspen, Colorado, March 16 - 20, 1996.
348. Zamorano L, Lis-Plannells M, Jiang Z, Diaz FG: Vascular malformations of the brain: surgical management using interactive image guidance. American Society for Laser Medicine and Surgery - Sixteenth Annual Meeting in Lake Buena Vista, Florida, April 15 - 17, 1996.
349. Zamorano L, Buciu R, Vinas F, Jiang Z, Majeed Kadi A, Diaz, FG: Infrared-based interactive image localization in the resection of intraventricular lesions. American Society for Laser Medicine and

- Surgery - Sixteenth Annual Meeting in Lake Buena Vista, Florida, April 15 - 17, 1996.
350. Zamorano L, Vaicys C, Buciuc R, Jiang Z, Majeed Kadi A, Diaz FG: Analysis of image guided interactive surgery using an infrared-based system. American Society for Laser Medicine and Surgery - Sixteenth Annual Meeting in Lake Buena Vista, Florida, April 15 - 17, 1996.
351. Zamorano L, Buciuc R, Jiang Z, Majeed Kadi A, Diaz FG: Interactive computer assisted surgery for skull base lesions. American Society for Laser Medicine and Surgery - Sixteenth Annual Meeting in Lake Buena Vista, Florida, April 15 - 17, 1996.
352. Buciuc R, Aronin P, Zamorano L, Canady A, Vinas F, Diaz FG: Value of stereotactic biopsy in pediatric brainstem lesions. The American Association of Neurological Surgeons 64th Annual Meetings. Minneapolis, Minnesota, April 27 - May 2, 1996.
353. Walter R, Zamorano L, Fontanesi J, Gaspar L: Assessment of accuracy using a relocatable stereotactic immobilization system during fractionated radiotherapy: a new methodology.
354. The American Association of Neurological Surgeons 64th Annual Meetings. Minneapolis, Minnesota, April 27 - May 2, 1996.
355. Zamorano L, Gaspar L, Shamsa F, Yakar D, Diaz FG: Permanent iodine-125 implants in primary malignant gliomas. The American Association of Neurological Surgeons 64th Annual Meetings. Minneapolis, Minnesota, April 27 - May 2, 1996.
356. Jiang Z, Zamorano L, Melgar M, Diaz FG: Three-dimensional visualization in the planning of aneurysm surgery. The American Association of Neurological Surgeons 64th Annual Meetings. Minneapolis, Minnesota, April 27 - May 2, 1996.
357. Zamorano L: Stereotactic surgery: principles, techniques and instrumentation. The American Association of Neurological Surgeons 64th Annual Meetings. Minneapolis, Minnesota, April 27 - May 2, 1996.
358. Zamorano L, Mueller R-A, Chugani H, Jiang Z, Diaz FG: (15o)-water PET and intraoperative brain mapping: a comparison in

- localization accuracy of eloquent cortex. The American Association of Neurological Surgeons 64th Annual Meetings. Minneapolis, Minnesota, April 27 - May 2, 1996.
359. Jiang Z, Zamorano L, Li, Q, Grosky W, Diaz FG: NSPS-5.0: a complimentary computer-assisted surgery system. International College of Surgeons, United States Section, 59th Annual Update. Washington, D.C., May 2 - 4, 1996.
360. Jiang Z, Grosky W, Zamorano L, Diaz FG: Environment modeling and databases. International College of Surgeons, United States Section, 59th Annual Update. Washington, D.C., May 2 - 4, 1996.
361. Zamorano L, Kadi AM, Jiang Z, Diaz FG: Open stereotactic ring - a solution to pre-operative and intra-operative patient management. XIIth European Society for Stereotactic and Functional Neurosurgery. Milan, Italy, June 12-15, 1996.
362. Vinas FC, Zamorano L, Buciuic R, Verma N, Jiang Z, Diaz FG: Interactive computer-assisted surgery for intractable epilepsy. XIIth European Society for Stereotactic and Functional Neurosurgery. Milan, Italy, June 12-15, 1996.
363. Buciuic R, Zamorano L, Vinas F, Lis-Planells M, Diaz FG: Surgical resection of intraventricular lesions with interactive intra-operative guidance. XIIth European Society for Stereotactic and Functional Neurosurgery. Milan, Italy, June 12-15, 1996.
364. Vinas FC, Zamorano L, Buciuic R, Lee H, Chiang C, Diaz FG: Comparison of application accuracy between a stereotactic frame and a semi-permanent fiducial system for frameless stereotaxis. XIIth European Society for Stereotactic and Functional Neurosurgery. Milan, Italy, June 12-15, 1996.
365. Roberts WA, Ezell GA, Gaspar L, Chuba P, Thornton D, Zamorano L, Fontanesi J: Precision and reproducibility of the F.L. Fischer relocatable mask system. XII European Society for Stereotactic and Functional Neurosurgery. Milan, Italy, June 12-15, 1996.
366. Zamorano L, Mueller R-A, Chugani H, Jiang Z, Diaz FG: [15O]-Water PET and intra-operative brain mapping: a comparison in

- localization accuracy of eloquent cortex. XIIth European Society for Stereotactic and Functional Neurosurgery. Milan, Italy, June 12-15, 1996.
367. Zamorano L: Interactive image guided surgery using IR system. XIIth European Society for Stereotactic and Functional Neurosurgery. Milan, Italy, June 12 - 15, 1996.
368. Vinas FC, Holdener H, Zamorano L, King PK, Li Q, Jiang Z, Diaz FG: Image guided surgery during vertebrectomy and anterior fixation. 3rd International Meeting on Advanced Spine Techniques, Park Hilton Hotel, Munich, Germany, June 20 - 22, 1996.
369. Zamorano L: Neuronavigation and 3D surgery panel. 2nd International Skull Base Congress and the 7th Annual Meeting of the North American Skull Base Society. San Diego, California, June 29 - July 4, 1996.
370. Zamorano L: Interactive image guided surgery. 2nd International Skull Base Congress and the 7th Annual Meeting of the North American Skull Base Society. San Diego, California, June 29 - July 4, 1996.
371. Zamorano L: Advance navigation techniques: use of robotic microscope. 46th Annual Meeting - Congress of Neurological Surgeons. Montreal, Quebec, Canada, September 28 - October 3, 1996.
372. Jiang Z, Zamorano L, Muzic O, Buciu R, Li Q, Popescu A, Diaz FG: Virtual brain environment for surgical planning and intraoperative guidance. 46th Annual Meeting - Congress of Neurological Surgeons. Montreal, Quebec, Canada, September 28 - October 3, 1996.
373. Li Q, Holdener H, Zamorano L, King P, Jiang Z, Diaz FG: Interactive image-guided spine surgery. 46th Annual Meeting - Congress of Neurological Surgeons. Montreal, Quebec, Canada, September 28 - October 3, 1996.
374. Zamorano L, Vinas F, Buciu R, Jiang Z, Li Q, Diaz FG: New design for stereotactic surgery: open stereotactic frame. 46th Annual

- Meeting - Congress of Neurological Surgeons. Montreal, Quebec, Canada, September 28 - October 3, 1996.
375. Zamorano L, Gaspar L, Shamsa F, Buciuc R, Eszell G, Li Q, Yakar D, Diaz FG: Permanent iodine-125 implants in malignant glioma. 46th Annual Meeting - Congress of Neurological Surgeons. Montreal, Quebec, Canada, September 28 - October 3, 1996.
376. Zamorano L: Image guided surgery: Carl Zeiss, Inc., Medilive 3D Theater. Congress of Neurological Surgeons. Montreal, Quebec, Canada, September 28 - October 3, 1996.
377. Zamorano L: Stereotactic radiation brachytherapy and radiosurgery. XXVII CLAN-FLANC Congress of Latin American Neurosurgery. San Pedro Honduras, October 5 - 11, 1996.
378. Zamorano L: Interactive image-guided surgery. XXVII CLAN-FLANC Congress of Latin American Neurosurgery. San Pedro, Honduras, October 5 - 11, 1996.
379. Zamorano L: Management of malignant gliomas and low grade astrocytomas. XXVII CLAN-FLANC Congress of Latin American Neurosurgery. San Pedro, Honduras, October 5 - 11, 1996.
380. Zamorano L: Cavernous angiomas. XXVII CLAN-FLANC Congress of Latin American Neurosurgery. San Pedro, Honduras, October 5 - 11, 1996.
381. Zamorano L: Stereotactic radiation brachytherapy and radiosurgery. XXVII CLAN-FLANC Congress of Latin American Neurosurgery. San Pedro, Honduras, October 5 - 11, 1996.
382. Zamorano L: Movement disorders and neurotransplant. XXVII CLAN-FLANC Congress of Latin American Neurosurgery. San Pedro, Honduras, October 5 - 11, 1996.
383. Zamorano L: Neuronavigation. XXVII CLAN-FLANC Congress of Latin American Neurosurgery. San Pedro, Honduras, October 5 - 11, 1996.

384. Zamorano L: Thalamic and brain stem arteriovenous malformations. XXVII CLAN-FLANC Congress of Latin American Neurosurgery. San Pedro, Honduras, October 5 - 11, 1996.
385. Zamorano L: Malignant gliomas. XXVII CLAN-FLANC Congress of Latin American Neurosurgery. San Pedro, Honduras, October 5 - 11, 1996.
386. Vinas F, Holdener H, Zamorano L, King P, Li Q, Diaz FG: Interactive image guidance during anterior instrumental fixation. North American Spine Society. Vancouver, British Columbia, Canada. October 23 - 26, 1996.
387. Holdener HJ, Li QH, Andrews C, Zamorano L, Jiang Z, Diaz FG: Computer assisted internal fixation of complex pelvic ring disruptions and acetabular fracture. Detroit Trauma Symposium. Detroit, Michigan, November 6 - 8, 1996.
388. Zamorano L: Intracranial malignancies & metastases. The Third Detroit Neurosurgery Symposium: Microsurgery vs. Radiosurgery. Detroit, Michigan, November 15 - 17, 1996.
389. Gaspar L, Zamorano L Shamsa F, Yakar D: Permanent iodine-125 implant in primary malignant gliomas. The Third Detroit Neurosurgery Symposium: Microsurgery vs. Radiosurgery. Detroit, Michigan, November 15 - 17, 1996.
390. Zamorano L, Buciu R, Gaspar L, Fontanesi J, Diaz FG: Radiosurgery for AVM: Wayne State Experience. The Third Detroit Neurosurgery Symposium: Microsurgery vs. Radiosurgery. Detroit, Michigan, November 15 - 17, 1996.
391. Zamorano L, Buciu R, Gaspar L, Fontanesi J, Diaz FG: Radiosurgery for brain metastases: Wayne State Experience. The Third Detroit Neurosurgery Symposium: Microsurgery vs. Radiosurgery. Detroit, Michigan, November 15 - 17, 1996.
392. Zamorano L, Gaspar L, Vinas F, Buciu R, Fontanesi J, Diaz FG: Radiosurgery for brain metastases: Wayne State Experience. LINAC Radiosurgery. Lake Buena Vista, Florida, December 11-15, 1996.

393. Zamorano L, Gaspar L, Vinas F, Buciu R, Fontanesi J, Diaz FG: Radiosurgery for AVM: Wayne State Experience. LINAC Radiosurgery. Lake Buena Vista, Florida, December 11-15, 1996.
394. Zamorano L: Advanced neurosurgery using MKM robotic system. International Symposium on Computer Assisted Neurosurgery. Kobe University School of Medicine, Kobe, Japan, January 25-26, 1997.
395. Zamorano L: Interactive other image guided surgery using infrared-based system. International Symposium on Computer Assisted Neurosurgery. Kobe University School of Medicine Kobe, Japan, January 25-26, 1997.
396. Zamorano L: Lecture - Modern approach to thalamotomy and pallidotomy. US-International Leibinger. Ixtapa, Mexico. February 6 - 8, 1997.
397. Zamorano L: Lecture - Wayne State's Experience with MKM, SMN and STN. US-International Leibinger. Ixtapa, Mexico. February 6 - 8, 1997.
398. Zamorano L: Lecture - LINAC radiosurgery. US-International Leibinger. Ixtapa, Mexico. February 6 - 8, 1997.
399. Zamorano L: Moderator - Functional stereotaxy. US-International Leibinger. Ixtapa, Mexico. February 6 - 8, 1997.
400. Zamorano L: Guest Lecturer on Computer Assisted Surgery. Gershenson Radiation Oncology Center. Wayne State University, Detroit, Michigan, February 28, 1997.
401. Zamorano L: Seminar - Snowmass 1997: MRI in Clinical Practice. Snowmass, Colorado, March 1-8, 1997.
402. Zamorano L: Faculty - Interactive image-guided neurosurgery (frameless stereotaxy); hands-on. American Association of Neurological Surgeons. Memphis, Tennessee, March 14 - 15, 1997.
403. Zamorano L, Lis-Planells M, Jiang Z, Diaz FG: Interactive image guidance in the surgical management of vascular malformations. The

65th Annual Meeting of the American Association of Neurological Surgeons. Denver, Colorado, April 12 - 17, 1997.

404. Zamorano L, Vinas FC, Buciuc R, Jiang Z, Li QH, Diaz FG: Interactive image-guided surgery, registered intraoperative functional mapping, and awake craniotomy: a three-arm technique for optimization of resection of intracranial lesions. The 65th Annual Meeting of the American Association of Neurological Surgeons. Denver, Colorado, April 12 - 17, 1997.
405. Zamorano L, Vinas FC, Buciuc R, Jiang Z, Li QH, Diaz FG: New design of an open stereotactic ring for conventional stereotaxis and interactive image-guided surgery. The 65th Annual Meeting of the American Association of Neurological Surgeons. Denver, Colorado, April 12 - 17, 1997.
406. Jiang Z, Zamorano L, Muzik O, Li QH, Popescu A, Diaz FG: Consistency analysis for the digitized three-dimensional talairach's coplanar stereotactic atlas of the human brain. The 65th Annual Meeting of the American Association of Neurological Surgeons. Denver, Colorado, April 12 - 17, 1997.
407. Buciuc R, Zamorano L, Diaz FG: The value of brain biopsy in patients with HIV infection. The 65th Annual Meeting of the American Association of Neurological Surgeons. Denver, Colorado, April 12 - 17, 1997.
408. Vinas FG, Zamorano L, Li QH, Jiang Z, Buciuc R, Diaz FG: Application accuracy study of a fiducial marker system as compared to a stereotactic frame. The 65th Annual Meeting of the American Association of Neurological Surgeons. Denver, Colorado, April 12 - 17, 1997.
409. Li QH, Holdener HJ, Zamorano L, King P, Jiang Z, Vinas FC, Diaz FG: Interactive image guidance for complicated spine surgery. The 65th Annual Meeting of the American Association of Neurological Surgeons. Denver, Colorado, April 12 - 17, 1997.
410. Vinas FC, Zamorano L, Gaspar L, Buciuc R, Yakar D, Shamsa F, Li QH, Diaz FG: Permanent implants of iodine-125 in the management of primary anaplastic astrocytomas. The 65th Annual Meeting of the

- American Association of Neurological Surgeons. Denver, Colorado, April 12 - 17, 1997.
411. Vinas FC, Zamorano L, Gaspar L, Buciuc R, Yakar D, Shamsa F, Li QH, Diaz FG: Permanent implants of iodine-125 in the up-front management of glioblastoma multiforme. The 65th Annual Meeting of the American Association of Neurological Surgeons. Denver, Colorado, April 12 - 17, 1997.
412. Buciuc R, Zamorano L, Vinas FC, Diaz FG: Interactive image-guided resection of intraventricular lesions. The 65th Annual Meeting of the American Association of Neurological Surgeons. Denver, Colorado, April 12 - 17, 1997.
413. Zamorano L: Faculty for a practical clinic on interactive image guided surgery. The 65th Annual Meeting of the American Association of Neurological Surgeons. Denver, Colorado, April 12 - 17, 1997.
414. Zamorano L: Faculty for a practical clinic on stereotactic surgery: principles, techniques and instrumentation. The 65th Annual Meeting of the American Association of Neurological Surgeons. Denver, Colorado, April 12 - 17, 1997.
415. Zamorano L: Faculty for a session on brain navigation and comparatives of navigators, Aneuronavigation concept and computed assisted surgery. The Spanish Society of Neurosurgeons 48th Annual Meeting. Barcelona, Spain, May 8 - 10, 1997.
416. Zamorano L: Natural history of surgical treatment of cavernomas. The Seventh Annual Lars Leksell Lecture/The Fourth Annual Charles Drake Lecture/The Sixth Annual Lucien Rubinstein Lecture/The Seventh Annual David D. Weaver Lecture/Anatomic Dissection: Symposia on Diagnosis and Management of Cavernomas and Meningiomas Involving the Cavernous Sinus. Charlottesville, Virginia, June 4 - 6, 1997.
417. Zamorano L: Panel Discussion: Diagnosis and Management of Cavernomas. The Seventh Annual Lars Leksell Lecture/The Fourth Annual Charles Drake Lecture/The Sixth Annual Lucien Rubinstein Lecture/The Seventh Annual David D. Weaver Lecture/Anatomic

- Dissection: Symposia on Diagnosis and Management of Cavernomas and Meningiomas Involving the Cavernous Sinus. Charlottesville, Virginia, June 4 - 6, 1997.
418. Zamorano L, Matter A, Saenz A, Buciuc R, Diaz FG: Presentation - Interactive image guided resection of cerebral cavernous angiomas. Michigan Association of Neurological Surgeons. Lewiston, Michigan, June 21 - 22, 1997.
419. Zamorano L, Saenz A, Matter A, Buciuc R, Diaz FG: Presentation - Interactive image guided resection of cerebral arteriovenous malformations. Michigan Association of Neurological Surgeons. Lewiston, Michigan, June 21 - 22, 1997.
420. Zamorano L, Saenz A, Matter A, Buciuc R, Diaz FG: Presentation - Interactive image guided surgery of the pineal region. Michigan Association of Neurological Surgeons. Lewiston, Michigan, June 21 - 22, 1997.
421. Zamorano L, Vinas FC, Gaspar L, Buciuc R, Yakar D, Shamsa F, Diaz FG: Presentation - I-125 permanent implants of up-front management of primary anaplastic astrocytomas. Michigan Association of Neurological Surgeons. Lewiston, Michigan, June 21 - 22, 1997.
422. Zamorano L, Vinas FC, Gaspar L, Buciuc R, Yakar D, Shamsa F, Diaz FG: Presentation - I-125 permanent implants of up-front management of primary glioblastoma multiforme. Michigan Association of Neurological Surgeons. Lewiston, Michigan, June 21 - 22, 1997.
423. Zamorano L, Vinas FC, Buciuc R, Jiang Z, Li QH, Diaz FG: Presentation - Interactive image-guided surgery, registered intraoperative functional mapping and awake craniotomy: a three-arm technique for optimization of resection of intracranial lesions. Michigan Association of Neurological Surgeons. Lewiston, Michigan, June 21 - 22, 1997.
424. Vinas FC, Zamorano L, Buciuc R, Diaz FG: Presentation - Role of intraoperative functional mapping in the optimization of surgical

- outcome. Michigan Association of Neurological Surgeons. Lewiston, Michigan, June 21 - 22, 1997.
425. Zamorano L, Lis-Planells M, Jiang Z, Diaz FG: Presentation - Interactive-image guidance in the surgical management of vascular malformations. Michigan Association of Neurological Surgeons. Lewiston, Michigan, June 21 - 22, 1997.
426. Buciuc R, Zamorano L, Vinas FC, Gaspar L, Fontanesi J, Diaz FG: Presentation - Radiosurgery for AVM; Wayne State Experience. Michigan Association of Neurological Surgeons. Lewiston, Michigan, June 21 - 22, 1997.
427. Buciuc R, Zamorano L, Vinas FC, Gaspar L, Fontanesi J, Diaz FG: Presentation - Radiosurgery for brain metastases; Wayne State Experience. Michigan Association of Neurological Surgeons. Lewiston, Michigan, June 21 - 22, 1997.
428. Zamorano L, Saenz A, Gaspar L, Fontanesi J, Garzon A, Buciuc R, Magnan M, Swider A, Diaz FG: Initial experience with gamma knife at Wayne State University. 8th International Meeting of the Leksell Gamma Knife Society. Marseille, France, June 22 - 25, 1997.
429. Zamorano L, Saenz A, Buciuc R, Gaspar L, Fontanesi J, Garzon A, Magnan M, Swider A, Diaz FG: Radiosurgery for arteriovenous malformations: Wayne State Experience. 8th International Meeting of the Leksell Gamma Knife Society. Marseille, France, June 22 - 25, 1997.
430. Zamorano L, Buciuc R, Saenz A, Vinas FC, Gaspar L, Fontanesi J, Garzon A, Magnan M, Swider A, Diaz FG: Lecture: Radiosurgery for brain metastases. 8th International Meeting of the Leksell Gamma Knife Society. Marseille, France, June 22 - 25, 1997.
431. Saenz A, Zamorano L, Buciuc R, Gaspar L, Fontanesi J, Garzon A, Diaz FG: Permanent iodine-125 implants in the treatment of pediatric brain tumors. International Stereotactic Radiosurgery Society 3rd Congress Meeting. Madrid, Spain, June 25 - 28, 1997.
432. Zamorano L, Saenz A, Buciuc R, Gaspar L, Fontanesi J, Garzon A, Diaz FG: Radiosurgical treatment of meningiomas. International

Stereotactic Radiosurgery Society 3rd Congress Meeting. Madrid, Spain, June 25 - 28, 1997.

