

CURRICULUM VITAE

Name: Garth Rees Cosgrove

Address: 15 Lawson Road
Winchester MA 01890

Date of Birth: September 22, 1956

Place of Birth: Montreal, Quebec, CANADA

Education

1976 B.Sc. Queen's University
1980 M.D. Queen's University

Postdoctoral Training

1980-1981 Intern in General Surgery, Royal Victoria Hospital, McGill University, Montreal, Quebec

1981-1984 Resident in Neurosurgery, Montreal Neurological Institute, McGill University, Montreal, Quebec

1984-1985 Senior Registrar, Neurosurgery, Addenbrooke's Hospital, University of Cambridge, Cambridge, England
Honorary Registrar, Neurology, National Hospital for Nervous Diseases, Queen's Square, London, England

1985-1986 Chief Resident in Neurosurgery, Montreal Neurological Institute, McGill University, Montreal, Quebec

Licensure and Certification

1980 Licentiate of Medical Council of Canada
1982 Diplomate of National Board of Medical Examiners
1986 Massachusetts License Registration
1988 Fellow, Royal College of Surgeons of Canada
1988 Fellow, Federation of Medical Specialists of Quebec
1989 Diplomate, American Board of Neurological Surgery
1990 Commonwealth of Virginia License Registration
2006 Licentiate, Bermuda Medical Council

Academic Appointments

1986-1989 Instructor in Surgery, Harvard Medical School
1989-1990 Assistant Professor of Surgery, Harvard Medical School
1990-1992 Assistant Professor of Neurological Surgery, University of Virginia School of Medicine
1990-1992 Assistant Professor of Neurology, University of Virginia School of Medicine
1992- Visiting Assistant Professor of Neurological Surgery, University of Virginia School of Medicine

| | |
|-----------|--|
| 1992-1996 | Assistant Professor of Surgery, Harvard Medical School |
| 1996-2005 | Associate Professor of Surgery, Harvard Medical School |
| 2005- | Professor of Neurosurgery, Tufts University School of Medicine |

Hospital Appointments

| | |
|-----------|--|
| 1986-1990 | Attending Neurosurgeon, Beth Israel Hospital, Boston, MA |
| 1990-1992 | Attending Neurosurgeon, University of Virginia Health Sciences Center, Charlottesville, VA |
| 1992-1995 | Assistant Visiting Neurosurgeon, Massachusetts General Hospital, Boston MA |
| 1993- | Consultant Neurosurgeon, Spaulding Rehabilitation Hospital, Boston, MA |
| 1995-2005 | Associate Visiting Neurosurgeon, Massachusetts General Hospital, Boston MA |
| 1995-2005 | Associate Visiting Surgeon, Massachusetts Eye and Ear Infirmary, Boston, MA |
| 2005- | Senior Neurosurgeon, Department of Neurosurgery, Lahey Clinic |
| 2005- | Chairman, Department of Neurosurgery, Lahey Clinic |

Other Professional Positions and Major Visiting Appointments

| | |
|------------|--|
| 1990- | Consultant, The Partnership for Organ Donation |
| 1990-1992 | Member, Board of Directors, New England Monitoring Co., Inc. |
| 1990-1992 | Member, Board of Directors, Virginia Organ Procurement Agency |
| 1992- | Visiting Neurosurgeon and Clinical Consultant, Department of Neurological Surgery, University of Virginia Health Sciences Center |
| 1995- | Member, Board of Directors, American Society of Stereotactic and Functional Neurosurgery |
| 1998-2006 | Member, Professional Advisory Board, Epilepsy Foundation of Massachusetts and Rhode Island |
| 1999-2001 | Secretary/Treasurer, American Society of Stereotactic and Functional Neurosurgery |
| 2000- | Member, Board of Directors, New England Grenfell Association |
| 2000- | Member, Medical Advisory Board, Confluent Technologies |
| 2001- 2002 | ASSFN Liaison, Board of Directors, American Association of Neurological Surgeons |
| 2001- 2003 | Vice President, American Society of Stereotactic and Functional Neurosurgery |
| 2003- 2005 | President, American Society of Stereotactic and Functional Neurosurgery |
| 2003- 2005 | ASSFN Liaison, Board of Directors, American Association of Neurological Surgeons |
| 2004- 2006 | Member, Board of Directors, Mereca, Inc. |

Awards and Honors

| | |
|------|---|
| 1974 | Queen's Anniversary Entrance Scholarship, Queen's University |
| 1976 | Senator F. Carrel Scholarship, Queen's University |
| 1977 | R. Dowd Prize in Anatomy, Queen's University Medical School |
| 1979 | Senator F. Carrel Scholarship, Queen's University |
| 1980 | Gold Medal in Surgery, Queen's University Medical School |
| 1984 | K.G. McKenzie Award, The Royal College of Physicians and Surgeons, Canadian Neurosurgical Society |
| 1985 | Donaghy Prize in Cerebrovascular Disease, Association of Quebec Neurosurgeons and New England Neurosurgical Society |
| 1986 | Wilder Penfield Award, Montreal Neurological Institute |
| 2000 | Life Member #141261, National Registry of Who's Who |