433. Zamorano L, Saenz A, Buciuc R, Gaspar L, Fontanesi J, Garzon A, Diaz FG: Radiosurgical treatment of acoustic neuromas. International Stereotactic Radiosurgery Society 3rd Congress Meeting. Madrid, Spain, June 25 - 28, 1997.
434. Saenz A, Zamorano L, Buciuc R, Fontanesi J, Gaspar L, Garzon A, Diaz FG: Hyperfractionated stereotactic radiosurgery in the management of primary brain tumors. International Stereotactic Radiosurgery Society 3rd Congress Meeting. Madrid, Spain, June 25 - 28, 1997.
435. Zamorano L, Vinas FC, Gaspar L, Buciuc R, Yakar D, Shamsa F, Diaz FG: I-125 permanent implants in the up-front management of primary anaplastic astrocytomas. International Stereotactic Radiosurgery Society 3rd Congress Meeting. Madrid, Spain, June 25 - 28, 1997.
436. Zamorano L, Vinas FC, Gaspar L, Buciuc R, Yakar D, Shamsa F, Diaz FG: I-125 permanent implants in the up-front management of primary glioblastoma multiforme. International Stereotactic Radiosurgery Society 3rd Congress Meeting. Madrid, Spain, June 25 - 28, 1997.
437. Portillo G, Zamorano L, Gaspar L, Buciuc R, Diaz FG: Iodine-125 permanent implants in the treatment of low grade gliomas. International Stereotactic Radiosurgery Society 3rd Congress Meeting. Madrid, Spain, June 25 - 28, 1997.
438. Zamorano L, Buciuc R, Vinas FC, Gaspar L, Fontanesi J, Diaz FG: Radiosurgery for AVM; Wayne State Experience. International Stereotactic Radiosurgery Society 3rd Congress Meeting. Madrid, Spain, June 25 - 28, 1997.
439. Zamorano L, Vinas FC, Gaspar L, Buciuc R, Yakar D, Shamsa F, Diaz FG: I-125 permanent implants in the up-front management of primary glioblastoma multiforme. 3rd International Congress of Minimally Invasive Neurosurgery. Paris, France, June 29 - July 1, 1997.

440. Zamorano L, Vinas FC, Gaspar L, Buciuc R, Yakar D, Shamsa F, Diaz FG: I-125 implants of up-front management of primary anaplastic astrocytomas. 3rd International Congress of Minimally Invasive Neurosurgery. Paris, France, June 29 - July 1, 1997.
441. Zamorano L, Matter A, Saenz A, Buciuc R, Diaz FG: Lecture - Interactive image guided resection of cerebral cavernous angiomas. 3rd International Congress of Minimally Invasive Neurosurgery. Paris, France, June 29 - July 1, 1997.
442. Zamorano L, Saenz A, Matter A, Buciuc R, Diaz FG: Lecture - Interactive image guided surgery of the pineal region. 3rd International Congress of Minimally Invasive Neurosurgery. Paris, France, June 29 - July 1, 1997.
443. Zamorano L, Saenz A, Matter A, Buciuc R, Diaz FG: Lecture - Interactive image guided resection of cerebral arteriovenous malformations. 3rd International Congress of Minimally Invasive Neurosurgery. Paris, France, June 29 - July 1, 1997.
444. Zamorano L, Saenz A, Buciuc R, Gaspar L, Fontanesi J, Garzon A, Diaz FG: Lecture - Radiosurgical treatment of meningiomas. The XII Meeting of the World Society for Stereotactic and Functional Neurosurgery. Lyon, France, July 1 - 3, 1997.
445. Vinas FC, Zamorano L, Buciuc R, Diaz FG: Role of intraoperative functional mapping in the optimization of surgical outcome. The XII Meeting of the World Society for Stereotactic and Functional Neurosurgery. Lyon, France, July 1 - 3, 1997.
446. Zamorano L: Oral Presentation -Surgical Treatment of Brain Tumors - Frameless Stereotaxis. XIV Mexican Congress of Neurological Surgery. Veracruz, Mexico, July 20 - 26, 1997.
447. Zamorano L: Oral Presentation - Surgical Treatment of Brain Tumors - Advance navigational techniques. XIV Mexican Congress of Neurological Surgery. Veracruz, Mexico, July 20 - 26, 1997.

448. Zamorano L: Oral Presentation - Surgical Treatment of Epilepsy - Functional Stereotaxis. XIV Mexican Congress of Neurological Surgery. Veracruz, Mexico, July 20 - 26, 1997.
449. Zamorano L: Oral Presentation - Radiosurgery. XIV Mexican Congress of Neurological Surgery. Veracruz, Mexico, July 20 - 26, 1997.
450. Zamorano L: Workshop - Stereotaxis-biopsy-techniques. Advances in Neurosciences and Spinal Surgery International Symposium. Miami Beach, Florida, July 25 - 30, 1997.
451. Zamorano L: Interstitial radiotherapy - Gliadel-Biodegradable polymers-intraparenchymal chemotherapy. Advances in Neurosciences and Spinal Surgery International Symposium. Miami Beach, Florida, July 25 - 30, 1997.
452. Zamorano L: AIDS-SNC lymphomas vs infections. Advances in Neurosciences and Spinal Surgery International Symposium. Miami Beach, Florida, July 25 - 30, 1997.
453. Zamorano L: Faculty -Skull Base Techniques 1997 - Practical Applications in Neurosurgical Practice. Detroit, Michigan, August 1 - 2, 1997.
454. Zamorano L, Vinas FC, Buciuc R, Jiang Z, Li QH, Diaz FG: Poster - Interactive image-guided surgery, registered intraoperative functional mapping and awake craniotomy: A three-arm technique for optimization of resection of intracranial lesions. Congress of Neurological Surgeons 47th Annual Meeting. New Orleans, Louisiana, Sept. 27 - Oct. 2, 1997.
455. Vinas FC, Zamorano L, Gaspar L, Buciuc R, Yakar D, Shamsa F, Diaz FG: Oral Poster - I-125 Permanent implants of up-front management of primary anaplastic astrocytomas. Congress of Neurological Surgeons 47th Annual Meeting. New Orleans, Louisiana, Sept. 27 - Oct. 2, 1997.
456. Saenz A, Zamorano L, Matter A, Buciuc R, Diaz FG: Poster - Interactive image guided surgery of the pineal region. Congress of Neurological

Surgeons 47th Annual Meeting. New Orleans, Louisiana, Sept. 27 - Oct. 2, 1997.

457. Vinas FC, Zamorano L, Gaspar L, Buciuc R, Yakar D, Shamsa F, Diaz FG: Poster - I-125 Permanent implants in the up-front management of primary glioblastoma multiforme. Congress of Neurological Surgeons 47th Annual Meeting. New Orleans, Louisiana, Sept. 27 - Oct. 2, 1997.
458. Buciuc R, Zamorano L, Vinas FC, Diaz FG: Poster - Interactive image-guided resection of intraventricular lesions. Congress of Neurological Surgeons 47th Annual Meeting. New Orleans, Louisiana, Sept. 27 - Oct. 2, 1997.
459. Zamorano L, Matter A, Saenz A, Buciuc R, Diaz FG: Poster - Interactive image - guided resection of cerebral cavernous angiomas. Congress of Neurological Surgeons 47th Annual Meeting. New Orleans, Louisiana, Sept. 27 - Oct. 2, 1997.
460. Saenz A, Zamorano L, Matter A, Buciuc R, Diaz FG: Poster - Interactive image - guided resection of cerebral arteriovenous malformations. Congress of Neurological Surgeons 47th Annual Meeting. New Orleans, Louisiana, Sept. 27 - Oct. 2, 1997.
461. Jiang Z, Zamorano L, Li QH, Gong J, Buciuc R, Diaz FG: Poster - Automated approach evaluation for pedicle screw insertion. Congress of Neurological Surgeons 47th Annual Meeting. New Orleans, Louisiana, Sept. 27 - Oct. 2, 1997.
462. Zamorano L: NIH Consultant - Brigham & Women's Hospital Site Visit. Boston, Massachusetts, November 12 - 14, 1997.
463. Jiang Z, Zamorano L, Li QH, Gong J, Diaz FG: Presentation - Technology and human errors in image-guided surgeries. SPIE Proceedings, OptoWest Bios 98, San Jose, CA, Jan. 28, 1998.
464. Zamorano L: Guest Speaker on Permanent Implants in Malignant Gliomas. Neurosurgery Department Grand Rounds. Detroit, Michigan, February 4, 1998.
465. Zamorano L: Guest Speaker on The Gamma Knife. Rehabilitation Institute (RIM). Detroit, Michigan, February 4, 1998.

466. Zamorano L: Panelist - Emerging Technologies: Stereotaxis & Neuronavigation. Ninth Annual Meeting of the North American Skull Base Society. Kamuela, Hawaii, February 13-17, 1998.
467. Gong J, Zamorano L, Jiang Z, Diaz FG: Presentation - Restricted surface matching: A new registration method for medical images. SPIE's Medical Imaging '98. San Diego, California, February 21 - 26, 1998.
468. Zamorano L: Guest Speaker on the Department of Neurosurgery. Detroit Athletic Club. Detroit, Michigan, March 10, 1998.
469. Zamorano L: Guest Speaker on Radiosurgery. Neurosurgery Department Grand Rounds. Detroit, Michigan, March 11, 1998.
470. Zamorano L: Guest Speaker on Interactive Image Guided Surgery. Radiation Oncology Center. Detroit, Michigan, March 13, 1998.
471. Zamorano L: Guest Speaker on Computer-Assisted Surgery in Brain Lesions. Western Michigan Neurological Society. Grand Rapids, Michigan, March 23, 1998.
472. Zamorano L, Matter A, Diaz FG: Interactive image guided resection of cerebral arteriovenous malformation. 18th Annual Meeting of the American Society for Laser Medicine and Surgery. San Diego, CA, April 3 - 7, 1998.
473. Vinas FC, Zamorano L, Jiang Z, Diaz FG: Role of image guided surgery in the resection of intraventricular lesions. 18th Annual Meeting of the American Society for Laser Medicine and Surgery. San Diego, CA, April 3 - 7, 1998.
474. Zamorano L: Guest Speaker on Radiosurgery: The Clinical Experience. Neurosurgery Department Grand Rounds. Detroit, Michigan, April 15, 1998.
475. Zamorano L: Workshop - Joint Section on Pain Hands-On Practical Clinic. Philadelphia, Pennsylvania, April 23 - 24, 1998.

476. Zamorano L: Faculty Representative - Interactive Image-Guided Neurosurgery Practical Clinic. Philadelphia, Pennsylvania, April 25, 1998.
477. Zamorano L: Faculty Representative - Stereotactic Surgery: Principles, Techniques, and Instrumentation Practical Clinic. Philadelphia, Pennsylvania, April 26, 1998.
478. Gong J, Jiang Z, Li QH, Zamorano L, Diaz FG: Poster - Instrumentation for Advanced Neuro-Navigation System. Annual Meeting of the American Association of Neurological Surgeons (AANS). Philadelphia, Pennsylvania, April 25 - 30, 1998.
479. Zamorano L, Vinas FC, Gaspar L, Fontanesi J, Diaz FG, Buciu R: Poster - Radiosurgery for AVM; Wayne State Experience. Annual Meeting of the American Association of Neurological Surgeons (AANS). Philadelphia, Pennsylvania, April 25 - 30, 1998.
480. Zamorano L, Matter A, Saenz A, Buciu R, Diaz FG: Poster - Interactive Image Guided Resection of Cerebral Arteriovenous Malformations. Annual Meeting of the American Association of Neurological Surgeons (AANS). Philadelphia, Pennsylvania, April 25 - 30, 1998.
481. Zamorano L, Vinas FC, Gaspar L, Diaz FG, Yakar D, Shamsa F: Poster - I-125 Permanent Implants in the Up-Front Management of Primary Glioblastoma Multiforme. Annual Meeting of the American Association of Neurological Surgeons (AANS). Philadelphia, Pennsylvania, April 25 - 30, 1998.
482. Zamorano L, Gaspar L, Fontanesi J, Garzon A, Diaz FG, Saenz A, Buciu R: Poster - Hyperfractionated Stereotactic Radiosurgery in the Management of Primary Brain Tumors.
483. Annual Meeting of the American Association of Neurological Surgeons (AANS). Philadelphia, Pennsylvania, April 25 - 30, 1998.
484. Zamorano L, Saenz A, Gaspar L, Fontanesi J, Diaz FG, Garzon A: Poster - Permanent Iodine-125 Implants in the Treatment of Pediatric Brain Tumors. Annual Meeting of the American Association of Neurological Surgeons (AANS). Philadelphia, Pennsylvania, April 25 - 30, 1998.

485. Zamorano L, Vinas FC, Gaspar L, Diaz FG, Yakar D, Shamsa F: Poster - I-125 Permanent Implants of Up-Front Management of Primary Anaplastic Astrocytomas. Annual Meeting of the American Association of Neurological Surgeons (AANS). Philadelphia, Pennsylvania, April 25 - 30, 1998.
486. Portillo G, Zamorano L, Gaspar L, Buciu R, Diaz FG: Poster - Iodine-125 Permanent Implants in the Treatment of Low Grade Gliomas. Annual Meeting of the American Association of Neurological Surgeons (AANS). Philadelphia, Pennsylvania, April 25 - 30, 1998.
487. Li QH, Zamorano L, Jiang Z, Gong J, Yan X, Diaz FG: Poster - The Affecting Factors on the Application Accuracy of Interactive Image Guided Surgical Localization Systems. Annual Meeting of the American Association of Neurological Surgeons (AANS). Philadelphia, Pennsylvania, April 25 - 30, 1998.
488. Li QH, Zamorano L, King P, Holdender H, Jiang Z, Gong J, Yan X, Diaz FG: Poster - Interactive Image Guidance Vertebral Tumor Resection on the Anterolateral Approach of Spine. Annual Meeting of the American Association of Neurological Surgeons (AANS). Philadelphia, Pennsylvania, April 25 - 30, 1998.
489. Jiang Z, Zamorano L, Li QH, Gong J, Diaz FG: Poster - Computer-Surgeon Interface for Advanced Neuro-Navigation. Annual Meeting of the American Association of Neurological Surgeons (AANS). Philadelphia, Pennsylvania, April 25 - 30, 1998.
490. Zamorano L, Saenz A, Matter A, Buciu Rm Diaz FG: Poster - Interactive Image Guided Surgery of the Pineal Region. Annual Meeting of the American Association of Neurological Surgeons (AANS). Philadelphia, Pennsylvania, April 25 - 30, 1998.
491. Matter A, Zamorano L, Buciu R, Vinas FC, Jiang Z, Diaz FG: Poster - Interactive Image-Guided Surgery Using an Infrared-Based System. Annual Meeting of the American Association of Neurological Surgeons (AANS). Philadelphia, Pennsylvania, April 25 - 30, 1998.
492. Vinas FC, Zamorano L, Li QH, Jiang Z, Buciu R, Diaz FG: Poster - Accuracy Study of a Fiducial Marker System. Annual Meeting of the American Association of Neurological Surgeons (AANS). Philadelphia, Pennsylvania, April 25 - 30, 1998.

493. Vinas FC, Zamorano L, Buciuc R, Diaz FG: Poster - Role of Intraoperative Functional Mapping in the Optimization of Surgical Outcome. Annual Meeting of the American Association of Neurological Surgeons (AANS). Philadelphia, Pennsylvania, April 25 - 30, 1998.
494. Vinas FC, Zamorano L, Matter A, Jiang Z, Li QH, Diaz FG: Poster - Advanced Neurosurgical Navigation Using a Robotic Microscope Integrated with an Infrared Digitizer. Annual Meeting of the American Association of Neurological Surgeons (AANS). Philadelphia, Pennsylvania, April 25 - 30, 1998.
495. Zamorano L: Presentation - Permanent Implants in Gliomas. Radiation Oncology Center. Detroit, Michigan, May 15, 1998.
496. Zamorano L, Matter A, Vinas FC, Muller R, Jiang Z, Chugani H, Diaz FG: (15 water PET and intraoperative brain mapping: A comparison in the localization of eloquent cortex. 4th International Conference on Functional Mapping of the Human Brain. Montreal, Quebec, Canada, June 7 - 12, 1998.
497. Zamorano L, Vinas FC, Matter A, Buciuc R, Diaz FG: Role of intraoperative functional mapping in the optimization of surgical outcome. 4th International Conference Functional Mapping of the Human Brain. Montreal, Quebec, Canada, June 7 - 12, 1998.
498. Matter A, Barger G, Zamorano L, Gaspar L, DiCarli M, Davis L, Diaz FG: Thallium 201 SPECT and F-18 fluorodeoxyglucose PET in the differential diagnosis of brain tumor recurrence vs radiation necrosis after permanent I-125 implantation. 4th International Conference Functional Mapping of the Human Brain. Montreal, Quebec, Canada, June 7 - 12, 1998.
499. Zamorano L, Saenz A, Matter A, Buciuc R, Diaz FG: Interactive image guided resection of cerebral cavernous angiomas. ICS-US 60th Annual Surgical Update Meeting. Maui, Hawaii, June 16 - 20, 1998.
500. Vinas FC, Zamorano L, Jiang Z, Li QH, Diaz FG: Advanced Neurosurgical Navigation using a Robotic Microscope Integrated with an Infrared Digitizer. ICS-US 60th Annual Surgical Update Meeting. Maui, Hawaii, June 16 - 20, 1998.

501. Zamorano L, Matter A, Saenz A, Buciu R, Diaz FG: Interactive Image Guided Resection of Cerebral Arteriovenous Malformations. ICS-US 60th Annual Surgical Update Meeting. Maui, Hawaii, June 16 - 20, 1998.
502. Vinas FC, Zamorano L, Buciu R, Diaz FG: Role of Intraoperative Functional Mapping in the Optimization of Surgical Outcome. ICS-US 60th Annual Surgical Update Meeting.
503. Maui, Hawaii, June 16 - 20, 1998.
504. Matter A, Zamorano L, Buciu R, Vinas FC, Jiang Z, Diaz FG: Interactive Image-Guided Surgery using an Infrared-Based System. ICS-US 60th Annual Surgical Update Meeting. Maui, Hawaii, June 16 - 20, 1998.
505. Portillo G, Zamorano L, Gaspar L, Buciu R, Diaz FG: I-125 Permanent Implants in the Treatment of Low Grade Gliomas. ICS-US 60th Annual Surgical Update Meeting. Maui, Hawaii, June 16 - 20, 1998.
506. Zamorano L, Vinas FC, Gaspar L, Buciu R, Yakar D, Shamsa F, Diaz FG: I-125 Permanent Implants of Up-Front Management of Primary Anaplastic Astrocytomas. ICS-US 60th Annual Surgical Update Meeting. Maui, Hawaii, June 16 - 20, 1998.
507. Zamorano L, Matter A, Barger G, Gaspar L, DiCarli M, Davis L, Diaz FG: Thallium 201 SPECT and F-18 fluorodeoxyglucose PET in the differential diagnosis of brain tumor recurrence vs. Radiation necrosis after permanent I-125 implantation. Michigan Association of Neurological Surgeons Annual Meeting (MANS). Thompsonville, Michigan, June 19 - 21, 1998.
508. Zamorano L, Matter A, Saenz A, Buciu R, Diaz FG: Poster - Interactive image guided resection of cerebral cavernous angiomas. Michigan Association of Neurological Surgeons Annual Meeting (MANS). Thompsonville, Michigan, June 19 - 21, 1998.
509. Zamorano L, Matter A, Benedetti J, England G, Gaspar L, Diaz FG: Gamma knife radiosurgery for trigeminal neuralgia. Michigan Association of Neurological Surgeons Annual Meeting (MANS). Thompsonville, Michigan, June 19 - 21, 1998.
510. England G, Zamorano L, Gaspar L, Levin K, Barger J, Diaz FG: Use of the gamma knife for the treatment of recurrent astrocytoma grade IV (GBM).

Michigan Association of Neurological Surgeons Annual Meeting (MANS).
Thompsonville, Michigan, June 19 - 21, 1998.

511. Portillo G, Zamorano L, Matter A, Diaz FG: Clinical outcome in aggressive resection of low grade gliomas: Role of image-guided awake craniotomy and functional mapping. Michigan Association of Neurological Surgeons Annual Meeting (MANS). Thompsonville, Michigan, June 19 - 21, 1998.
512. Zamorano L, Matter A, Benedetti J, Gaspar L, Garzon A, Diaz FG: Initial experience with radiosurgical treatment at Wayne State University. Michigan Association of Neurological Surgeons Annual Meeting (MANS). Thompsonville, Michigan, June 19 - 21, 1998.
513. Zamorano L: Presentation - Gamma Knife in Pituitary Tumors. Canton Public Library, Canton, Michigan, July 11, 1998.
514. Zamorano L: Principal Investigator - Radiation Therapy Oncology Group - RTOG Meeting, Washington, D.C., July 25 - 26, 1998.
515. Li QH, Zamorano L, Jiang Z, Vinas FC, Diaz FG: The application accuracy of the frameless implantable marker system and analysis of related affecting factors. Medical Image Computing and Computer-Assisted Intervention – MICCAI '98, pp. 253-260. Proceedings of First International Conference, Cambridge, MA, USA, Oct. 1998.
516. Zamorano L, Matter A, Benedetti JC, Diaz FG: Interactive image guided resection of cerebral cavernous angiomas (CAs). Annual Meeting of the Congress of Neurological Surgeons. Seattle, Washington, Oct. 3 - 8, 1998.
517. Matter A, Barger G, Zamorano L, Gaspar L, DiCarli M, Davis L, Diaz FG: Thallium 201 SPECT and F-18 fluorodeoxyglucose PET in the differential diagnosis of brain tumor recurrence vs radiation after permanent I-125 implantation. Annual Meeting of the Congress of Neurological Surgeons. Seattle, Washington, Oct. 3 - 8, 1998.
518. Li QH, Zamorano L, Jiang Z, Gong J, Yan X, Diaz FG: The affecting factors on the application accuracy of image guided surgical localization system. Annual Meeting of the Congress of Neurological Surgeons. Seattle, Washington, Oct. 3 - 8, 1998.

519. Zamorano L, Matter A, Benedetti JC, England G, Gaspar L, Diaz FG: Gamma knife radiosurgery for trigeminal neuralgia. Annual Meeting of the Congress of Neurological Surgeons. Seattle, Washington, Oct. 3 - 8, 1998.
520. Zamorano L, Matter A, Videtic G, Gaspar L, Fontanesi J, Levin K, Kupsky W, Tekyi-Mensah S: I-125 implants in the primary treatment of malignant gliomas (MG): survival comparison using the RTOG recursive partitioning analysis (RPA). Annual Meeting of the Congress of Neurological Surgeons. Seattle, Washington, Oct. 3 - 8, 1998.
521. Zamorano L, Matter A, Benedetti JC, Gaspar L, Fontanesi J, Shamsa F, Garzon A, Diaz FG: Radiosurgical treatment of brain metastases. Annual Meeting of the Congress of Neurological Surgeons. Seattle, Washington, Oct. 3 - 8, 1998.
522. Matter A, Zamorano L, Vinas FC, Buciu R, Diaz FG: HIV-1 related central nervous system illness - infections vs neoplasm. Annual Meeting of the Congress of Neurological Surgeons. Seattle, Washington, Oct. 3 - 8, 1998.
523. Zamorano L: Curso Pre-Congreso - ARadiocirugia y Estereotaxia: Resecciones volumetricas de tumores con estereotaxia. XXVIII Congreso Latinoamericano De Neurocirugia. Santiago, Chile, Oct. 10-12, 1998.
524. Zamorano L: Simposium: Radiocirugia -Tratamiento de los gliomas cerebrales. XXVIII Congreso Latinoamericano De Neurocirugia. Santiago, Chile, Oct.10-12, 1998.
525. Zamorano L: Simposium: Estereotaxia - Estereotaxia en Tumores cerebrales. XXVIII Congreso Latinoamericano De Neurocirugia. Santiago, Chile, Oct. 13, 1998
526. Zamorano L, England G, Gaspar L, Diaz FG: Lecture Presentation - Diffuse White Matter Ischemic Changes and Radiation Necrosis in Radiosurgery: Delayed Complications in Patients followed more than five years. 9th International Meeting of the Leksell Gamma Knife Society. Hong Kong, SAR, Nov. 8 - 11, 1998.
527. Zamorano L, Videtic GMM, Matter A, Gaspar L, Diaz FG, Tekyi-Mensah S, Garzon A:

528. Poster Presentation - Stereotactic radiosurgery for brainstem lesions using Gamma knife. 9th International Meeting of the Leksell Gamma Knife Society. Hong Kong, SAR, Nov. 8 - 11, 1998.
529. Zamorano L, Matter A, Benedetti J, Gaspar L, Garzon A, Diaz FG: Poster Presentation -
530. Initial experience with radiosurgical treatment at Wayne State University. 9th International Meeting of the Leksell Gamma Knife Society. Hong Kong, SAR, Nov. 8 - 11, 1998.
531. Zamorano L: Moderator/Epilepsy Session - Gamma Knife Callostomy. Dose/Volume/Time - Considerations. 9th International Meeting of the Leksell Gamma Knife Society. Hong Kong, SAR, Nov. 9, 1998.
532. Zamorano L: Moderator/Epilepsy Session - Gamma Knife Radiosurgery for Lesional and Non-Lesional Epilepsy of Mesial Temporal Lobe Origin. 9th International Meeting of the Leksell Gamma Knife Society. Hong Kong, SAR, Nov. 9, 1998.
533. Zamorano L: Moderator/Special Epilepsy Session - Cavernous Malformations associated with Epilepsy. 9th International Meeting of the Leksell Gamma Knife Society. Hong Kong, SAR, Nov. 9, 1998.
534. Zamorano L: Moderator/Special Epilepsy Session - Image Guided Surgery in Epilepsy. 9th International Meeting of the Leksell Gamma Knife Society. Hong Kong, SAR, Nov. 9, 1998.
535. Zamorano L, Jiang Z, Gong J, Diaz FG- Influence of different medical images on the application accuracy during image-guided surgery. SPIE's International Symposium. San Diego, CA, Feb. 22, 1999.
536. Tao Y, Grosky W, Zamorano L, Jiang Z, Gong J: Poster - Segmentation and representation of lesions in the MRI brain images. SPIE's International Symposium. San Diego, CA, Feb. 22-26, 1999.
537. Li QH, Zamorano L, Jiang Z, Diaz FG: Oral Presentation - Quantitative comparison of the application accuracy between NDI and IGT tracking systems. SPIE's International Symposium. San Diego, CA, Feb. 22-26, 1999.

538. Zamorano, L. Oral Presentation - ABrachytherapy on Brain Tumors. RTOG Semi-Annual Meeting. The Atlanta Hilton & Towers, Atlanta, Georgia January 14 - 17, 1999.
539. Zamorano L : Oral Presentation - ARadiosurgical Treatment of Meningiomas@ 4th International Stereotactic Radiosurgery Society, Sydney, Australia February 23-26, 1999.
540. Zamorano L: Oral Presentation - ABrachytherapy For Gliomas@ 4th International Stereotactic Radiosurgery Society, Sydney, Australia February 23-26, 1999.
541. Zamorano L: Oral Presentation - AUse Of The Gamma Knife In Treatment For Recurrent Astrocytoma Grade IV (GBM), 4th International Stereotactic Radiosurgery Society, Sydney, Australia February 23-26, 1999.
542. Zamorano L: Poster Presentation: ARadiosurgery For Vestibular Schwannomas: Preliminary Study@ 4th International Stereotactic Radiosurgery Society, Sydney, Australia February 23-26, 1999.
543. Zamorano L: Experience With Radiosurgical Treatment At Wayne State University. 4th International Stereotactic Radiosurgery Society, Sydney, Australia. February 23-26, 1999.
544. Zamorano L:Radiosurgery For AVM: Wayne State Experience. 4th International Stereotactic Radiosurgery Society, Sydney, Australia. February 23-26, 1999.
545. Zamorano, L: A Gamma Knife Radiosurgery For Trigeminal Neuralgia 4th International Stereotactic Radiosurgery Society, Sydney, Australia. February 23-26, 1999.
546. Zamorano L: Interactive Image-guided Endoscopy. 1999 International Winter Congress on Neurosurgery, Otolaryngology & Minimally Invasive Techniques: Prospects for the 21st Century - Snowmass Village, CO March 21-26, 1999.
547. Zamorano L: Radiosurgery of Meningiomas.1999 International Winter Congress on Neurosurgery, Otolaryngology & Minimally

Invasive Techniques: Prospects for the 21st Century@ - Snowmass Village, CO March 21-26, 1999.

548. Zamorano L: Advanced Application of Interactive Image Guided Surgery. 1999 International Winter Congress on Neurosurgery, Otolaryngology & Minimally Invasive Techniques: Prospects for the 21st Century - Snowmass Village, CO March 21-26, 1999.
549. Zamorano L, Matter A, Benedetti C, Diaz F. Computer Assisted Resection of cerebral Angiomas. American Society for Laser Medicine And Surgery, Inc. (ASLMS) Lake Buena Vista, Florida April 14-18, 1999.
550. Matter A, Zamorano L, Benedetti C, Vinas F, Diaz F: AInteractive Image-Guided Neurosurgery Using Robotic Microscope Integrated with an Infrared-Based System.@ American Society for Laser Medicine And Surgery, Inc. (ASLMS) Lake Buena Vista, Florida April 14-18, 1999.
551. Zamorano L, Matter A, Chuba P, Benedetti J, Shamsa F, Diaz F: APermanent Iodine-125 Implants in the Treatment of Pediatric Brain Tumors (Oral presentation).American Association of Neurological Surgeons Annual Meeting (AANS) - New Orleans, Louisiana April 24 - 29, 1999.
552. Gong J, Zamorano L, Li Q, Diaz F: AIntro-Operative Computer-Surgeon Interface for Advanced Neuro-navigation System. American Association of Neurological Surgeons Annual Meeting (AANS) - New Orleans, Louisiana April 24 - 29, 1999.
553. Gong J, Zamorano L, Jiang Z, Li Q, Diaz F: ATradeoff Analysis of Medical Image Registration With Surface Matching vs Fiducial Matching. American Association of Neurological Surgeons Annual Meeting (AANS) - New Orleans, Louisiana April 24 - 29, 1999.
554. Gong J, Zamorano L, Li Q, Diaz F: ATradeoff Analysis of Medical Image Registration Strategies i n Computer Assisted Surgery System. American Association of Neurological Surgeons Annual Meeting (AANS) - New Orleans, Louisiana April 24 - 29, 1999.
555. Gong J, Zamorano L, Li Q, Diaz F: AIntro-Operative Registration of Universal Instruments for Advanced Neuronavigation

- System.American Association of Neurological Surgeons Annual Meeting (AANS) - New Orleans, Louisiana April 24 - 29, 1999.
556. Gong J, Zamorano L, Jiang Z, Li Q, Diaz F: A3-D Segmentation in Neuro-Image. American Association of Neurological Surgeons Annual Meeting (AANS) - New Orleans, Louisiana April 24 - 29, 1999.
557. Gong J, Zamorano L, Jiang Z, Li Q, Diaz F: A Cost Function Construction in Multi-Modalities Medical Image Registration With Adaptive Restricted Surface Matching. American Association of Neurological Surgeons Annual Meeting (AANS) - New Orleans, Louisiana April 24 - 29, 1999.
558. England G, Zamorano L, Gaspar L, Barger G, Levine K, Diaz F: A Use of the Gamma Knife for the Treatment of Recurrent Astrocytoma Grade IV (GBM). American Association of Neurological Surgeons Annual Meeting (AANS) - New Orleans, Louisiana April 24 - 29, 1999.
559. Li Q, Zamorano L, Jiang Z, Gong J, Diaz F: A Image Guided Endoscopic Transnasal, Transseptal and Transsphenoidal Approach for Pituitary Tumors. American Association of Neurological Surgeons Annual Meeting (AANS) - New Orleans, Louisiana April 24 - 29, 1999.
560. Li Q, Zamorano L, Jiang Z, Gong J, Diaz F: A A Quantitative Comparison of the Application Accuracy Between NDI and IGT Tracking System for Image Guided Surgery. American Association of Neurological Surgeons Annual Meeting (AANS) - New Orleans, Louisiana April 24 - 29, 1999.
561. Matter A, Zamorano L, Gaspar L, Benedetti J, Levine K, Garzon A, Diaz F: A Experience with Radiosurgical Treatment at Wayne State University. American Association of Neurological Surgeons Annual Meeting (AANS) - New Orleans, Louisiana April 24 - 29, 1999.
562. Matter A, Zamorano L, Gaspar L, Benedetti J, Levine K, Garzon A, Diaz F: A Thallium 201 SPECT and F-18 Fluorodeoxyglucose PET in the Differential Diagnosis of Brain Tumor Recurrence vs. Radiation Necrosis After Permanent I-125 Implantation. American Association of Neurological Surgeons Annual Meeting (AANS) - New Orleans, Louisiana April 24 - 29, 1999.

563. Matter A, Zamorano L, Benedetti J, Vinas F, Diaz F: AInteractive Image-Guided Neurosurgery Using a Robotic Microscope Integrated with an Infrared-based System. American Association of Neurological Surgeons Annual Meeting (AANS) - New Orleans, Louisiana April 24 - 29, 1999.
564. Zamorano L, Matter A, Gaspar L, Levine K, Benedetti J, Fontanesi J, Garzon A, Diaz F: A Radiosurgery For Vestibular Schwannomas. American Association of Neurological Surgeons Annual Meeting (AANS) - New Orleans, Louisiana April 24 - 29, 1999.
565. Zamorano L, Matter A, Videtic G, Gaspar L, Fontanesi J, Levine K, Kupsky W, Tekyi-Mensah S: AI-125 Implants in the Primary Treatment of Malignant Gliomas (MG): Survival Comparison Using the RTOG Recursive Partitioning Analysis (RPA). American Association of Neurological Surgeons Annual Meeting (AANS) - New Orleans, Louisiana April 24 - 29, 1999.
566. Zamorano L, Matter A, Perez R, Benedetti J, Diaz F: A Computer Assisted Surgery in Skull Base Lesions: Results and Complications. 10th Annual North American Skull Base Society May 28 - 31, 1999. Chicago Marriott Downtown, Chicago, Illinois
567. Zamorano L: Neuro-oncology and Modern Stereotactic Navigation Zamorano. III International Symposium of Advances in Neurosciences and Spine Surgery, Cusco, Peru June 19 - 25, 1999
568. Ostertag C, Zamorano L: (roundtable) Diagnostic Stereotactic Surgery: Neuro-oncology 1999 Quadrennial Meeting of the American Society for Stereotactic and Functional Neurosurgery July 7 - 10, 1999 Snowbird, Utah
569. Zamorano L: Guest speaker at Stryker Leibinger, Kalamazoo, and Michigan October 15, 1999.
570. Zamorano L, Ramiro Perez-de la Torre, Laurie Gaspar, Falah Shamsa, Sandra Kozlo, Fernando Diaz: Brachytherapy With I125 permanent Implants in the Up-Front Management of primary Non-GBM Malignant Gliomas. 49th Annual Meeting of the Congress of Neurological Surgeons; Boston, Massachusetts. October 30 - November 04, 1999

571. Qinghang Li, Zamorano L, Ramiro Perez, Jianxing Gong, Abhilash Pandya, Fernando Diaz: Endoscopic Transnasal, Transseptal, and Transsphenoidal Approach for Pituitary tumors Guided by Infrared Tracking System. 49th Annual Meeting of the Congress of Neurological Surgeons; Boston, Massachusetts. October 30 - November 04, 1999
572. Ramiro Perez de la Torre, L. Zamorano, Li Qing Hang, A. Pandya, J. Gong, F. Diaz: Robotic System (MKM) Interfaced To Infrared System In Stereotactic Neurosurgery. Experience At Wayne State University. 49th Annual Meeting of the Congress of Neurological Surgeons; Boston, Massachusetts. October 30 - November 04, 1999.
573. Jianxing Gong, Zamorano L: Tradeoff Analysis of Medical Image Registration Strategy. 49th Annual Meeting of the Congress of Neurological Surgeons; Boston, Massachusetts. October 30 - November 04, 1999.
574. Qinghang Li, Zamorano L, Jianxing Gong, Abhilash Pandya, Fernando Diaz: The Effects of OPTOTRAK and FlashPoint Tracking Systems on the Guided Surgery. 49th Annual Meeting of the Congress of Neurological Surgeons; Boston, Massachusetts. October 30 - November 04, 1999.
575. George England, Zamorano L, Laurie Gaspar, Geoffery Barger, Kenneth Levine, Fernando Diaz: Use of the Gamma Knife for the Treatment of Recurrent Astrocytomas Grade 1V (GBM). 49th Annual Meeting of the Congress of Neurological Surgeons; Boston, Massachusetts. October 30 - November 04, 1999.
576. Zamorano L, George England, Laurie Gaspar, Fernando Diaz: Diffuse Whit Matter Ischemic Changes and Radiation necrosis in Radiosurgery: Delayed Complications in Patients Followed more than Five Years. 49th Annual Meeting of the Congress of Neurological Surgeons; Boston, Massachusetts. October 30 - November 04, 1999.
577. Jianxing Gong, Zamorano L: Registration of Universal Instruments for Advanced Neuronavigation System. 49th Annual Meeting of the Congress of Neurological Surgeons; Boston, Massachusetts. October 30 - November 04, 1999.

578. Ramiro Perez-de la Torre, Zamorano L, Laurie Gaspar, Falah Shamsa, Sandra Kozlo, Fernando Diaz: Brachytherapy with I-125 Implants In The Up-Front Management Of Primary Glioblastoma Multiforme. 49th Annual Meeting of the Congress of Neurological Surgeons; Boston, Massachusetts. October 30 - November 04, 1999.
579. Zamorano L: Image Guided Surgery/Minimal Access Craniotomy: Interstitial Radiation for Malignant Gliomas. Neuro-Oncology Symposium: Current Concepts 2000, Cleveland Clinic Symposium, Naples, Florida, February 06 - 10, 2000.
580. Zamorano L: Brachytherapy in Primary Malignant Gliomas: Image Guided Surgery and Functional Mapping in Malignant Gliomas: Mayfield Clinic-Cleveland Clinic Winter Neuroscience Symposium February 21 -25, 2000
581. Torre R. de la Perez, MD, Zamorano L G. England, MD, F. Diaz, PhD: Radiosurgical Treatment of Trigeminal Neuralgia: The Wayne State University Experience: American Association of Neurological Surgeons Annual Meeting (AANS), San Francisco, California, April 8-13, 2000.
582. Qinghang LI, MD, PhD, Zamorano L., Jianxing Gong, PhD, Abhilash Pandya, MS, Fernando Diaz, MD, PhD: The Application Accuracy of Different Registration Methods in Frameless Computer-Assisted Surgery: American Association of Neurological Surgeons Annual Meeting (AANS), San Francisco, California, April 8-13, 2000.
583. Ramiro Perez-de la Torre, MD, Zamorano L, MD, George England, MD, Fernando G. Diaz, MD, PhD: Correlation between Anatomical Functional Areas and Neurological Outcome in Brain Lesion Resection: Results in 315 patients with Awake Craniotomy: American Association of Neurological Surgeons Annual Meeting (AANS), San Francisco, California, April 8-13, 2000.
584. Lucia J. Zamorano, MD, Esam Elkhatib, MD, Ramiro Perez-de la Torre, MD, Falah Shamsa, PhD, Sandra Kozlo, BSN, RN, Fernando Diaz, MD, PhD: Brachytherapy with Iodine-125 Permanent Implants in the Up-Front Management of Non-Glioblastoma Multiforme

- Malignant Gliomas: American Association of Neurological Surgeons Annual Meeting (AANS), San Francisco, California, April 8-13, 2000.
585. Ramiro Perez-de la Torre, MD, Zamorano L, MD, Laurie Gaspar, MD, Falah Shamsa, PhD, Sandra Kozlo, BSN, RN, Fernando Diaz, MD, PhD: Brachytherapy with Iodine-125 Implants in the Up-Front Management of Primary Glioblastoma Multiforme: American Association of Neurological Surgeons Annual Meeting (AANS), San Francisco, California, April 8-13, 2000.
586. Ramio Torre, MD, Zamorano L, MD, Esam Elkhatib, MD, Laurie E. Gaspar, MD, Falah Shamsa, PhD, J. Fontanesi, MD, Gary E. Ezzel, PhD and Daniel A. Yakar, MD, Sandra Kozlo, BSN, RN, Fernando Diaz, MD, PhD: Permanent Iodine Implant for Recurrent Malignant Gliomas: American Association of Neurological Surgeons and Congress of Neurological Surgeons (AANS/CNS Section on Tumors): San Francisco, California, April 13-14, 2000.
587. George England, MD, L. Zamorano, MD, L. Gaspar, MD, G. Barger, MD, F. Diaz, MD, PhD: American Association of Neurological Surgeons and Congress of Neurological Surgeons (AANS/CNS Section on Tumors): San Francisco, California, April 13-14, 2000.
588. George England, MD, Zamorano L, MD, Andrew Sloan, MD, Laurie Gaspar, MD: Heather Maki, RN, Fernando Diaz, MD, PhD: Gamma Knife Treatment of Brain Metastases: American Association of Neurological Surgeons and Congress of Neurological Surgeons (AANS/CNS Section on Tumors): San Francisco, California, April 13-14, 2000.
589. Zamorano L, MD, DrMed, Esam Elkhatib, MD, Ramiro Perez-de la Torre, MD, Falah Shamsa, Phd, Sandra Kozlo, RN, Fernando Diaz, MD, PhD: Brachytherapy with I125 Implants in the Up-Front Management of Non-GBM Malignant Gliomas: American Association of Neurological Surgeons and Congress of Neurological Surgeons (AANS/CNS Section on Tumors): San Francisco, California, April 13-14, 2000.
590. Qinghang LI, MD, PhD, Zamorano L, MD, DrMed, Janxing Gong, PhD, Abhilash Pandya, MS, Fernanco Diaz, Md, PhD: The Application

Accuracy of Different Registration Methods in Frameless Computer-Assisted Surgery, (AANS): San Francisco, California, April 8-13, 2000.

591. Ramiro Perez-de la Torre, MD, Zamorano L, MD, DrMed, George England MD, Fernando G. Diaz, MD, PhD: Correlation between Anatomical Functional Areas and Neurological Outcome in Brain Lesion Resection: Results in 315 Patients with Awake Craniotomy, (AANS): San Francisco, California, April 8-13, 2000.

592. Lucia J. Zamorano, MD, Esam Elkhatib, MD, Ramiro Perez-de la Torre, MD, Falah Shamsa, PhD, Sandra Kozlo, BSN, RN, Fernando Diaz, MD, PhD: Brachytherapy with Iodine-125 Permanent Implants in the Up-Front Management of Non-Glioblastoma Multiforme Malignant Gliomas, (AANS): San Francisco, California, April 8-13, 2000.

593. Ramiro Perez-de la Torre, MD, Zamorano L, MD, Laurie Gaspar, MD, Falah Shamsa, PhD, Sandra Kozlo, BSN, RN, Fernando Diaz, MD, PhD: Brachytherapy with Iodine-125 Implants in the Up-Front Management of Primary Glioblastoma Multiforme, (AANS): San Francisco, California, April 8-13, 2000.

A.K. Pandya, Q. H. Li, L. J. Zamorano, D. Perez-de la Torre, Department of Neurosurgery, Wayne State University/Harper Hospital. Detroit Medical Center, Suite 930, 4160 John R, Detroit, Michigan 48201, USA: The Application Accuracy of the Neuromate Robot ---- A Quantitative Comparison with Frameless Infrared and Frame Based Surgical Localization Systems, COAS USA 2000, Pittsburg, Pennsylvania, June 15-17, 2000.

J. Zamorano, D. Perez-de la Torre: Interactive Image-Guided Surgery in Malignant Gliomas: Clinical Outcomes and Analysis of Complications, MANS, Grand Traverse Resort, Michigan, June 23 - 25, 2000

594. Zamorano L, M.D. Dr. Med, Abhilash Pandya, M. S., Qing Hang Li, M.D., Ph.D, Ramiro Perez-de la Torre, M.D., Patrick Pittet, M.S., Fernand Badano, Ph.D, Vincent Robert, M.S.: The Clinical Use and Accuracy of the NeuroMate Robot for Open Neurosurgery, CARS 2000, June 28 - July 1, 2000, San Francisco, CA

595. Esam A. Elkhatib, Zamorano L, Geoffrey Barger, Gary Wood, Roy Baynes, Kenneth Levin, Ramiro Perez-de la Torre, Sandra Kugelman, Fernando Diaz: Clinical Experience of Active and Adoptive Immunotherapy in Malignant Brain Tumors, Congress of Neurological Surgeons Annual Meeting, September 23-28, 2000, San Antonio, Texas
596. Andrew Sloan, Hari Sundrum, Zamorano L, Fernando Diaz, Gary Wood: Vaccination of Patients with Recurrent Malignant Astrocytoma with Autologous Whole Cell Vaccine and Granulocyte Macrophage Colony Stimulating Factor (GM-CSF), Congress of Neurological Surgeons Annual Meeting, September 23-28, 2000, San Antonio, Texas
597. Esam A. Elkhatib, Zamorano L, Andrew Sloan, Gary Wood, Roy Baynes, Geoffrey Barger, Kenneth Levin, Ramiro Perez-de la Torre, Sandra Kugelman, Fernando Diaz: Initial Experience in Cancer Antigen Specific Adoptive Immunotherapy in Malignant Brain Tumor, Congress of Neurological Surgeons Annual Meeting, September 23-28, 2000, San Antonio, Texas.
598. Ramiro P. De La Torre, L. Zamorano, G. England, I. Presagar, Elkhatib Esam, Q. Li. F. Diaz: Interactive Image-guided Resection of Cerebral Cavernous Angioma, Congress of Neurological Surgeons Annual Meeting, September 23-28, 2000, San Antonio, Texas.
599. Zamorano L, Esam Elkhatib, Gary Wood, Roy Baynes, Geoffrey Barger, Ramiro Perez-de la Torre, Andrew Sloan, Sandra Kozlo, Feasibility and Initial Experience in Immune Therapy of Malignant Brain Tumors, Congress of Neurological Surgeons Annual Meeting, September 23-28, 2000, San Antonio, Texas.
600. Qingliang Li, Zamorano L, M. Guthikonda, Abhilash Pandya, Ramiro Perez, Fernando Diaz: The Application Accuracy of Intraoperative Registration and Related Factors in Image Guided Neurosurgery, Congress of Neurological Surgeons Annual Meeting, September 23-28, 2000, San Antonio, Texas.
601. Zamorano L, Abhilash Pandya, Qing Hang Li, Patrick Pittet, Fernand Badano: The Kinematic Accuracy of Surgical Robots: Accuracy Evaluation of the Neuromate System, Congress of

Neurological Surgeons Annual Meeting, September 23-28, 2000, San Antonio, Texas

- K. Zamorano, Ramiro Perez-de la Torre, Esam Elkhatib, Abhilash Pandya, Qing Hang Li: Clinical Implementation of Robotic Open Neurosurgery: The Beginning of a New Era, Congress of Neurological Surgeons Annual Meeting, September 23-28, 2000, San Antonio, Texas

602. George D. England, Zamorano L, Andy Sloan, Fernando Diaz: MRI Format standard for the Evaluation of CNS Metastasis, Congress of Neurological Surgeons Annual Meeting, September 23-28, 2000, San Antonio, Texas

603. George D. England, Zamorano L, Andy Sloan, and Fernando Diaz: Gamma Knife Treatment of Brain Metastasis, Congress of Neurological Surgeons Annual Meeting, September 23-28, 2000, San Antonio, Texas

604. George D. England, Zamorano L, Andy Sloan, Fernando Diaz: Use of the Gamma Knife for the Treatment of Recurrent Glioblastoma (GBM), Congress of Neurological Surgeons Annual Meeting, September 23-28, 2000, San Antonio, Texas

605. Ramiro P. de la Torre, Zamorano L, Esam ElKhatib, James Fontanesi, Kenneth Levin, Falah Shama, Sandra Kozlo, Fernando Diaz: Brachytherapy with I-125 Implants in the Up-Front Management of Primary Glioblastoma Multiforme, Congress of Neurological Surgeons Annual Meeting, September 23-28, 2000, San Antonio, Texas

606. Ramiro P. de la Torre, L. Zamorano, E. Elkhatib, S. Tekyi Mena, J. Fontanesi, K. Levin, Fernando Diaz, Brachytherapy Implants with I-125 in Recurrent Non-GBM Malignant Gliomas, Long-Term Follow-Up, Congress of Neurological Surgeons Annual Meeting, September 23-28, 2000, San Antonio, Texas

607. Ramiro P. de la Torre, Zamorano L, Esam ElKhatib, Ishwar C. Premsagar, Falah Shamsa, Fernando Diaz, Interactive Image Guided Surgery in Malignant Gliomas, Congress of Neurological Surgeons Annual Meeting, September 23-28, 2000, San Antonio, Texas

608. Zamorano L, Esam Elkhatib, Ramiro Perez-de la Torre, Falah Shamsa, Kenneth Levin, James Fontanesi, Sandra Kugelman, Fernando Diaz: Brachtherapy with I-125 Implants in the Up-Front Management of Primary Malignant Non-GBM, Congress of Neurological Surgeons Annual Meeting, September 23-28, 2000, San Antonio, Texas
609. Ishwar C. Premsagar, Zamorano L, Esam Elkhatib, Ramiro Perez, Kenneth Levin, Jim Fontanesi, Falah Shamsa, Fernando Diaz: Survival Analysis Following Brachytherapy with I-125 Impant in the Treatment of Recurrent Glioblastoma Multiforme, Congress of Neurological Surgeons Annual Meeting, September 23-28, 2000, San Antonio, Texas
610. George D. England, Zamorano L, Andy Sloan, and Fernando Diaz: Gamma Knife Treatment Outcomes of Multiple Brain Metastasis by Volume, Congress of Neurological Surgeons Annual Meeting, September 23-28, 2000, and San Antonio, Texas
611. Zamorano L: Stereotactic Neurosurgery Using NeuroMate Robotic System, 39th Annual Meeting of the Japan Society for Stereotactic and Functional Neurosurgery, October 21 - 22, 2000, Fukuoka, Japan
- L. Zamorano, R. Perez-de la Torre, E. Elkhatib: Brachytherapy with I 125 in the UP-Front Management of Primary Glioblastoma Multiform, European Society for Stereotactic and Functional Neurosurgery October 25-27, 2000, London, UK
612. L. Zamorano, R. Perez-de la Torre, E. Elkhatib: Interactive Image-Guided Surgery in Malignant Gliomas: Clinical Outcomes and Analysis of Complications, European Society for Stereotactic and Functional Neurosurgery October 25-27, 2000, London, UK.
613. L. Zamorano, E. Elkhatib, R. Perez-de la Torre: Brachytherapy with I 125 Implants in the Up-Front Management of Primary Malignant NON-GBM, European Society for Stereotactic and Functional Neurosurgery October 25-27, 2000, London, UK
614. L. Zamorano: Robotics and Advanced Image Guided Neurosurgery, 5th Detroit Neurosurgery Symposium, November 3-5, 2000, Detroit, Michigan

615. L. Zamorano: Minimally Invasive Skull Base Surgery, III International Skull Base Congress, November 7-11, 2000, Foz do Iguassu, Brazil
616. L. Zamorano: New Techniques in Skull Base Surgery, III International Skull Base Congress, November 7-11, 2000, Foz do Iguassu, Brazil
617. L. Zamorano: Techniques in Radiosurgery, III International Skull Base Congress, November 7-11, 2000, Foz do Iguassu, Brazil.
618. L. Zamorano: Radiosurgery in Petroclival Meningiomas, III International Skull Base Congress November 7-11, 2000, Foz do Iguassu, Brazil
619. Pandya, L. Zamorano: The Development and Human Factors Analysis of Advanced 3-D Visualization for Telepresence, Bioastronautics Investigator's Workshop, January 17-19, 2001, Galveston, Texas
620. Pandya, L. Zamorano: Towards Using Augmented Reality for Neurosurgery, The 9th Annual Medicine Meets Virtual Reality Conference, January 24-27, 2001, Newport Beach, California.
621. L. Zamorano: Modern Epilepsy Surgery in Adults, 5th International Congress on Minimally Invasive Neurosurgery, (oral) March 12-15, 2001, Cairo, Egypt, pp 14.
622. L. Zamorano: Neurosurgery, 5th International Congress on Minimally Invasive Neurosurgery, (oral) March 12-15, 2001, Cairo, Egypt, pp 54
623. L. Zamorano: Immunotherapy in Brain Tumors, 5th International Congress on Minimally Invasive Neurosurgery, March 12-15, 2001, Cairo, Egypt, pp 88.
624. L. Zamorano: Advanced Neurosystems, 5th International Congress on Minimally Invasive Neurosurgery, March 12-15, 2001, Cairo, Egypt, pp 94

625. L. Zamorano: IGS & Functional and Functional Mapping in Malignant Glioma, 5th International Congress on Minimally Invasive Neurosurgery, March 12-15, 2001, Cairo, Egypt., pp 99
626. Perez R, Zamorano L, Elkhatib E, England G, Li Q, Diaz F: Interactive Image-Guided Surgery in the Resection of Cerebral Cavernous Angioma, 2001 AANS Annual Meeting, Toronto, Ontario, Canada, (poster) April 21-26, 2001.
627. England G, Zamorano L, Sloan A, Diaz F: Gamma Knife Treatment of Multiple Brain Metastasis by Number, 2001 AANS Annual Meeting, Toronto, Ontario, Canada, (poster) April 21-26, 2001.
628. Perez R, Zamorano L, Elkhatib E, Martinez J, Keiser M, Levin K, Diaz F: Gamma Knife Radiosurgery for Trigeminal Neuralgia, AANS Annual Meeting, Toronto, Ontario, Canada, (poster) April 21-26, 2001.
629. Li Q, Zamorano L, Pandya A, Gong J, Elkhatib E, Perez R, Diaz F: The Application Accuracy of the NeuroMate Robot System, AANS Annual Meeting, Toronto, Ontario, Canada, (poster) April 21-26, 2001.
630. Perez R, Zamorano L, Elkhatib E, Martinez J, Shamsa F, Diaz F: Interactive Image-Guided Surgery in Malignant Gliomas: Clinical Outcomes and Analysis of Complications, AANS Annual Meeting, Toronto, Ontario, Canada, (poster) April 21-26, 2001.
631. Martinez J, Zamorano L, Elkhatib E, Perez R, Marino R, Diaz F: Dual Pathology in Lesional Epilepsy: Etiological Considerations, AANS Annual Meeting, Toronto, Ontario, Canada, (poster) April 21-26, 2001.
632. Perez R, Zamorano L, Elkhatib E, Martinez J, Fontanesi, Levin K, Shamsa F, Kozlo S, Diaz F: I-125 Permanent Implants in the Management of Primary Glioblastoma Multiforme, AANS Annual Meeting, Toronto, Ontario, Canada, (poster) April 21-26, 2001.
633. Perez R, Zamorano L, Elkhatib E, Martinez J, Mensa S, Fontanesi J, Levin K, Diaz F: I-125 Permanent Implant in the Management of Recurrent Non-Glioblastoma Multiforme Malignant Gliomas, AANS Annual Meeting, Toronto, Ontario, Canada, (poster) April 21-26, 2001.

634. Elkhatib E, Zamorano L, Perez R, Martinez J, Levin K, Fontanesi J, Shamsa F, Diaz F: Brachytherapy with I-125 Permanent Implant in the Management of Recurrent Glioblastoma Multiforme: Survival Analysis, AANS Annual Meeting, Toronto, Ontario, Canada, (poster) April 21-26, 2001, pp 226
635. England G, Zamorano L, Sloan A, Diaz F: AANS Annual Meeting, Toronto, Ontario, Canada, (poster) April 21-26, 2001, pp 233
636. Zamorano L: Radiosurgery in the Multidisciplinary Management of Metastases, 5th International Stereotactic Radiosurgery Society Congress, Las Vegas, Nevada, June 10-13, 2001
637. Zamorano L: Interactive Image-Guidance and Brain Navigation, Neuromodulation: Defining the Future, Cleveland Clinic, Cleveland, Ohio, June 8-10, 2001, pp.4
638. Abhilash Pandya, Zamorano L (PI), MD, Mohammad Siadat, MS, Qinghang Li, MD, Ph.D., Jason Gong, Ph.D. and James Maida, MS, IAIR, Nassau Bay Hilton, Nassau, June 19-22, 2001, pp. 8.
639. L Zamorano, Technical Advances in Tumour Surgery, “Neuronavigation and Brain Tumours” World Federation of Neurosurgical Societies, Sydney, Australia, September 16-20, 2001, pp. 12.
640. L Zamorano, Image Guided Neurosurgery, World Federation of Neurosurgical Societies, Sydney, Australia, September 16-20, 2001, pp. 9.
641. L Zamorano, Image Guided Neurosurgery, World Federation of Neurosurgical Societies, Sydney, Australia, September 16-20, 2001, pp. 10.
642. L Zamorano, Women in Neurosurgery, World Federation of Neurosurgical Societies, Sydney, Australia, September 16-20, 2001, pp. 11.
643. J Gonzalez-Martinez, L Zamorano, R De la Torre, Q Li, E Elkhatib, A Pandya, M Keiser, F Diaz, Association of anatomical functional areas and neurological outcome in malignant gliomas: Results in 145 patients with awake craniotomy, World Society for Stereotactic and

- Functional Neurosurgery, Adelaide, Australia, September 11-14, 2001, pp. 9.
644. I Germano, K Foley, R Bucholz, R Maciunas, C Mascott, H Nauta, W Tobler, K Manwaring, L Zamorano, S Gonzalez-Arias, G Barnett, Image-Guided Cranial Surgical Navigation (Practical Courses), Congress of Neurological Surgeons 51st Annual Meeting, San Diego, California, September 29 – October 4, 2001, pp 62.
645. L Zamorano, Q Li, M Keiser, J Marinez, F Diaz, Outcomes in Image-guided Neurosurgery, Congress of Neurological Surgeons 51st Annual Meeting, San Diego, California, September 29 – October 4, 2001, pp 134.
646. Gonzalez-Martinez J, Zamorano L, De la Torre R, Elkhatib E, Pandya A, Li Q, Keiser M, Diaz F. Interactive Image-Guided Endoscopic Management of Collid Cysts: A Clinical Outcome Study, Congress of Neurological Surgeons 51st Annual Meeting, San Diego, California, September 29 – October 4, 2001.
647. Gonzalez-Martinez, J, Zamorano L, De la Torre R, Li Q, Keiser M, Diaz F. Association of anatomical Functional areas and neurological outcome in malignant gliomas: Results in 145 patients with awake craniotomy, Congress of Neurological Surgeons 51st Annual Meeting, San Diego, California, September 29 – October 4, 2001.
648. Gonzalez-Martinez J, Zamorano L, Fontanesi J, Sloan A, Elkhatib E, De la Torre R, Garzon s, Pandya A, Li, H, Keiser M, Diaz F. Prognostic Factor Analysis for Melanoma Brain Metastases Treated Radiosurgery, Congress of Neurological Surgeons 51st Annual Meeting, San Diego, California, September 29 – October 4, 2001.
649. Gonzalez-Martinez J, Gordon V, Zamorano L, Elkhatib E, De la Torre R, Garzon S, Pandya A, Li H, Keiser M, Diaz F. The Effect of Stereotactic Radiosurgery on Epilepsy Associated with Arteriovenous Malformation: A Clinical Outcome Study, Congress of Neurological Surgeons 51st Annual Meeting, San Diego, California, September 29 – October 4, 2001.
650. Gonzalez-Martinez J, Gordon V, Zamorano L, Elkhatib E, De la Torre R, Garzon S, Lodej M, Pandya A, Li H, Keiser M, Diaz F.

Stereotactic Radiosurgery for Arteriovenous Malformations of the Brain: The Experience of Wayne State University, Congress of Neurological Surgeons 51st Annual Meeting, San Diego, California, September 29 – October 4, 2001.

651. Zamorano L, Qinghang Li, Abhilash Paqndya, Jianxing Gong. Interactive Image-Guided Neurosurgery with the Stryker Wireless Navigation System, Congress of Neurological Surgeons 51st Annual Meeting, San Diego, California, September 29 – October 4, 2001.

652. Zamorano L, Laura Hernandez, Abhilash Pandya, Qinghang Li, Web-Base Teaching Tools for Computer Assisted Neurosurgery for Residents and Fellows of Stereotactic and Radio Neurosurgery, Wayne State University, David Adamany Undergraduate Library, 3rd Annual TLTR Conference, March 7, 2002

653. Jorge Martinez MD, Zamorano L MD, Ramiro De la Torre MD, Qinghang Li PhD, Fernando Diaz MD (Detroit, MI). Association of Anatomical Functional Areas and Neurological Outcome in Malignant Gliomas: Results in 145 Patients Undergoing Awake Craniotomy, AANS 2002 Annual Meeting, April 6-11, 2002, Chicago, Illinois.

654. Zamorano L MD, Qinghang Li PhD, Abhilash Pandya, MS, Jianxing Gong, PhD, Fernando Diaz, MD (Detroit, MI), Interactive Image-Guided Neurosurgery With the Stryker Wireless Navigation System, AANS 2002 Annual Meeting, April 6-11, 2002, Chicago, Illinois.

655. Jianxing Gong, PhD, Zamorano L ,Qinghang Li, PhD, Abhilash Pandya, MS, Fernando Diaz, MD (Detroit, MI), Development of Universal Instrumentation for Advanced Neuronavigation System, AANS 2002 Annual Meeting, April 6-11, 2002, Chicago, Illinois.

656. Jianxing Gong, MD Zamorano L., Qinghang Li, PhD, Abhilash Pandya, MS, Fernando Diaz, MD (Detroit, MI), Improvement of Safety for Surgical Navigation Instrument: 5-Year Experience at Wayne State University, AANS 2002 Annual Meeting, April 6-11, 2002, Chicago, Illinois.

657. Zamorano L, Qinghang Li, PhD, Jorge Martinez, MD, Abhilash Pandya, MS, Jianxing Gong, PhD, Fernando Diaz, MD (Detroit, MI),

- Medical Robotics in Open Neurosurgery, AANS 2002 Annual Meeting, April 6-11, 2002, Chicago, Illinois.
658. Jorge Martinez, MD, Zamorano L., Andy Sloan, MD, James Fontanesi, MD, Kenneth Levin, MD, Qinghang Li, PhD Fernando Diaz, MD (Detroit, MI), Prognostic Factor Analysis for Melanoma Brain Metastases Treated With Radiosurgery, AANS 2002 Annual Meeting, April 6-11, 2002, Chicago, Illinois.
659. Qinghang Li, MD, PhD, Jianxing Gong, PhD Abhilash Pandya, MS Fernando Diaz, MD (Detroit, MI), Brain Deformation During Image-Guided Stereotactic Biopsy. A Case Report, AANS 2002 Annual Meeting, April 6-11, 2002, Chicago, Illinois.
660. Laura Hernandez, MD Zamorano L, MD Andy Sloan, MD Kenneth Levin, MD James Fontanesi, MD Qinghang Li, PhD Fernando Diaz, MD (Detroit, MI), Gamma Knife Surgery for Brain Metastases, AANS 2002 Annual Meeting, April 6-11, 2002, Chicago, Illinois.
661. Laura Hernandez, MD, Zamorano L, MD, Michael Higgins, MD, James Fontanesi, MD, Qinghang Li, PhD, Fernando Diaz, MD (Detroit, MI), Gamma Knife Surgery for Renal Cell Carcinoma Brain Metastases, AANS 2002 Annual Meeting, April 6-11, 2002, Chicago, Illinois.
662. Zamorano L, MD Qinghang Li, PhD Fernando Diaz, MD (Detroit, MI), Outcomes Analysis in Image-Guided Neurosurgery, AANS 2002 Annual Meeting, April 6-11, 2002, Chicago, Illinois.
663. Zamorano L, MD James Fontanesi, MD Kenneth Levin, MD Qinghang Li, PhD Fernando Diaz, MD (Detroit, MI), Permanent Iodine-125 Interstitial Radiation Therapy in the Treatment of Non-GBM High-Grade Gliomas, AANS 2002 Annual Meeting, April 6-11, 2002, Chicago, Illinois.
664. Jorge A. Gonzalez-Martinez, MD, PhD (Cleveland Heights, OH) Ramiro Perez de la Torre, MD, Zamorano L, MD , Qinghang Li, PhD Falah Samsha, PhD Fernando Diaz, MD, PhD (Detroit, MI) Outcome of Awake Craniotomy and Functional Mapping Surgery of Eloquent Brain Lesions. (Oral Presentation) (Preuss Award), AANS 2002 Annual Meeting, April 6-11, 2002, Chicago, Illinois.

665. Jorge A. Gonzalez-Martinez MD, Zamorano L MD, Ramiro Perez MD, Essam Elkhatib MD, Qing Hang Li PhD, James Fontanesi MD, Fernando G Diaz MD. Brachytherapy: Acceptable treatment for recurrent Glioblastoma Multiforme (GBM), Role in the treatment of primary GBM is still a matter of debate, (Oral Presentation) AANS/CNS Section on Tumors: Fifth Biennial Satellite Symposium. AANS 2002 Annual Meeting, April 6-11, 2002, Chicago, Illinois.
666. Bruce E. Pollock, Kenneth F. Casey, Robert Nugent, Zamorano L, Samuel Hassenbusch, Trigeminal (workshop), AANS/CNS Section on Pain, Interventional Therapies in Neurosurgical Pain Management, AANS 2002 Annual Meeting, April 6-11, 2002, Chicago, Illinois.
667. Jorge A Gonzalez-Martinez, MD PhD (Cleveland Heights OH), Ramiro Perez de la Torre, MD, Zamorano L, MD, Dr Med, Qinhang Li, PhD, Essam Elkhatib, MD, James Fontanesi, MD, Fernando G. Diaz, MD, PhD (Detroit MI), Survival Comparison between Conventional External Beam Irradiation with and Without I-125 Brachytherapy “Boost” for Primary Glioblastoma Multiforme using Recursive Partitioning Analysis Classes, AANS 2002 Annual Meeting, April 6-11, 2002, Chicago, Illinois.
668. Zamorano L, MD, Neuronavigation Mapping for Functional for Surgery of Malignant Gliomas, AANS 2002 Annual Meeting, April 6-11, 2002, Chicago, Illinois.
669. Zamorano L, Stereotactic in Brain Metastasis, XXIV Congress Brazil Neurosurgery, September 2 – 7, 2002.
670. Zamorano L, Brain Metastasis, XXIV Congress Brazil Neurosurgery, September 2 – 7, 2002.
671. Zamorano L, Advanced Neuronavigations and Robotics, XXIV Brazil Neurosurgery, September 2 – 7, 2002.
672. Zamorano L, Martinez J, Sloan A, Levin K, Li Q: PhD, Prognostic Factor Analysis for Melanoma Brain Metastases Treated with Gamma Knife, Society for Neuro-Oncology Seventh Annual Meeting, November 21-24, 2002, San Diego, CA

673. Zamorano L, Martinez J, Sloan A, Levin K, Li Q: PhD, Prognostic Factor Analysis for Melanoma Brain Metastases Treated with Gamma Knife, Society for Neuro-Oncology Seventh Annual Meeting, November 21-24, 2002, San Diego, CA
674. Hernandez L, Zamorano L, Sloan A, Fontanesi J, Lo S, Levin K, Li Q, Diaz F: Whole Brain Radio Therapy plus Gamma Knife Radiosurgery Treatment for Renal Cell Carcinoma Brain Metastases, Society for Neuro-Oncology Seventh Annual Meeting, November 21-24, 2002
675. Sehgel V, Haacke EM, Sloan A, Zamorano L, Del Proposto Z, Kupsky W, Prabakraran, Elangovan IR, Jing J: Detecting Hemmorage in Tumors Using Susceptibility Weighted Imaging. Radiological Society of North America (RSNA) 88th Annual Scientific Assembly & Annual Meeting, Chicago, IL, December 1-6, 2002.
676. Zamorano L, Image Guided Surgery (Practical Course), AANS, San Diego, California, April 26 – May 1, 2003.
677. Marchese E, Pandya A, Mahmoud M, Higgins M, Li Q, Zamorano L, Quantative Comparison between the Heads-Up-Display (HUD) and Common Monitor in Endoscopic Surgery, AANS, San Diego, California, April 26 – May 1, 2003.
678. Zamorano L, Laura Hernandez MD, Abhilash Pandya MS, Qinghang Li MD PhD. Web-base Teaching Tools for Residents and Fellows Stereotactic Neurosurgery and Radiosurgery, AANS, San Diego, California, April 26 – May 1, 2003.
679. Zamorano L, Current state-of-art of Image-guided surgery. American Society for Stereotactic and Functional Neurosurgery, 2003 Quadrennial Meeting, New York City, New York, May 18 – 21, 2003
680. Zamorano L. Brachytherapy in the management of malignant primary brain tumors. American Society for Stereotactic and Functional Neurosurgery, 2003 Quadrennial Meeting, New York City, New York, May 18 – 21, 2003
681. Zamorano L, Malignant Glioma: Radiosurgery, Radiotherapy or both. 6th International Stereotactic Radiosurgery Society, 6th

- International Stereotactic Radiosurgery Society, Kyoto, Japan, June 22-26, 2003.
682. Zamorano L, Hernandez L, Sloan A, Lo S, Levin K, Fontanesi J, Li Q, Diaz F: Prognostic Factor Analysis for Brain Metastases Treated with Gamma Knife Radiosurgery, Society for Neuro-Oncology Seventh Annual Meeting, November 21-24, 2002, San Diego, CA
683. Zamorano L, (Invited Speaker), Management of Brain Metastases: Radiosurgery vs. Radiotherapy, 6th International Stereotactic Radiosurgery Society, 6th International Stereotactic Radiosurgery Society, Kyoto, Japan, June 22-26, 2003.
684. Zamorano L, (Invited Speaker), State of the Art Gamma Knife, Elekta Neuroscience, Mexico City, Mexico, September 30, 2003.
685. Zamorano L, CAS: Current State-of-Art and Limitations, Institute for Scientific Computing (ISC) seminar series, Wayne State University, Detroit, Michigan, October 17, 2003.
686. Zamorano L, Permanent I25 Interstitial Radiation Therapy in the Treatment of Non-GBM High Grade Gliomas, Society for Neuro-Oncology Eighth Annual Meeting, Keystone, Colorado, November 13-16, 2003.
687. Zamorano L, Analysis of Iodine-125 Implants in the Primary Treatment of Malignant Gliomas Using of the RTOG Recursive partitioning, Society for Neuro-Oncology Eighth Annual Meeting, Keystone, Colorado, November 13-16, 2003.
688. Zamorano L, I-125 Implants in the Up-Front Management of Primary Glioblastoma Multiforme, Society for Neuro-Oncology Eighth Annual Meeting, Keystone, Colorado, November 13-16, 2003.
689. Zamorano L, Medical Devices and Collaboration with the SRI Team, SRI. Menlo Park, California, November 21, 2003.
690. Zamorano L, (Invited Speaker) Intelligent Planning and Automated Brain Atlas, Oakland University, Rochester, Michigan, March 29, 2004.

691. Zamorano L, (Invited Speaker) Optimization of Surgical Procedures, Oakland University, Rochester, Michigan, March 29, 2004.
692. Zamorano L, (Invited Speaker) SCP 7400 (Supercomputing Modeling for CAS). Wayne State University, State Hall, Detroit, Michigan, April 1, 2004.
693. Zamorano L, Use of the RTOG Recursive Partitioning Analysis to Validate the Benefit of I-125 Implants in the Upfront Management of Primary Glioblastoma Multiforme, 2004 AANS Annual Meeting, May 1-6, 2004, Orlando, Florida
- Li Q, Zamorano L, Permanent 125-Iodine Interstitial Radiation Therapy in the Treatment of Nonresectable Low-Grade Gliomas, 2004 AANS Annual Meeting, May 1-6, 2004, Orlando, Florida
- Li Q, Zamorano L, The Use of RTOG Recursive Partitioning Analysis to Validate the Benefit of Permanent 125-I Interstitial Radiation Therapy in the Treatment of Non-GBM High-Grade Gliomas, 2004 AANS Annual Meeting, May 1-6, 2004, Orlando, Florida
694. Sehgel V, Haddar D, Haacke EM, Delproposto Z, Sloan A, Zamorano L, Kupsky W, Xu Y, Prabhakaran K, Elangovan I, Reichenbach J, Tong K: Susceptibility Weighted Imaging in Brain Masses. The International Society for Magnetic Resonance in Medicine (ISMRM) 12th Annual Scientific Meeting and Exhibition, Kyoto, Japan, May 15-21, 2004.
695. Zamorano L, (Invited Speaker) Neurosurgery Technology, IX Congress of the Spanish Association of Neurological Surgeons, Santander, Spain, May 19-22, 2004.
696. Zamorano L, (Invited Speaker) Advances in Neuronavigation and Robotics, IX Congress of the Spanish Association of Neurological Surgeons, Santander, Spain, May 19-22, 2004.
697. Zamorano L, (Invited Speaker) Advance Computer Assisted Surgery and Robotics, Boston Scientific de Mexico, Toluca, Mexico, June 18, 2004.
698. Zamorano L, (Invited Speaker) Update and Management of Primary

- Brain Tumors, Boston Scientific de Mexico, Toluca, Mexico, June 18, 2004.
699. Zamorano L, (Invited Speaker), GammaKnife and Brachtherapy in Brain Tumors, Boston Scientific de Mexico, Toluca, Mexico, June 18, 2004.
700. Li Q, Marchese E, Pandya A, Zamorano L, Quantitative Comparison between the Heads-up-display (HUD) and Common Monitor in Endoscopic Neurosurgery, CARS, Chicago, Illinois, June 23-26, 2004.
701. Zamornao L, Li Q, Surbhi J, Levin K, Barger G, Brachytherapy with I-125 permanent implant combined with sequential gliadel in the treatment of GBM: a novel approach, AANS, New Orleans, Louisiana, April 16-21, 2005.
702. Li Q, Gong J, Zamorano L, Yang K, The detection of brain shift using intraoperative MRI - Initial Experience with Intraoperative MRI, AANS, New Orleans, Louisiana, April 16-21, 2005.
703. Advancing Knowledge in Healthcare: The Neurosurgeon's Approach to Brain Tumors: Comfort or Controversy? AKH, Orange Park, Florida, April 18, 2005.
704. Endoscopic Techniques in Neurosurgery. Barrows Neuroscience Institute, Phoenix, Arizona, January 20-21, 2006
705. Intraoperative MRI. Polestar, February 3-4, 2006. Denver, Colorado.
706. Adding, Updating and Expanding Comprehensive Cancer Centers Programs and services for hospitals and health systems, Boston, MA, April 8-9, 2006.
707. Advanced Management of Brain Metastasis from Breast: SRS Gammaknife and Image guided Surgery. The 21st Century Approach in the Treatment and prevention of Breast Cancer. Doha, Qatar, April 30-May 1, 2006.
708. Radiosurgery Symposium. Radiosurgery from the point of view of the neurosurgeon. Santo Domingo, Dominican Republic, May 11-12,

2007

709. Computer Assisted Surgery: present and future. Kettering medical Center, Kettering, Ohio December 17-18, 2007

710. MGI Pharma. Advisory Boar Meeting. Half Moon Bay, CA. April 4-5, 2008

711. Awake craniotomy and Functional mapping. 33rd Annual meeting American Academy of neurological and Orthopaedic Surgeons, Montreal, Canada, May 27-30, 2009.

712. Robotics in Neurosurgery. 33rd Annual meeting American Academy of neurological and Orthopaedic Surgeons, Montreal, Canada, May 27-30, 2009.

713. Workshop. Minimally Invasive Spine Surgery. 33rd Annual meeting American Academy of neurological and Orthopaedic Surgeons, Montreal, Canada, May 27-30, 2009.

714. Complex and Minimally Invasive Spine Technologies. American Academy of Neurological and Orthopaedic Surgeons, May 28, 2009

715. Intracranial/Cerebrovascular neurosurgery. American Academy of Neurological and Orthopaedic Surgeons, May 28, 2009

716. Role of the Neurosurgeon in the Acute Management of Stroke. 34rd Annual meeting American Academy of neurological and Orthopaedic Surgeons, Denver, Colorado, May 5-8, 2010.

717. Current Management of Arteriovenous Malformations. 34rd Annual meeting American Academy of neurological and Orthopaedic Surgeons, Denver, Colorado, May 5-8, 2010.

718. Advances in the Surgical Treatment of brain Lesions. 34rd Annual meeting American Academy of neurological and Orthopaedic Surgeons, Denver, Colorado, May 5-8, 2010.

719. Minimally Invasive Spine Workshop. 34rd Annual meeting American Academy of neurological and Orthopaedic Surgeons, Denver, Colorado, May 7, 2010.

720. Advances in Neuosurgery. Sao Paulo, University, Sao Paulo, Brasil, December 20, 2010
721. American Academy Of Neurological and Orthopedic Surgery 35th Annual Scientific Meeting, Portland, Oregon, June 10-11, 2011.
722. Management of Arteriovenous Malformations, American Academy Of Neurological and Orthopedic Surgery 35th Annual Scientific Meeting, Portland, Oregon, June 11, 2011
723. American Academy Of Neurological and Orthopedic Surgery 35th Annual Scientific Meeting, Atlanta, Georgia, June 2012
724. Modern Epilepsy Surgery in Adults. American Academy Of Neurological and Orthopedic Surgery 35th Annual Scientific Meeting, Atlanta, Georgia, June 2012
725. Advances in Brain Tumors. American Academy of Neurological and Orthoepedic Surgery 37th Annual Meeting, Jacksonville, Florida, June 7-8, 2013
726. Endoscopic transforaminal approach for disc herniations and stenosis. American Academy of Neurological and Orthoepedic Surgery 37th Annual Meeting, Jacksonville, Florida, June 8, 2013
727. Current advances in Epilepsy Surgery. American Academy of Neurological and Orthoepedic Surgery 37th Annual Meeting, Jacksonville, Florida, June 7, 2013
728. Endoscopic and Robotics Spine Surgery. Minimally Invasive Neurosurgical Society (MINS) Cadaveric Spine MIS Workshop, Detroit, MI, August 8-9, 2013
729. Mazor Robotics Spine Surgery. Technological Advancements in Pain Control & Minimally Invasive Surgery. Troy, MI, December 4, 2013
730. Robotics and Endoscopic Minimally Invasive Spine Surgery. Troy, MI, May 19, 2014.

731. Advanced Imaging in the Management of Brain Tumors. American Academy of Neurological and Orthopedic Surgery 38th Annual Meeting, Memphis, TN, June 11-14, 2014.
732. Navigation, Robotics, and Endoscopy in MISS (Minimally Invasive Spine Surgery). American Academy of Neurological and Orthopedic Surgery 38th Annual Meeting, Memphis, TN, June 11-14, 2014.
733. Robotics Spine Surgery with Mazor Robot. Minimally Invasive Neurosurgical Society (MINS) Detroit, MI, July 27, 2014
734. Surgical Management of Epilepsy, American Academy of Neurological and Orthopedic Surgery 39th Annual Meeting , Annapolis, MD, June 11-13, 2015
735. Minimally Invasive Endoscopic Spine Surgery & Fusion with Expandable Cages. IV Brain and Spine Symposium, Miami, FL, September 19, 2015
736. Use of expandable cages in TLIF and Endoscopic ILIF, American Academy of Neurological and Orthopedic Surgery 40th Annual Meeting, Troy, MI, June 17-18, 2016
737. Does Cervical Fusion with 0 profile Cage System (LDR) decrease rate of adjacent level disease? American Academy of Neurological and Orthopedic Surgery 40th Annual Meeting, Troy, MI, June 17-18, 2016
738. Surgical Laser and Energy Based Devices in Neurosurgery, Brazilian Meeting of Laser Therapy, Sao Paulo, Brazil, November 4, 2016
739. 79th Annual Surgical Update, International College of Surgeons, United States Section, Seattle, WA, June 15-17, 2017
740. AANOS 40th Annual Scientific Meeting, Seattle, WA, June 16-17, 2017. Scientific Chair of Meeting
741. Use of standalone cages and reduction of adjacent disease in anterior cervical disc fusion. AANOS 40th Annual Scientific Meeting, Seattle, WA, June 16-17, 2017.

742. Optimization of TLIF and ILIF Using Expandable Cages. AANOS
40th Annual Scientific Meeting, Seattle, WA, June 16-17, 2017.

O. ATTENDANCE TO/ PARTICIPATION PROFESSIONAL MEETINGS

1. Practical seminar of histological and histochemical techniques for light microscope. Histology Laboratory. Santiago, Chile (one year) 1974.
2. Seminar on electronic microscope technique. Histology Laboratory Catholic University. Santiago, Chile (one year) 1975.
3. Seminar on experimental methods in neurobiology. Neurophysiology Laboratory Catholic University. Santiago, Chile (one year) 1975.
4. XIX Annual Meeting of Chilean Society of Biology. Jahuel, Chile, December 1976.
5. Annual Congress of American College of Surgeons. Santiago, Chile, April 1977.
6. Advances in neurology. Course sponsored by Department of Neurology, Carlos Van Buren Hospital. Valparaiso, Chile, April 1978.
7. Cancer chemotherapy. Course sponsored by Chilean Medical Society. Santiago, Chile, July 1978.
8. Aphasie, apraxie and agnosia. Symposium organized by Chilean Society of Neurology, Psychiatry, and Neurosurgery. Santiago, Chile, August 1978.
9. First Congress of Medical Students. Santiago, Chile, August 1978.
10. Second Congress of Medical Students. Santiago, Chile, August 1979.

11. LII Chilean Congress of Surgery. Santiago, Chile, November 1979.
12. Intensive care of critical patient. Postgraduate course sponsored by Catholic University. Santiago, Chile, December 1980.
13. Liver, gallbladder, and pancreas surgery. Course sponsored by Catholic University. Santiago, Chile, March 1980.
14. LIII Chilean Congress of Surgery and course "Emergency in Surgery." Santiago, Chile, November 1980.
15. Stomach and duodenum diseases. Course organized by Catholic University. Santiago, Chile, September 1980.
16. Liver, pancreas and spleen. Course sponsored by Valparaiso Medical Society. Valparaiso, Chile, January 1981.
17. Transactional analyses. Course sponsored by Chilean University. Santiago, Chile, January 1981.
18. LIV Chilean Congress of Surgery. Santiago, Chile, November 1981.
19. Advances in Gastroenterology. Course sponsored by Catholic University Medical School. Santiago, Chile, December 1981.
20. VIII Chilean Congress of Gastroenterology. Santiago, Chile, December 1981.
21. Chemotherapy and hormone therapy. Course sponsored by Catholic University Medical School. Santiago, Chile, April 1982.
22. IX Chilean Congress of Gastroenterology. Santiago, Chile, December 1982.
23. LV Chilean Congress of Surgery. Santiago, Chile, November 1982.
24. Colonic diseases. Course sponsored by Catholic University School of Medicine. Santiago, Chile, December 1982.
25. Microneurosurgery course. Microsurgery laboratory, Catholic University. Santiago, Chile, November - December 1982.

26. Annual Congress of American College of Surgeons. Santiago, Chile, April 1983.
27. Advances in muscular pathology. Course sponsored by Chilean Society of Neurology, Psychiatry, and Neurosurgery. Santiago, Chile, July 1983.
28. High-risk patients on surgery. Course sponsored by Catholic University School of Medicine. Santiago, Chile, September 1983.
29. Advances in cerebrovascular diseases. Symposium sponsored by Chilean Society of Neurology, Psychiatry, and Neurosurgery. Santiago, Chile, September 1983.
30. International Congress on Epilepsy. Santiago, Chile, October 1983.
31. Congenital malformations of the central nervous system. Course sponsored by Chilean Society of Neurology, Psychiatry, and Neurosurgery. Santiago, Chile, November 1983.
32. XXXVIII Annual Journey of Chilean Society of Neurology, Psychiatry, and Neurosurgery. Santiago, Chile, November 1983.
33. Spinal cord computed tomography. Symposium organized by Freie University. Berlin, West Germany, May 1984.
34. XXXV Congress of German Society of Neurosurgery. Hannover, Germany, June 1984.
35. XXXIV Nobel Prize Congress. Lindau, West Germany, June 1984.
36. II International Congress of Skull Base Study Group. Mainz, West Germany, June 1984.
37. Congress of Neurological Surgeons. Post Congress Scientific Meeting. Berlin, West Germany, October 1984.

38. Primary health care in tropical countries. Course sponsored by Friedrich Thieding Foundation. Dusseldorf, West Germany, November 1984.
39. Emergency medicine, sponsored by Friedrich Thieding Foundation. Worms, West Germany, 1984.
40. Midline meningiomas. Microneurosurgery Meeting. Berlin, West Germany, December 1984.
41. Treatment of brain tumors and brain metastasis. Postgraduate course organized by Freie University. Berlin, West Germany, February 1985.
42. International symposium on surgery in and around the brainstem and the third ventricle. Hannover, West Germany, February 1985.
43. The clivus. Anatomical, clinical, radiological and surgical aspects. Mainz, West Germany, June 1985.
44. Lasers in advanced neurosurgical technologies. Fondazione Cini. Venice, Italy, March 1986.
45. Advances in Neurosurgery. Buenos Aires, Argentina, October 1986.
46. Meeting of American Association of Neurological Surgeons. Dallas, Texas, 1987.
47. Meeting of American Association of Stereotaxis. Montreal, Canada, June 1987.
48. Meeting of Michigan Society of Neurosurgery. Glen Arbor, Michigan 1987.
49. Meeting of The Xth Congress of Mexican Neurosurgical Society. Monterrey, Mexico, July 1987.
50. European Congress of Neurosurgery. Madrid, Spain, September 1987.

51. 40th Annual Conference on Engineering in Medicine and Biology. Niagara Falls, New York, September 1987.
52. Workshop on neurostimulation organized by Avery Lab. Glen Cove, New York, October 1987.
53. Congress of Neurological Surgeons 37th Annual Meeting. Baltimore, Maryland, October 25 - 29, 1987.
54. Esterotaxis multiplanar y radioterapia intersticial. Sociedad de Neurocirugai de Chile. Noviembre 23 - 27, 1987.
55. Thirteenth Radiological Society of North America. Chicago, Illinois, November 29 -December 4, 1987.
56. Medical Research Society of Pakistan. Rawalpindi, Pakistan, December 24, 1987.
57. The Annual Meeting of the American Association of Neurological Surgeons. Toronto, Canada, April 24 - 28, 1988.
58. Eighth Meeting of the European Society for Stereotactic and Functional Neurosurgery. Budapest, Hungary, June 1 - 3, 1988.
59. Annual Meeting Michigan Association of Neurological Surgeons. Traverse City, Michigan, June 17 - 19, 1988.
60. Mexican Congress of Neurosurgery. Monterrey, Mexico, July 3 - 9, 1988.
61. Eighth European Congress on Diseases of the Chest. Dublin, Ireland, July 10 - 14, 1988.
62. Ninth International Symposium for Cerebral Ischemia. Detroit, Michigan, July 1988.
63. International Conference in Photodynamic Therapy and Medical Laser Applications. London, England, July 19 - 21, 1988.
64. World Congress on Medical Physics and Biomedical Engineering. San Antonio, Texas, August 6 - 12, 1988.

65. Congress of Neurological Surgeons. Seattle, Washington, September 24 - 29, 1988.
66. Argentinian Neurosurgical Society, 30th Annual Meeting. Buenos Aires, Argentina, September 1988.
67. International Symposium on Cranial Base Surgery. Pittsburgh, Pennsylvania, September 13 - 17, 1988.
68. XVII Brazilian Congress of Neurosurgery. Brasilia, Brazil, September 1988.
69. 54th Annual Scientific Assembly of American College of Chest Physicians. Anaheim, California, October 3 - 7, 1988.
70. Clinical Congress of American College of Surgeons. Chicago, Illinois, October 23 - 28, 1988.
71. Latin American Congress of Neurosurgery. Acapulco, Mexico, November 13 - 19, 1988.
72. Ninth Annual Meeting American Society for Laser Medicine and Surgery. Arlington, Virginia, April 15 - 17, 1989.
73. The Annual Meeting of the American Association of Neurological Surgeons. Washington D.C., April 1989.
74. Radiosurgery Symposium, University of Virginia. Charlottesville, Virginia, May 1 - 4, 1989.
75. The Annual Meeting of the Michigan Association of Neurological Surgeons. Traverse City, Michigan, June 1989.
76. Mexican Neurosurgical Society. Veracruz, Mexico, August 1989.
77. International Society for Optical Engineering SPIE's 33rd Annual International Symposium on Optical & Optoelectronic Applied Science & Engineering. San Diego, California, August 6 - 11, 1989.

78. Tenth Meeting of The World Society for Stereotactic and Functional Neurosurgery. Maebashi, Japan, October 2 - 5, 1989.
79. Ninth International Congress of Neurological Surgery. New Delhi, India, October 8 - 13, 1989.
80. MEDTECH Meeting. West Berlin, Germany, November 6 - 11, 1989.
81. Congress of Neurological Surgeons. Atlanta, Georgia, October 1989.
82. Advances in Neurosurgery. Buenos Aires, Argentina, October 1989.
83. Simposium Internacional de Ciencias Neurologicas. Santiago, Chile, November 2 - 6, 1989.
84. International Symposium on Stereotactic Radiosurgery. Miami, Florida, November 30 - December 2, 1989.
85. University of Sao Paulo. Sao Paulo, Brazil, January 3 - 4, 1990.
86. Curso "Moderna Tecnologia en Neurocirugia." Zaragoza, Espana, January 18 - 20, 1990.
87. International Society for Optical Engineering SPIE. Los Angeles, California, January
88. 15 -17, 1990.
89. American Society for Laser Medicine and Surgery, Inc. Nashville, Tennessee, April 6 - 8, 1990.
90. The Annual Meeting of the Michigan Association of Neurological Surgeons. Traverse City, Michigan, June 16, 1990.
91. Surgical Advances in Head and Neck Cancer. Mexico City, Mexico, July 11 - 14, 1990.
92. AANC XXX Annual Meeting. Cordoba, Argentina, September 4 - 7, 1990.

93. First International Symposium. Mexico City, Mexico, September 10 - 13, 1990.
94. Ninth Congress of the European Society for Stereotactic and Functional Neurosurgery. Marbella, Spain, September 16 - 20, 1990.
95. The Annual Meeting of the Congress of Neurological Surgeons. Los Angeles, California, October 20 - 25, 1990.
96. The 1990 Meeting of the Henry Ford Hospital Medical Association. Detroit, Michigan, October 18 - 20, 1990.
97. OE LASE'91, International Society for Optical Engineering SPIE. Los Angeles, California, January 20 - 25, 1991
98. North American Skull Base Society. Lake Buena Vista, Florida, February 27 - March 3, 1991.
99. XXIV Latin American Congress of Neurosurgery. Miami, Florida, March 17 - 23, 1991.
100. The Annual Meeting of the American Association of Neurological Surgeons. New Orleans, Louisiana, April 20 - 25, 1991.
101. American Society for Laser Medicine and Surgery, 11th Annual Meeting. April 29 - May 1, 1991.
102. The Annual Meeting of the American Society for Stereotactic and Functional Neurosurgery. Pittsburgh, Pennsylvania, June 1991.
103. Ninth European Congress of Neurosurgery. Moscow, USSR, June 1991.
104. XII Mexican Congress of Neurological Surgery. Puerto Vallarta, Mexico, August 17 - 22, 1991.
105. Eighth Asian-Australasian Congress of Neurological Surgery. Principal and Guest Speaker, Seoul, Korea, October 6 - 11, 1991.

106. Congress of Neurological Surgeons Annual Meeting. Stereotaxis Practical Course. Orlando, Florida, October 26 - 31, 1991.
107. VII Congresso Brasileiro de Cirurgia Toracica, III Congresso de Pneumologia e Tisiologia do Rio de Janeiro e I Encontro Brasileiro de Endoscopia Respiratoria. Rio de Janeiro, Brazil, 18 a 21 de Novembro de 1991.
108. Radiation Therapy Oncology Group Semi-Annual Meeting. Philadelphia, Pennsylvania, February 5 - 9, 1992.
109. International Society for Optical Engineering SPIE. Newport Beach, California, February 23 - 27, 1992.
110. The Annual Meeting of the American Association of Neurological Surgeons. San Francisco, California, April 11 - 16, 1992.
111. Twenty-Fourth Annual Cancer Symposium "Cytometry 2000." Detroit, Michigan, April 30 - May 1, 1992.
112. The Annual Meeting of the American Society for Laser Medicine and Surgery, Inc. Lake Buena Vista, Florida, May 17 - 19, 1992.
113. Intracranial EEG in Epilepsy Surgery. Pittsburgh, Pennsylvania, May 22 - 25, 1992.
114. First International Skull Base Congress. Hannover, Germany, June 14 - 20, 1992.
115. Radiation Therapy Oncology Group. Sheraton Society Hill, Philadelphia, Pennsylvania, July 23 - 26, 1992.
116. Tenth Congress of European Society for Stereotactic and Functional Neurosurgery. Stockholm, Sweden, September 2 - 5, 1992.
117. VBC '92 Biomedical Computing. Chapel Hill, North Carolina, October 13 - 16, 1992.
118. Congress of Neurological Surgeons. Washington D.C., October 31 - November 5, 1992.

119. 1992 Michigan State Medical Society. Dearborn, Michigan, November 17 - 19, 1992.
120. Third Annual Meeting of Neuroendoscopy Workshop and Symposium. Vancouver, Canada, December 5 - 6, 1992.
121. Radiation Therapy Oncology Group Semi Annual Meeting. New Orleans, Louisiana, January 15 - 17, 1993.
122. International Society for Optical Engineering SPIE. Los Angeles, California, January 17 -20, 1993.
123. Fourth Annual Meeting of the North American Skull Base Society. Scottsdale, Arizona, February 12 - 14, 1993.
124. Advanced Applications in Endoscopic Neurosurgery. St. Louis, Missouri, March 2 - 3, 1993.
125. Interactive Surgery and Imaging of Paranasal Sinuses, Skull Base, Brain and Spine. Snowmass Village/Aspen, Colorado, March 14 - 17, 1993.
126. The Jerusalem Symposium on Surgery of the Skull Base and Adjacent Midline Region. Jerusalem, Israel, March 21 - 16, 1993.
127. American Society for Laser Medicine and Surgery. New Orleans, Louisiana, April 18 - 20, 1993.
128. The 61st Annual Meeting of American Association of Neurological Surgeons. Boston, Massachusetts, April 24 - 29, 1993.
129. Advanced Applications in Endoscopic Neurosurgery. St. Louis, Missouri, June 3 - 4, 1993.
130. 1st International Congress on Minimal Invasive Techniques in Neurosurgery. Wiesbaden, Germany, June 15 - 19, 1993.
131. 1st Congress of the International Stereotactic Radiosurgery Society. Stockholm, Sweden, June 16 - 19, 1993.
132. Advanced Applications in Endoscopic Neurosurgery. St. Louis, Missouri, September 23 - 24, 1993.

133. Congress of Neurological Surgeons Annual Meeting. Vancouver, British Columbia, October 2 - 7, 1993.
134. The XIth Meeting of the World Society for Stereotactic and Functional Neurosurgery. Ixtapa, Mexico, October 11 - 15, 1993.
135. The Xth International Congress of Neurological Surgery. Acapulco, Mexico, October 17 - 22, 1993.
136. Advanced applications in endoscopic neurosurgery. St. Louis, Missouri, November 11 - 12, 1993.
137. Guest Lecturer for Grand Rounds at Mt. Siani Medical Center. New York, New York, November 17, 1993.
138. SPIE, Biomedical Optic 1994. Los Angeles, California, January 22 - 28, 1994.
139. Advanced applications in endoscopic neurosurgery. St. Louis, Missouri, January 27 - 28, 1994.
140. 1994 Joint Annual Meeting German and North American Skull Base Societies. Lake Buena Vista, Florida, February 19 - 23, 1994.
141. Minimally invasive imaging and surgery of skull base, paranasal sinuses, brain and spine. Snowmass Village Aspen, Colorado, March 13 - 16, 1994.
142. The 62nd Annual Meeting of American Association of Neurological Surgeons. San Diego, California, April 9 - 14, 1994.
143. The American Association of Neurological Surgeons "94 Reimbursement Update for Neurosurgeons." Chicago, Illinois, May 14 - 15, 1994.
144. Michigan Association of Neurological Surgeons, 1994 Annual Summer Meeting. Grand Traverse Resort, Traverse City, Michigan, June 10 - 12, 1994.

145. Practical Anatomy and Surgical Technique Workshop of St. Louis. Neurosurgery Workshops Part IV: Microsurgery of the Brain. St. Louis, Missouri, June 13 - 18, 1994.
146. Radiation Therapy Oncology Group. Sheraton Society Hill, Philadelphia, Pennsylvania, July 14 - 17, 1994.
147. Fourth Annual Course on Minimally Invasive Therapy of the Brain. Santa Monica, California, August 25 - 27, 1994.
148. Virtual Reality and Medicine: The Cutting Edge, 1994 at the New York Hilton Hotel. New York, New York, September 8 - 11, 1994.
149. Congress of Neurological Surgeons Annual Meeting. Chicago, Illinois, October 1 - 6, 1994.
150. American College of Surgeons, 80th Annual Clinical Congress. Chicago, Illinois, October 9 - 14, 1994.
151. XXVI Congreso LatinoAmerican de Neurocirugia. Cartagena, Colombia, October 16 - 21, 1994.
152. F.L. Fischer User's Meeting & Stereotactic Workshop. Tucson, Arizona, November 3 - 4, 1994.
153. Seventh Annual Fall Meeting of the Arizona Neurosurgical Society. Tucson, Arizona, November 5, 1994.
154. First Japanese Conference on Neuroendoscopy, Osaka University Hospital. Osaka, Japan, November 19 - 20, 1994.
155. The National Center for Advanced Medical Education. Specialty Review in Neurological Surgery. Chicago, Illinois, February 4 - 12, 1995.
156. North American Skull Base Society, Sixth Annual Meeting. Naples, Florida, February 18 - 21, 1995.
157. 1995 Quadrennial Meeting of the American Society for Stereotactic and Functional Neurosurgery. Marina del Rey, California, March 8 - 11, 1995.

158. Fifteenth Annual Meeting of the American Society for Laser Medicine and Surgery. San Diego, California, April 2 - 4, 1995.
159. The American Association of Neurological Surgeons 63RD Annual Meeting. Orlando, Florida, April 22 - 27, 1995.
160. Technology Transfer in Image-Guided Therapy. Clinical Team Leader for Neurosurgery Bethesda, Maryland, May 30 - June 1, 1995.
161. Virtual Reality in Medicine and Developers' Expo. Cambridge, Massachusetts, June 1 - 4, 1995.
162. 2nd Congress of the International Stereotactic Radiosurgery Society. Boston, Massachusetts, June 14 - 17, 1995.
163. 2nd Biennial Meeting of the International Stereotactic Radiosurgery Society, the American
164. Association of Neurological Surgeons and the American College of Radiology. Boston, Massachusetts, June 14 - 17, 1995.
165. Joint International Congress on Minimally Invasive Techniques in Neurosurgery and Otolaryngology. Pittsburgh, Pennsylvania, June 17 - 20, 1995.
166. Radiation Therapy Oncology Group Meeting. Philadelphia, Pennsylvania, July 21 - 23, 1995.
167. Mexican Congress of Neurological Surgery. Ixtapa, Mexico, July 24 - 26, 1995.
168. Dominican Republic Neurosurgical Society Conference. Santa Domingo, Dominican Republic, August 9 - 12, 1995.
169. Principles and Practice of Gamma Knife. Pittsburgh, Pennsylvania, September 11 - 22, 1995.
170. Congress of Neurological Surgeons 45th Annual Meeting. San Francisco, California, October 14 - 19, 1995.
171. "Pallidotomy...Where Are We?" Irvine, California, October 19 - 21, 1995.

172. Epileptology: Comprehensive Review with Practical Exercises. Hilton Head, South Carolina, November 4 - 7, 1995.
173. Leksell Gamma Knife Society 7th International Meeting. Island of Lana'i, Hawaii, November 12 - 15, 1995.
174. International Winter Congress on Minimally Invasive Techniques in Neurosurgery, Otolaryngology and Radiology. Aspen, Colorado, March 16 - 23, 1996.
175. American Society for Laser Medicine and Surgery. Sixteenth Annual Meeting. Lake Buena Vista, Florida, April 15 - 17, 1996.
176. The American Association of Neurological Surgeons. 64th Annual Meeting. Minneapolis, Minnesota, April 27 - May 2, 1996.
177. International College of Surgeons, U.S. Section, 58th Annual Meeting. Washington, D.C., May 2 - 5, 1996.
178. European Society for Stereotactic and Functional Neurosurgery, XIIIth Meeting. Milan, Italy, June 12 - 15, 1996.
179. Second International Skull Base Congress and the Seventh Annual Meeting of the North American Skull Base Society. San Diego, California, June 29 - July 4, 1996.
180. 48th Annual Meeting - Congress of Neurological Surgeons. Montreal, Quebec, Canada, September 28 - October 3, 1996.
181. XXVII CLAN-FLANC Congress of Latin American Neurosurgery. San Pedro, Honduras, October 5 - 11, 1996.
182. The Third Detroit Neurosurgery Symposium: Microsurgery vs. Radiosurgery. Detroit, Michigan, November 15 - 17, 1996.
183. LINAC Radiosurgery, Lake Buena Vista, Florida, December 11 - 15, 1996.
184. University of California at San Diego School of Medicine: ANeuroradiology: a Comprehensive Review.@ Palm Beach, Florida, January 13 - 17, 1997.

185. 6th Annual Meeting of the Japanese Society for Computers in Neurosurgery, Kobe University School of Medicine. Kobe, Japan, January 25 - 26, 1997.
186. 29th Annual Meeting of Computer Imaging Neurosurgery. Kyoto, Japan, January 25 - 26, 1997.
187. US-International Leibinger. Ixtapa, Mexico, February 6 - 8, 1997.
188. AMRI in Clinical Experience.@ Snowmass Village, Colorado, March 2 - 7, 1997.
189. AANS Professional Development Course on Interactive Image-Guided Neurosurgery (Frameless Stereotaxy).@ Memphis, Tennessee, March 14 - 15, 1997.
190. The 65th Annual Meeting of the American Association of Neurological Surgeons. Denver, Colorado, April 12 - 17, 1997.
191. Course: Spinal Biomechanics. The 65th Annual Meeting of the American Association of Neurological Surgeons. Denver, Colorado, April 12, 1997.
192. Course: Interactive Image Guided Neurosurgery. The 65th Annual Meeting of the American Association of Neurological Surgeons. Denver, Colorado, April 12, 1997.
193. Course: Thoracic/Lumbar Stabilization Techniques. The 65th Annual Meeting of the American Association of Neurological Surgeons. Denver, Colorado, April 13, 1997.
194. Course: Stereotactic Surgery: Principles, Techniques and Instrumentation. The 65th Annual Meeting of the American Association of Neurological Surgeons. Denver, Colorado, April 13, 1997.
195. Course: Low-Grade Gliomas: Current Treatment and Controversies. The 65th Annual Meeting of the American Association of Neurological Surgeons. Denver, Colorado, April 14, 1997.

196. Course: Stereotactic Surgery for Movement Disorders. The 65th Annual Meeting of the American Association of Neurological Surgeons. Denver, Colorado, April 15, 1997.
197. Course: Surgical Options in Epilepsy. The 65th Annual Meeting of the American Association of Neurological Surgeons. Denver, Colorado, April 16, 1997.
198. Course: Pallidotomy for Parkinson's Disease. The 65th Annual Meeting of the American Association of Neurological Surgeons. Denver, Colorado, April 17, 1997.
199. The Spanish Society of Neurosurgeons 48th Annual Meeting. Barcelona, Spain, May 8 - 10, 1997.
200. The Seventh Annual Lars Leksell Lecture/The Fourth Annual Charles Drake Lecture/The Sixth Annual Lucien Rubinstein Lecture/The Seventh Annual David D. Weaver Lecture/Anatomic Dissection: Symposia on Diagnosis and Management of Cavernomas and Meningiomas Involving the Cavernous Sinus. Charlottesville, Virginia, June 4-6, 1997.
201. 8th International Meeting of the Leksell Gamma Knife Society. Marseille, France, June 22 - 25, 1997.
202. International Stereotactic Radiosurgery Society 3rd Congress Meeting. Madrid, Spain, June 25 - 28, 1997.
203. 3rd International Congress of Minimally Invasive Neurosurgery. Paris, France, June 29 - July 1, 1997.
204. The XII Meeting of the World Society for Stereotactic and Functional Neurosurgery. Lyon, France, July 1 - 3, 1997.
205. XIV Mexican Congress of Neurological Surgery. Veracruz, Mexico, July 20 - 26, 1997.
206. Advances in Neurosciences and Spinal Surgery International Symposium. Miami Beach, Florida, July 25 - 30, 1997.
207. Skull Base Techniques 1997 - Practical Applications in Neurosurgical Practice. Detroit, Michigan, August 1 - 2, 1997.

208. 47th Annual Meeting of the Congress of Neurological Surgeons. New Orleans, Louisiana, Sept. 27 - Oct. 2, 1997.
209. Course: Proactive Approach to Managed Care: Strategies and Solutions. AANS- American Association of Neurological Surgeons. Palm Beach, Florida, November 7 - 8, 1997.
210. NIH - National Institute of Health Corants Division - Brigham & Women's Hospital Site Visit. Boston, Massachusetts, November 12 - 15, 1997.
211. Course: Physician in Management Seminar I. American College of Physician Executives. Naples, Florida, December 1 - 5, 1997.
212. Ninth Annual Meeting of the North Amercian Skull Base Society. Kamuela, Hawaii, February 13-17, 1998.
213. Course: Seminar on Effective Communication. Physician Leadership Academy. MSU Management Education Center. Troy, Michigan, February 27, 1998.
214. Course: Seminar on Finance & Accounting for Managers. Radisson Suite Hotel. Farmington Hills, Michigan, March 18-19, 1998.
215. 18th Annual Meeting of the American Society for Laser Medicine & Surgery (ASLMS). San Diego, California, April 3 - 7, 1998.
216. Joint Section on Pain Workshop/AANS. Philadelphia, Pennsylvania, April 23 - 24, 1998.
217. Annual Meeting of the American Association of Neurological Surgeons (AANS). Philadelphia, Pennsylvania, April 25 - 30, 1998.
218. Course: 2nd Pallidotomy Accord. Annual Meeting of the American Association of Neurological Surgeons (AANS). Philadelphia, Pennsylvania, April 25, 1998.
219. Stereotactic Surgery: Principles, Techniques, and Instrumentation Practical Clinic. Philadelphia, Pennsylvania, April 26, 1998.

220. Course: Stereotactic Surgery for Movement Disorders. Annual Meeting of the American Association of Neurological Surgeons (AANS). Philadelphia, Pennsylvania, April 27, 1998.
221. Course: Functional Pituitary Tumors. Annual Meeting of the American Association of Neurological Surgeons (AANS). Philadelphia, Pennsylvania, April 28, 1998.
222. Course: Neurosurgery://On-Call. Annual Meeting of the American Association of Neurological Surgeons (AANS). Philadelphia, Pennsylvania, April 29, 1998.
223. Workshop: Surgery for Movement Disorders. Toronto, Ontario, May 22 - 23, 1998.
224. Course: MSMS/MGA-Seminar on Achieving Economic Freedom. Van Dyke Park Hotel. Warren, Michigan, June 2, 1998.
225. Course: Brain Mapping. 4th International Conference on Functional Mapping of the Human Brain. Montreal, Quebec, Canada, June 7 - 8, 1998.
226. 4th International Conference on Functional Mapping of the Human Brain. Montreal, Quebec, Canada, June 7 - 12, 1998.
227. Workshop: SEAK Law School for Physicians. Cape Cod, Massachusetts, June 24 - 26, 1998.
228. Course: Physician/Home Healthcare Microsoft Office. Southfield, Michigan, June 30, 1998.
229. Course: Microsoft Office Seminar. Dearborn, Michigan, July 17, 1998.
230. Radiation Therapy Oncology Group - RTOG Meeting. Washington, D.C., July 25 - 26, 1998.
231. RPR GLIADEL Wafer Advisory Board Meeting. Dearborn, Michigan, July 31 - Aug. 1, 1998.
232. Workshop: Troubleshooting and Maintaining Pcs for IBMs and Compatibles. Bloomfield Hills, Michigan, August 6 - 7, 1998.

233. Course: Evelyn Wood's Reading Dynamics Seminar. Detroit, Michigan, August 26, 1998.
234. GE Medical Systems Mississippi Site Visit. Jackson, Michigan, September 3 - 4, 1998.
235. Course: The Internet: A Guide for Health Professional. Dearborn, Michigan, September 25, 1998.
236. Course: Business Writing for Results. Detroit, Michigan, September 29, 1998.
237. 28th Latin American Congress of Neurosurgery. Santiago, Chile, October 10 - 15, 1998.
238. Course: Windows Users Conference. Farmington Hills, Michigan, October 30, 1998.
239. 9th International Meeting of the Leksell Gamma Knife Society. Hong Kong, SAR, November 8 - 11, 1998.
240. Advance Coding and Reimbursement Concepts in Neurosurgery. Cancun, Mexico, November 13 - 15, 1998.
241. Course: ACPE AThe Physician in Management@ Seminar III. Ritz Carlton Naples, Naples, Florida, November 30 - December 4, 1998.
242. Course: PLA - AHow to Run a Productive Meeting@ Seminar. University Health Center, Crockett Center Rm. D- Detroit, MI, December 7, 1998.
243. Surgical Navigation Network (SNN) User Group Meeting. Scottsdale, AZ January 18, 1999.
244. Course: Zeiss Image Guided Surgery Customer Training Program. Rye, New York
245. January 19 - 24, 1999.
246. 12th Annual Vail 1999: MR/CT of the Head & Spine Symposium Vail Marriott Mountain Resort. Vail, Colorado January 31 - February 5, 1999.

247. Workshop: Microsoft Power Point Presentations. Northfield Hilton, Troy, MI February 16, 1999.
248. International Winter Congress on Minimally Invasive Techniques for Neurosurgery and Otolaryngology. Snowmass Aspen, Colorado March 21 -26 1999.
249. Course: AO ASIF Comprehensive Spine Course. Cancun, Mexico April 8 - 11, 1999.
250. Third International Symposium of Advances in Neurosciences & Spinal Surgery. Cusco, Peru June 19 - 25, 1999.
251. 1999 Quadrennial Meeting of the American Society for Stereotactic and Functional Neurosurgery. Snowbird, Utah July 7 - 10, 1999.
252. Medical Image Computing and Computer-Assisted Intervention. Cambridge, England September 19 - 22, 1999.
253. Rhone-Poulenc Rorer Pharmaceuticals Inc. Gliadel Wafer Advisory Board Meeting. Chicago, Il October 7 - October 8, 1999.
254. 49th Annual Meeting of the Congress of Neurological Surgeons. Boston, Massachusetts, October 30 - November 04, 1999.
255. Space Human Factors Engineering Winter Workshop, Houston, Texas January 13, 2000
256. American College of Physician Executives, Health Care Finance - Financial Decision Making. Amelia Island, Florida January 15 - 20, 2000
257. Neuro-Oncology Symposium: Current Concepts 2000. Naples, Florida, February 6 - 10, 2000.
258. Mayfield Clinic-Cleveland Clinic Winter Neuroscience Symposium 2000. Snowmass, Colorado, February 20 - 25, 2000.
259. North American Users Group Meeting. Scottsdale, Arizona, March 24, 2000.

260. FDA/Neurological Devices Panel Meeting. Washington D.C. March 31, 2000.
261. American Association of Neurological Surgeons Annual Meeting (AANS). San Francisco, California, April 8-13, 2000.
262. American Association of Neurological Surgeons and Congress of Neurological Surgeons (AANS/CNS), Section on Tumors. San Francisco, California, April 13-14, 2000.
263. Leksell Gamma Knife Society, Gamma Knife Surgery Moving into the 21st Century. San Francisco, California, April 14 - 17, 2000.
264. XXIX Latin American Congress of Neurosurgery, Fortaleza - Ceara - Brazil, June 10-16, 2000.
265. Michigan Association of Neurological Surgeons, Grand Traverse Resort Hotel, Michigan, June 23 - 25, 2000.
266. Computer Assisted Radiology and Surgery, 14th International Congress and Exhibition, CARS 2000, June 28 - July 1, 2000, San Francisco, California
267. Zamorano L: Medical Informatics A, The Institute on Health Care Leadership and Management, American College of Physician Executives, Chicago, IL, July 29-30, 2000.
268. Zamorano L: Managing Physician Performance, The Institute on Health Care Leadership and Management, American College of Physician Executives, Chicago, IL, July 31-August 2, 2000.
269. Controversies in Neurosurgery: Intraventricular Neurosurgery, Zurich, Switzerland, July 7 - July 8, 2000.
270. Spine, Spondylolisthesis and Advanced Spinal Treatment, sponsored by DePuy Acromed, Chicago, Illinois, September 8-9, 2000.
271. Congress of Neurological Surgeons Annual Meeting, San Antonio, Texas, September 23-28, 2000.

272. The 39th Annual Meeting of the Japan Society for Stereotactic and Functional Neurosurgery, Fukuoka, Japan, October 21-22, 2000.
273. European Society for Stereotactic and Functional Neurosurgery, London, UK, October 25-27, 2000.
274. Detroit Neurosurgery Symposium, Neurosurgery in the 21st Century, Detroit, Michigan, November 3-5, 2000
275. III International Skull Base Congress, Foz do Iguassu, Brazil, November 7-11, 2000.
276. Pivotal Glioma Trial Meeting, San Juan, Puerto Rico, November 16-19, 2000.
277. Snowmass 2001 - MR & CT: A Practical Update, Snowmass, Colorado, February 18 - 23, 2001
278. Advanced Cervical Spine Course, Tuttlingen, Germany, January 17-20, 2001
279. 5th International Congress on Minimally Invasive Neurosurgery, March 12-15, 2001, Cairo, Egypt
280. 2001 AANS Annual Meeting, April 21-26, 2001, Toronto, Ontario, Canada
281. 2nd Annual Hermelin Brain Tumor Center Symposium, Primary & Metastatic Tumors: A Multidisciplinary Approach, June 1, 2001, Westin Hotel, Southfield, Michigan
282. Cleveland Clinic, Neuromodulation: Defining the Future, June 8-June 10, 2001, Ritz-Carlton, Cleveland, Ohio
283. 5th International Stereotactic Radiosurgery, June 10-13, 2001, The Mirage Hotel and Casino, Las Vegas, Nevada
284. American College of Physician Executives, July 24, 2001, Finding the Financial Backing for Your Medical Venture, ACPE's On Call Web Cast.

285. University of Pittsburgh, Center of Excellence Program, Sponsored by SulzerMedica, July 26-28, 2001, Pittsburgh, Pennsylvania.
286. World Society for Stereotactic and Functional Neurosurgery, September 11 – 14, 2001, Adelaide Convention Centre, Adelaide, Australia
287. World Federation of Neurosurgical Societies, 12th World Congress of Neurosurgery, September 16 – 20, 2001, Sydney, Australia.
288. Guilford Pharmaceutical, Gliadel Wafer Peer Advocate Update Meeting, Westin Horton Plaza, September 28 – 30, 2001, San Diego, California.
289. First Quadrennial Meeting of the World Federation of Neuro-Oncology, November 15 – 18, 2001, Washington D.C.
290. Congress of Neurological Surgeons 51st Annual Meeting, September 29-October 4, 2001,
291. San Diego, California.
292. Spine Education Summit (Sponsored by DePuy AcroMed, Inc.), Palm Springs, California, November 15-18, 2001.
293. Stanford University, (Sponsored by Accuray, Inc.), Site Visit, San Jose, California, January 21 – 22, 2002.
294. RTOG Semi-Annual Meeting, January 31 – February 3, 2002, Tampa, Florida
295. MRI: Basics to Advanced, February 10 – 15, 2002, Vail, Colorado.
296. AANS: Speaking Out, 2002 Annual Meeting, April 6-11, 2002, Chicago, Illinois
297. XXIV Congress Brazilian Neurosurgery, September 2 – 7, 2002, Fortaleza, Brazil.
298. NASA Bioastronautics Investigators' Workshop, Galveston, Texas, January 13-15, 2003.
299. Gamma Knife Radiosurgery training course, Cleveland Clinic,

Cleveland, Ohio, March 10-14, 2003.

300. EBI, Challenges to Spine Surgery, The Venetian Resort Hotel Casino, Las Vegas, Nevada, April 4-5, 2003.

301. AANS, San Diego, California, April 26 – May 1, 2003.

302. American Society for Stereotactic and Functional Neurosurgery, 2003 Quadrennial Meeting, New York City, New York, May 18 – 21, 2003.

303. DePuy Acromed, Advanced Spinal Techniques: Hands-on-Workshop, Orthopaedic Learning Center, Rosemont, Illinois, July 18-19, 2003.

304. 4th Annual Remarkable Woman Luncheon, Atheneum Hotel/Conference Center, Detroit, MI, September 18, 2003.

305. Leksell Gamma Knife, Advanced Training on Functional Neurosurgery, Marseille, France, September 22-24, 2003.

306. Congress of Neurological Surgeons 53rd Annual Meeting, Denver, Colorado, October 17 – 23, 2003.

307. 16th Annual Contemporary Update on Disorders of the Spine, Whistler, British Columbia, Canada, January 17-23, 2004.

308. 8th Annual Vail 2004: MRI Basics to Advanced/What you Need to Know, Vail Marriott Mountain Resort & Spa, Vail, Colorado, February 15-20, 2004.

309. The University of Michigan-Dearborn, Teaching and Evaluating the ACGME and AOA Competencies, Dearborn, Michigan, March 19, 2004.

310. “New EBI Techniques for Spine Surgery” Symposium, Venetian Hotel, Las Vegas, Nevada, April 23-24, 2004.

311. 72nd Annual Meeting of the AANS, Orlando, Florida, May 1-6, 2004.

312. CARS 2004, Computer Assisted Radiology and Surgery 18th

- International Congress and Exhibition, Hilton & Towers Hotel, Chicago, Illinois, June 23-26, 2004.
313. Guilford Pharmaceuticals, Gliadel National Consultant Meeting, The Westin Chicago/River North Hotel, June 25-27, 2004.
314. IX Congress of the Spanish Association of Neurological Surgeons, Santander, Spain, May 19-22, 2004.
315. CARS 2004, Computer Assisted Radiology and Surgery 18th International Congress and Exhibition, Hilton & Towers Hotel, Chicago, Illinois, June 23 – 26, 2004.
316. MICCAI 2004 – 7th International Conference on Medical Image Computing & Computer Assisted Intervention, Saint Malo, France, September 24 – 29, 2004.
317. 2004 Congress of Neurological Surgeons Annual Meeting, Mascone West Convention Center, San Francisco, California, October 16-21, 2004
318. EBI Regional Spine Hands-on Workshop, Westwood, California, Sept 16-17, 2005.
319. Glioblastoma Multiforme: The multidisciplinary approach to treatment. Medical Education Department, (Shering-Ploughr Oncology) Bingham Farms, MI 48025.
320. 2005 Congress of Neurological Surgeons Annual Meeting, Boston Convention Center, Boston, MA, October 9-13, 2005.
321. Xyphoplasty, Henry Ford Hospital, November 4, 2005
322. Endoscopic Techniques in Neurosurgery. Barrows Neuroscience Institute, Phoenix, Arizona, January 20-21, 2006.
323. MIS Symposium. Minimally Invasive Technologies. Cadaver Training Course. Spine Education and Research Institute, Thornton, Colorado, February 24-26, 2006.
324. Posterior Instrumentation and MIS (Luxor system). Beaumont Hospital, Royal Oak, April 2006.

325. The 21st Century Approach in the Treatment and Prevention of Breast Cancer. Doha, Qatar, April 30-May 1, 2006.
326. DMC Risk Management. May 13, Troy, MI
327. Advanced Cervical Spine Srgery. Minimally Invasive Spine Surgery Training. Jun8-June 10, Las Vegas, NV
328. Zimmer training ALIF. Bloomfield Hills, MI. July 15, 2006
329. InTouch Health Users Conference. Santa Barbara, CA, July 20-22, 2006
330. Stryker Training TLIF, University of Michigan, August 21, 2006
331. ALIF vs TLIF: advanced techniques revision. Minneapolis, MN, September 9, 2006
332. Congress of Neurological Surgeons, Chicago, IL, October 7-12, 2006.
333. ENHANCING YOUR NEUROSURGERY PRACTICE PROFILE, Chicago, IL, October 9.2006
334. CPT CODING: WHAT'S NEW, Chicago, IL, October 8, 2006
335. THORACIC AND LUMBAR FUSION: EMERGING TECHNOLOGIES, Chicago, IL, October 7, 2006.
336. MOTION - PRESERVING SPINAL SURGERY: INDICATIONS AND OUTCOMES, Chicago, Il, October 10, 2006.
337. ENHANCING SPINAL FUSION: BIOMECHANICAL AND BIOCHEMICAL APPROACHES, Chicago, Il, October 11, 2006.
338. Minimally Invasive Spine, Dynesis, Snta Monica, CA, October 21-22, 2006
339. Current Concepts in Bone Grafting, Sunny Isles Beach, FL, November 17-18, 2006.

340. Managing thoracolumbar trauma, degenerative disease & deformity. Focus in Minimally Invasive Spine Surgery. Vail, January 26-28, 2007.
341. Anterior Lumbar Spine: exposure strategies and techniques for the treatment of degenerative disc disease and total disc replacement. Dallas, Texas, February 10-11, 2007.
342. Endonasal & Skull Base Key-Hole Surgery Course. Endoscopic Pituitary Surgery. West Palm Beach, Florida. March 9-11, 2007.
343. Globus Medical Minimal Spine Surgery, Denver, Colorado, May 24-27, 2007
344. Spine Less Invasive Technologies. MISS. Fort Lauderdale, FL 33304, July 20-22, 2007
345. X-Stop Interspinous Process Decompression (IPD) System certification. Detroit, MI, August 2, 2007
346. Advancements in Minimal Access Surgery, John Hopkins, Baltimore, MD, August 17-18, 2007
347. LDR Spine Medical. Visit Program for cervical artificial disc, and minimally invasive surgery. Paris, France, October 7-14, 2007
348. Multidisciplinary perspectives on controversial management approaches for patients with cerebrovascular and cardiovascular risks. Troy, MI, November 1, 2007
349. Minimally Invasive Spine Surgery. San Diego, CA, November 16-17, 2007
350. Who, what, where, why and how do I report? Risk Management DMC/WSU. November 4, 2006
351. XLIF/TLIF Course agenda, Nuvasive, San Diego, CA, December 6-7, 2007
352. Visiting Surgeon Program. XLiF and AxialLIF. Las Vegas, Nevada. March 23 -24, 2008

353. New Frontiers in Neuroscience: From the Gammaknife & Beyond. Birmingham, MI, April 4, 2008.
354. Depositions: Defending your Care. Troy, MI, May 3, 2008.
355. Congress of Neurological Surgeons, Orlando, Florida September 20_25, 2008
356. Practical Neurosurgical ICU Management. Orlando, Florida September 25, 2008
357. Spinal radiosurgery. Orlando, Florida, September 26, 2008
358. Entrepreneurship in Neurosurgery. Orlando, Florida, September 26, 2008
359. Trigeminal Neuralgia Association Meeting. Oakwood Boulevard, Dearborn, MI. September 11-13, 2008
360. Plasma Decompression Training. ArthroCare national Spine Lab.Plano, Texas, September 5-6, 2008.
361. Annual Scientific Meeting MSMS, Troy, MI , October 22-24, 2008.
362. Annual lung Cancer Symposium. Beaumont cancer Institute. Birmingham, MI , November 7, 2008
363. University of Michigan Spine Lecture. Jeffrey Wang, MD. Ann Arbor, MI, November 14, 2008
364. Never Events. Troy, MI, November 2008
365. Spine Symposium. 4th Henry Ford Comprehensive. Dearborn, Michigan, Decemebr 5, 2008.
366. The Atlas Forum. Minimally Invasive Spine Surgery.MIS Percutaneous approach. Interspinous spacers. Posterior Cervical Applications. Dorel, Florida. February 19-22, 2009
367. 33rd Annual meeting American Academy of Neurological and Orthopaedic Surgeons, Montreal, Canada, May 27-30, 2009.

368. Surgical treatment for complex spine disorders. Bay Harbor, MI. July 25, 2009.
369. 4th Aspen Symposium on Brain Tumor Immuno and Stem Cell Therapy. August 9-12, 2009. Aspen, Colorado.
370. Spinal Cord Stimulators Boston Scientific. August 29, 2009 .Chicago, Illinois.
371. Breast Cancer Management in 2009, September 29, 2009. Troy, MI
372. Minimally Invasive Solutions. Pathfinder Training Workshop. Beaumont Hospital Lab. Royal Oak ,MI. September 4, 2009
373. Dealing with difficult patient. November 8, Troy, MI
374. Coding Update 2009: Essentials and Controversies of Operative and Nonoperative Spine Care Coding. November 9-10, 2009. San Francisco, California
375. NASS 24th Annual Meeting Technique Workshop: Cervical Spine Stabilization, November 10, 2009. San Francisco, CA
376. NASS 24th Annual Meeting Technique Workshop: Interbody Fusion Technologies. November 10, 2009
377. NASS (North American Spine Society) 24th Annual Meeting. November 11-14, 2009. San Francisco, CA
378. Henry Ford 2nd Stroke symposium. Dec 3-4, 2009. Dearborn, MI
379. Neuromodulation Academy: theory and practice in Neuromodulation (SCS St. Jude Medical NMD Product Training). December 12, 2009. Doral, FL
380. BrainLab Academy: Radiosurgery – Cranial and Spinal Applications. January 11-13, 2010. Westchester, IL
381. Cervical Arthroplasty Core Education Course: Prestige Cervical Disc Course. January 28, 2010. Troy, Michigan.
382. Aesthetics Enhancement International Institute. Botox Training

- Workshop. Feb 6, 2010. Fort Lauderdale, FL
383. Aesthetics Enhancement International Institute. Dermal Fillers Training Workshop. Feb 7, 2010. Fort Lauderdale, FL
384. Manipulation Under Anesthesia Certification Course. Feb 26-28, 2010. Clinton Township, MI
385. Minimally Invasive Solutions. Interfuse VTI Training Workshop. March 19, 2010. Beaumont Hospital Lab. Royal Oak ,MI.
386. Minimally Invasive Solutions. Pathfinder Training Workshop. Beaumont Hospital Lab. Royal Oak ,MI. September 4, 2009
387. Minimally Invasive Solutions. Pathfinder Training and Facet Fusion Workshop. March 26, 2010. Beaumont Hospital Lab. Royal Oak ,MI.
388. Orthobiologics Seminar. April 8, 2010. Southfield, MI.
389. 34rd Annual meeting American Academy of neurological and Orthopaedic Surgeons, Denver, Colorado, May 5-8, 2010.
390. Current Osteobiologic Options for Spinal Fusion. New York, NY, May 22, 2010.
391. 14th Annual Clinical Magnetic Resonance Society Meeting , Orlando, Fl, June 24-27, 2010.
392. Congress of Neurological Surgeons, San Francisco, CA, October 16-20, 2010
393. Annual Scientific Meeting MSMS, Troy, MI , October 21-23, 2010
394. Neuroradiology: Practice to Innovation. Naples. Fl Nov 8-12, 2010
395. Minimally Invasive Spine Surgery, Las Vegas, NV, Dec 10-12, 2010
396. Microsurgery in AVMs. Birmingham, MI, March 1, 2011
397. Spine Radiosurgery Credentialing. Radiation Oncology, William

- Beaumont Hospital, Royal Oak, MI, April 15, 2011
398. Practice Management: training and tips. Somerset Inn, Troy, MI, April 20, 2011
399. Annual New Frontiers in Neurosciences. Townsend Hotel, Birmingham, MI, April 29, 2011
400. Advances Techniques for Acute and Chronic Pain Management 2011. Detroit, MI, April 29-May 1, 2011
401. 2011 Hermelin Brain Tumor Symposium: National Guidelines and Future Treatments for Primary and Metastatic Tumors. Dearborn ,MI, May 6, 2011
402. Risk Management Seminar. EMR and the Law. Troy, MI, May 14, 2011
403. American Academy Of Neurological and Orthopedic Surgery 35th Annual Scientific Meeting, Portland, Oregon, June 10-11, 2011
404. 73rd Annual Surgical Update of the International College of Surgeons: Trauma and Critical Care. Portland, Oregon, June 8-11, 2011
405. Workshop: Ultrasound Guided Procedures. Portland, Oregon, June 10, 2011.
406. Medtronic VIP Meeting. Memphis, July 7, 2011
407. Botox for chonic migraine patients. Dearborn, Michigan, August 12, 2011
408. Sacroliliac Fusion. William Beaumont Royal Oak. Troy, Michigan, August 13, 2011
409. 146th Annual Scientific Meeting MSMS. Troy, October 26-29, 2011.
410. Updates in Ischemic and Hemorrhagic Cerebrovascular Disease. Troy , October 26-29, 2011
411. Advances in Minimally Invasive Spine Surgery. Troy , October 26-

- 29, 2011.
412. Diagnosis and treatment of primary and Metastatic Brain Tumors. Troy , October 26-29, 2011.
413. Management of Epilepsy: newly diagnosed and when medications fail. Troy , October 26-29, 2011.
414. Neurology and Neurosurgery Review Topics. Troy , October 26-29, 2011.
415. DMC Fall Seminar. Troy, MI, October 29, 2011.
416. NASS North American Spine Society Annual Meeting. Chicago, Illinois, November 2-5, 2011.
417. Convergence of Science and Surgery: the future treatment of patients with brain tumors. Townsend Hotel, Birmingham, Michigan, November 8, 2011.
418. American Association of Neurological Surgeons AANS Annual Meeting, Miami, Florida, April 14-19, 2012
419. Transfacet Technology: An Alternative to Pedicle Screw Fixation with Interbody Techniques, Miami, Florida, April 14, 2012
420. Incorporation of Electronic Technology to Improve Clinical Practice: Current Uses and Future Directions, Miami, Florida, April 14, 2012
421. Peripheral Nerve Injuries, Entrapments and Tumors: Examination and Evaluation, Miami, Florida, April 15, 2012
422. The Spectrum of Adjuvant Therapy for Brain Tumors, Miami, Florida, April 14-19, 2012
423. Current Surgical Techniques and Approaches to MIS Spine Surgery, Miami, Florida, April 14-19, 2012
424. Malignant Brain Tumors: State-of-the-Art Treatment, Miami, Florida, April 14-19, 2012

425. Resective Strategies for Epilepsy, Miami, Florida, April 14-19, 2012
426. 2012 ASLMS Annual Conference , Kissimmee, FL, April 18-22, 2012
427. New Frontiers in Neuroscience:2012. Birmingham, MI, April 27 2012
428. Risk Management Seminar: Defensive Medicine and Medical Malpractice. Troy, MI, May 19, 2012.
429. American Academy Of Neurological and Orthopedic Surgery 35th Annual Scientific Meeting, Atlanta, Georgia
430. K2M Bioskills Lab, Lansdowne, VA, June 21-22, 2012
431. Traumatic Injury-MRI Update, Birmingham, MI, July 18, 2012
432. MINS MIS Workshop, Beaumont Hospital, Royal Oak , MI, August 1, 2012
433. Endoscopic Training Joimax, Louisville, KY, August 8, 2012
434. K-2 MIS Workshop, Beaumont Hospital, Royal Oak, MI, September 8, 2012
435. SpineFrontier Workshop, Spine frontier Headquarters, Boston, MA, September 14, 2012
436. SMISS Advanced Track Cadaveric Course , M.A.R.C. Lab, Miami, FL, September 21 2012

437. SMISS Annual Meeting, Miami, FL, September 21-23, 2012
438. Spine education: Mazor Robotics, Spineology, Orthofix. Lakes Surgery Center, West Bloomfield, MI, November 10, 2012
439. BIAMI Brain Injury Association MI. Dual Diagnosis: TBI & Mental Health. Novi, MI, November 15, 2012
440. Endoscopic Spinal Surgery: TESSYS, iLESSYS, Multiuse. Medizinische Kompetenzzentrum, Wendisch Rietz, Berlin, Germany, November 29-30, 2012
441. Visitation Program Spine Surgery, Helios Klinik Voltach, December 5, Voltach, Germany
442. Visitation Program Spine Surgery, Klinik Rotes Kreuz, Frankfurt, Germany, December 3, 2012
443. Visitation Program Spine Surgery, Rugklinik Ipreburg, The Netherlands, December 4, 2012
444. German Spine Society Annual Meeting, Stuttgart, Germany, Dec 6-8, 2012
445. Introduction to Evidence Based Medicine, Troy, MI, Jan 31, 2013
446. AxialLIF Bioskills and Lateral access Lab, Synergy Surgical, at Beaumont Toyal Oak Learning Center, Troy, MI, Feb 16, 2013
447. The Role of Microsurgery in the Management of Neurovascular Disorders, March 19, 2013, Troy, MI.

448. Information Mastery-Searching PubMed, Beaumont - Troy, Troy, MI , March 28, 2013
449. MedEdPortal:dissemination of educational resources as scholarship, Beaumont, Royal Oak, MI, March 29, 2013
450. ISASS 13th Annual Meeting Minimally, Minimally Invasice Endoscopic Surgery, April 3-6, 2013, Vancouver, Canada
451. MSMS House of Delegates Meeting, , May 28-29, 2013 Grand Rapids, MI
452. Evidence Based Medicine. NASS Headquarters, Burrridge, Il, May 11, 2013
453. New Frontiers in Neuroscience, Birmingham, MI, May 30, 2013
454. American Academy of Neurological and Orthoepedic Surgery 37th Annual Meeting, Jacksonville, Florida, June 7-8, 2013
455. Minimally Invasive Neurosurgical Society (MINS) Improving Outcomes with Knowledge. Detroit, Michigan, August 10, 2013
456. Minimally Invasive Neurosurgical Society (MINS) Cadaveric Spine MIS Workshop, Detroit, MI, August 8-9, 2013
457. Mobic C Total Disc Replacement Course, Laguna Beach, CA, September 3, 2013
458. Advances in Neuro Imaging, Head & Neck , Auburn Hills, MI, October 12, 2013
459. Complete Coding Updates for 2014. MSMS, Troy, MI, December 3, 2013

460. ICD-10-Are you prepared? MSMS, Troy, MI, December 3, 2013.
461. Technological Advancements in Pain Control & Minimally Invasive Surgery, Troy, MI, December 4, 2013
462. ISSAS MISS Course and Cadaver Lab, Las Vegas, NV, January 17-20, 2014
463. Complication Avoidance and Management, San Diego, CA, Feb 21, 2014
464. Cavernous Sinus Surgery: Myth or Reality? Birmingham , MI, March 4, 2014
465. ISASS 2014 . Miami Beach, FL, April 29-May 4, 2014
466. Current techniques in complex spine surgery (Zimmer) May 16-17, 2014
467. 3rd Annual William M. Davidson Medical Education Week. Stanford Training Program. Royal Oak, MI, May 19, 2014.
468. Special BCBS coding seminar for DMC PHO physicians, Southfield, MI, May 31, 2014
469. EndoLIF (Endoscopic Lumbar Interbody Fusion) Training course.Vista Lab, Baltimore, MD, June 7, 2014.
470. American Academy of Neurological and Orthoepedic Surgery 38th Annual Meeting, Memphis, TN, June 11-14, 2014.
471. Minimally Invasive Neurosurgical Society (MINS) Improving Outcomes with Knowledge. Detroit, Michigan, July 24-27, 2014
472. Minimally Invasive Neurosurgical Society (MINS) Cadaveric Spine MIS Workshop, Detroit, MI, July 24, 2014
473. SMISS Annual Meeting , Miami, Florida, September 19-21, 2014

474. SMISS Advanced Track Cadaveric Course , M.A.R.C. Lab, Miami, Fl, September 21 2014
475. Essentials and Controversies of Spine Care Coding, NASS, San Francisco, CA, November 10-11, 2014
476. NASS North American Spine Society 29th Annual Meeting, San Francisco, CA, November 12-15, 2014
477. Advanced Endoscopic Skull Base and Pituitary Surgery: Hands-on Symposium, May 8-9, 2015
478. 77th Annual Surgical Update of the ICS-US Section held in conjunction with the 39th AANOS Scientific Meeting, Annapolis , MD, June 11-13, 2015
479. IV Brain and Spine Symposium, Miami, Fl, September 17-20, 2015
480. Spine Laboratory Workshop, IV Brain ans Spine Simposium, Miami, Fl, September 17, 2015
481. Degenerative and Complex Conditions in the Aging Spine. Atlanta, GA, March 18-19, 2016.
482. 84 th AANS (American Association of Neurological Surgeons) Annual Meeting, Chicago, Il, April 30-May 4, 2016
483. Practical Clinic: Integrating Pain Management into your neurosurgical practice, Chicago, Il, March 30, 2016
484. PRACTICAL CLINIC: ALTERNATIVES TO TRANSPEDICULAR APPROACHES TO ACHIEVING ARTHRODESIS, March 30, Chicago, IL, 2016
485. 2016 PRACTICAL CLINIC: CPT CODING UPDATE WITH ICD-10 FOR NEUROSURGERONS, May 1, Chicago, Il, 2016
486. Minimally Invasive Spinal Neurosurgery: Indications, techniques and

- complicationsimally , Chicago, Il, May 2, 2016.
487. Deep Brain Stimulation: update and new directions. March 30, 2016, Chicago, Il.
488. How Expandable Technology has changed my Practice? May 3, 2016, Chicago, Il.
489. 78th Annual Surgical Update, International College of Surgeons, United States Section, Troy, MI, June 16-18, 2016
490. AANOS 40th Annual Scientific Meeting,. Troy, MI, June 17-18, 2016. Scientific Chair of Meeting
491. Annual Meeting Congress of Neurological Surgeons (CNS), SanDiego, CA, September 24-28, 2016
492. Neurovascular Update: Evidence-Based guidelines in Ischemic and Hemorrhagic Stroke for the Practicing Neurosurgeon, September 24, 2016. San Diego, CA
493. Cervical Sondylotic Myelopathy. September 24, 2016, San Diego, CA
494. Spinal Crd Stimulation: the transformation. September 25, 2016. SanDiego, CA
495. Guidelines for Lumbar Degenerative Disease. Sept 26, 2016. San Diego, CA
496. New CPT Codes, MIPS and Bundling, Sept 26, 2016. San Diego, CA
497. Managing Degenerative Thoracic Disease. Sept 27, 2016. San Diego, CA
498. Concussion:Diagnosis, Management and Outcomes. Sept 27, 2016. San Diego, CA
499. Minimally Invasive Deformity: New Frontiers. Sept 28, 2016. San Diego, CA
500. Endoscopic Spinal Surgery, Joimax , Harvard University, Boston,

MA, October 24, 2016

501. North American Spine Society, NASS 31th Annual meeting,
Boston, MA, October 26-29, 2016

502. Brazilian Meeting of Laser Therapy, Sao Paulo, Brazil, November
2016

503. World Association for Laser Therapy Annual Meeting, , Sao
Sebastao, Brazil, November 6-9, 2016

504. 79th Annual Surgical Update, International College of Surgeons,
United States Section, Seattle, WA, June 15-17, 2017

505. AANOS 40th Annual Scientific Meeting, Seattle, WA, June 16-17,
2017. Scientific Chair of Meeting

506. 19th Annual Update in Headache and Pain management, Dearborn,
MI, May 12, 2017

P. RESEARCH/GRANTS

Public Health Service

April 1996

Subject: Localization of Epileptic Foot with PET in Children
\$327,409.

Cray Research

June 1996

Subject: High Performance Computing Technologies in the Field of
Computer
Assisted Surgery
\$8,000.

Elekta Leksell Corporation

July 1996

Subject: Stereotactic and Radiosurgery Fellowship Award
\$35,000

National Science Foundation

September 1996
Subject: Virtual Brain Model System
\$100,000

NIH - National Institute of Health
12/1/96 ~ 11/30/01
Subject: Localization of Epileptic Foci with Pet in Children
\$120,000

Rhone-Poulenc Rorer
Funded: January 2000
Subject: Phase II Trial of Local Chemotherapy Using Gliadel, Local
Radiation and Systemic Cancer Antigen Immunotherapy for Primary
Grade IV Astrocytoma
GIA37029
\$145,700

NASA - National Aeronautics and Space Administration
Subject: The Development and Human Factors Analysis of Advanced 3D
Visualization for Telepresence
Dates of approval/Proposed project: 01/15/00-01/14/03
Annual Direct Costs/Percent Effort: \$382,650 10%

NASA
Subject: Evaluation of the Use of Augmented Reality Technology in
Space Station Remote Manipulator System Trainer. January 2002

NASA Research
Subject: Framework Assessing Notorious Contributing Influences to
Error (FRANCIE):
Researching and Adding the Cognitive Component for Human
Performance Analysis Based on Relevant Cognitive Models. January
2002

Embassy of Arab Republic
Title of Project: Egyptian Research Fund
Dates of Approved/Proposed Project: 08/01/99-07/30/03
Annual Direct Costs: \$20,000

NSF
Title of Project: IGERT-Interdisciplinary Traineeship in High Performance
Computing Applications

Dates of Approved/Proposed Project: 08/01/00-07/31/05
Annual Direct Costs/Percent Effort: \$2,559,322 11%

MLSC-Michigan Life Sciences Corridor

Title of Project: Integration of Bioengineering & Biocomputing to Advance Michigan Computer-Assisted Surgery Research

Dates of Proposed Project: 08/01/03-07/31/06

Total Award Amount/Percent Effort: \$3,377,560 45%

Wayne State University

Title of Project: Wireless Web Based Teaching Tools

Dates of Proposed Project: 05/15/03- 02/14/04

Total Award Amount/Percent Effort: \$4,938 5 %

Study Title: "Feasibility Study: Safety of Cortical Stimulation in Patients with Hemiparetic Stroke"

Sponsor: Northstar Neuroscience, Inc.

PI: Jeffrey A. Brown, M.D.

Total Direct Costs: \$228,489

Total Costs: \$284,469

Dr. Zamorano's Effort: 5%

Advanced Robotic Home Care Centered Applications.

Private source investing.

Dates of project: 11/08 until now

SUBMITTED GRANTS

BRP – Bioengineering Research Partnership

Title of Project: Data Sensing, Automatic 'Real-Time' Identification of Structure, Intelligent Planning and Advanced Visualization for Computer Enabled Surgery

Dates of Proposed Project: 09/01/03-08/30/05

Annual Direct Costs/Percent Effort: \$3,620,585 30%

NIH- National Institute of Health

Title of Project: Biocomputing Tools for Image Guided Interventions

Dates of Proposed Project: 09/01/2003-08/31/2008

Annual Direct Costs/Percent Effort: \$6,043,272 40%

Department of Defense (DOD)

Title of Project: Integration of Bioengineering and Biocomputing Tools for Remote Computer Assisted Surgical Applications.

Dates of Proposed Project: 10/01/2003-9/30/2007

Annual Direct Costs/Percent Effort: \$3,736,352 40%

NASA- AHST

Title of Project: Integration of Bioengineering and Biocomputing Tools for Remote Computer Assisted Surgical Applications.

Dates of Proposed Project: Preproposal

Annual Direct Costs/Percent Effort: \$723,133 30%

NASA- RIS

Title of Project: Implementation of an Intelligent System for Computer Assisted Surgery

Dates of Proposed Project: Preproposal

Annual Direct Costs/Percent Effort: \$2,278,409 30%

NIH

Title of Project: Improved Characterization of Tumors in MRI using SWI

Dates of Proposed Project: 07/01/05 -06/30/08

Annual Direct Costs/Percent Effort: \$2,208,320 10%

MTTC

Title of Project: Biomedical Computing to Advance Image Guided Applications in Michigan

Dates of Proposed Project: 9/1/04 - 8/31/07

Annual Direct Costs/Percent Effort: \$3,262,316 20%

NIH

Title of Project: Optimized Intelligent Planning in Image-Guided Surgeries

Dates of Proposed Project: 10/1/04- 9/30/09

Annual Direct Costs/Percent Effort: \$2,469,924 51%

MTTC

Title of Project: Data Sensing, Transmissioin, and Visualization for Advanced Computer-Assisted Surgery

Dates of Proposed Project: 9/1/04 - 8/31/07

Annual Direct Costs/Percent Effort: \$1,615,574 20%

NIH

Title of Project: Biomedical Computing for Image Guided Surgeries & Therapies

Dates of Proposed Project: 9/15/04 – 9/14/09

Annual Direct Costs/Percent Effort: \$18,706,516

)

MEDC

Title of Project: Biomedical Computing Center to Advance Image-guided Applications in Michigan

Dates of Proposed Project: 9/104-8/31/07

Total Direct Costs/Percent Effort: \$3,262,316 45%

NIH

Title of Project: Robotic Manipulator to Enhance Computer Assisted Surgery

Dates of Proposed Project: 9/1/05 – 8/31/07

Total Direct Costs/Percent Effort: \$275,000 22%

NIH

Title of Project: Machine Learning Optimizatin of Intraoperative Changes

Dates of Proposed Project: 9/1/5 – 8/31/10

Total Direct Amount/Percent Effort: \$2,496,533 45%

STUDIES

Radiation Therapy Oncology Group

Treatment of Primary Malignant Gliomas with Stereotaxis Interstitial Permanent I-125 and Concurrent External RT

1993

WSU Radiation Therapy Oncology Group

Statistical Design of Glioma Protocol D-1072

1993

WSU Radiation Therapy Oncology Group

Subject: A Phase III Trial Comparing the Use of Radiosurgery Followed by Conventional Radiotherapy with BCNU to Conventional Radiotherapy with BCNU for Supratentorial Glioblastoma Multiforme
RTOG 93-05

Barbara Ann Karmanos Cancer Institute and Wayne State University
Subject: D-1910 Phase II Trial of Carmustine, Cyclophosphamide, Cisplatin and Stem Cell rescue in Patients with Refractory Brain Tumors
Co-PI
November 1998

Rhone-Poulenc Rorer
Funded: January 2000
Subject: Phase II Trail of Local Chemotherapy Using Gliadel, Local Radiation and Systemic Cancer Antigen Immunotherapy for Primary Grade IV Astrocytoma
GIA37029

Q. SERVICE

Q1.EDITORIAL & REVIEW ACTIVITIES

EC Neurology, Editirial Board

Editorial Board Journal of Neurosurgery Part A

Editorial Board of Minimally Invasive Neurosurgery Journal

Editorial Board Spine Line (NASS) 2010-Present

Editorial Board Robotics in Surgery. 2003- Present

Editorial Board of Photomedicine and Laser Surgery. 2010- present.

Image Guided Surgery, Editorial Board, 1994 - Present

Minimally Invasive Neurosurgery, Editorial Board, 1994 - Present

Virtual Reality in Medicine, Editorial Board, 1994 - Present

International Society for Stereotactic Radiosurgery, Editorial Board, 1994 - Present

Board member of International Journal for Minimally Invasive Neurosurgery, 1994 – Present

Q2. PROFESSIONAL

Evidence-based Guideline Development Committee of NASS (North American Spine Society (2013-2016)

Performance Measurement Committee of NASS (North American Spine Society (2013- 2016)

Professional, Economic and Regulatory Committee (PERC) of of NASS (North American Spine Society (2013- 2016)

Delegate Body of the Wayne County Medical Society of Southeast Michigan

SpineLine Editorial Board Member (2013-2016)

WCMSSM Executive Council (2013-2014)

Board of Regents, Regent of the US Section of the International College of Surgeons (2013-present)

Board of Director American Academy of Neurological and Orthopedic Surgeons (AANOS) (2010-present).

Education Sub-Committee of the American Academy of Neurological and Orthopedic Surgeons (AANOS) (2011-present).

Vice-Chairman Fund Raising Sub-Committee of the American Academy of Neurological and Orthopedic Surgeons (AANOS) (2011-present)

Scientific Organizing Sub-Committee of the American Academy of Neurological and Orthopedic Surgeons (AANOS) (2011-present)

American Academy of Neurological and Orthopedic Surgeon, Board of Director, 2010- Present

Board of Directors/Secretary Medical Executive Committee (MEC), Southeast Michigan Surgical Hospital, (2010-present)

Board of Directors, PPPR Detroit Medical Center, (2008 until present)

Member at Large, Medical Staff Operations Committee (MSOC) Harper/Hutzel Hospital, (2006-present)

Board of Directors, Greater Michigan Gammaknife, William Beaumont Royal Oak, (2008-present)

Board of Directors, American Academy of Neurological and Orthopaedic Surgeons (AANOS), (2010-present)

Delegate Wayne County Medical Society to MSMS from Geographic District three (1999 - Present)

Wayne County Medical Society, Delegate (1998 – Present)

Honorary Membership to the American Academy of Neurological and Orthopedic Surgeons, May 29, 2009- Present.

Consultant to the Neurological Devices Panel of the Medical Devices Advisory Committee, Center for Devices and Radiological Health, Food and Drug Administration, FDA (1993-present).

Consultant Department of Defense DOD (1998-2010)

Consultant NASA (1999- present)

Principal Investigator - Radiation Therapy Oncology Group (RTOG 93-05), "A Phase III Trial comparing the use of radiosurgery followed by conventional radiotherapy with BCNU to conventional radiotherapy with BCNU for supratentorial glioblastoma multiforme."

Q3. PUBLIC: COMMUNITY BOARDS AND COMMITTEES

Board of Director St Vincent de Paul Foundation Board (2006-present)

Board of Directors WDL Vail Ritz Carlton Club Association (2012-present)

Pine Lake Country Club Committees Strategic Planning (2013-present)

Pine Lake Country Club Financial Committee (2013-present)

Detroit Athletic Club Communications Committee (2012-present)