2000 Daniel D Federman Outstanding Clinical Educator Award, Harvard Medical School

Major Local Committee Assignments

1990-1992 University of Virginia School of Medicine
 Member, Quality Assurance Committee, 1990-1992
 Member, Search Committee for Chairman of Orthopedic Surgery, 1991
 Member, Institutional Self-study Task force for LCME Accreditation, Finance Subcommittee, 1991
 Member, Task Force for UVA Capital Campaign, 1991
 Member, Council on Medical Education, 1991
 Chairman, Search Committee for Research Assistant Professor of Neurosurgery and Biomedical Engineering, 1992

1991- 1992 University of Virginia Health Sciences Center
 Member, Organ Donation Committee

1992- 2005 Massachusetts General Hospital
 Member, Steering Committee, Center for Minimally Invasive Therapy 1992-
 Member, Laser Safety Committee 1992-
 Member, Global Fee Committee 1992-1993
 Member, Tertiary Care Advisory Council, 1993-1995
 Member, Length of Stay Committee, 1993
 Member, Bedded Outpatient Committee, 1993-1996
 Member, Information Resources Committee (Neuroscience), 1994-2000
 Member, Strategic Committee on Patient Focused Care, 1995
 Chairman, Sub-Committee on Technological Translational Research in Neuro-Oncology, 1996-1997
 Member, Task Force on Imaging Research in the MGH Clinical Neuroscience Units 1999-2000
 Member, Preoperative Testing Initiative Committee 2000

Massachusetts General Physicians Organization
 Member, Practice Committee, 1995-1999
 Member, Managed Care Committee, 1997-1998

2005- Lahey Clinic Medical Center
 Member, Search Committee for Chairman of Radiology 2006

Major National and Regional Committee Assignments

1991 NIH Neurology B-1 Study Section, Special reviewer

1996 ASSFN, Member, Task Force on Guidelines for Epilepsy Surgery

1996 ASSFN, Chairman, Task Force on Guidelines for Psychosurgery

1998-1999 Congress of Neurological Surgeons, Member, Annual Meeting Scientific Program Committee

1998-1999 Congress of Neurological Surgeons, Chairman, Nursing Educational Program, Annual Meeting Scientific Program Committee

1998-2000 Member, Data Safety Monitoring Board, Diacrin/Genzyme Study of xenotransplantation in Parkinson's Disease

2000 Congress of Neurological Surgeons, Member, Annual Meeting Scientific Program Committee

2002-2004 American Association of Neurological Surgeons, ABNS Liaison Committee

2005-2006 American Society of Stereotactic and Functional Neurosurgery Biennial Meeting, Chairman

2005- Member, Data Safety Monitoring Board, Deep Brain Stimulation for Treatment Refractory Major Depression

Editorial Boards

| | |
|-----------|--|
| 1991-1998 | Neurosurgery Section Editor, <u>Current Surgery</u> |
| 1992- | Ad Hoc Reviewer, <u>Journal of Neurosurgery</u> |
| 1993- | Ad Hoc Reviewer, <u>Neurosurgery</u> |
| 1997- | Ad Hoc Reviewer, <u>New England Journal Of Medicine</u> |
| 1998 | Guest Editor, Neurosurgical Focus, <u>Journal of Neurosurgery</u> |
| 1998- | Ad Hoc Reviewer, <u>Surgical Neurology</u> |
| 1999- | Member, Editorial Board, <u>Stereotactic and Functional Neurosurgery</u> |
| 2000- | Member, Editorial Board, <u>Neurosurgery News</u> |
| 2001- | Ad Hoc Reviewer, <u>Annals of Neurology</u> |
| 2002- | Reviewer, <u>Agency for Healthcare Research and Quality</u> |
| 2003 | Guest Editor, Neurosurgical Focus, <u>Journal of Neurosurgery</u> |

Memberships, Offices and Committee Assignments in Professional Societies

| | |
|-----------|---|
| 1980-1986 | Quebec Medical Association |
| 1980-1986 | Canadian Medical Association |
| 1986- | Massachusetts Medical Society |
| 1987- | New England Neurosurgical Society |
| 1987- | Congress of Neurological Surgeons |
| | 1998-1999 Member, Annual Meeting Scientific Program Committee |
| 1987- | American Society for Stereotactic and Functional Neurosurgery |
| | 1995-1999 Member, Board of Directors |
| | 1999-2001 Secretary/Treasurer |
| | 2001-2003 Vice-President |
| | 2003-2005 President |
| | 2005-2006 Annual Meeting Chairman |
| 1987 | World Society for Stereotactic and Functional Neurosurgery |
| | 2001-2005 Secretary/Treasurer |
| | 2004 Member, Scientific Committee for 14 th World Congress |
| 1988- | American Epilepsy Society |
| 1988- | Epilepsy Association of Massachusetts and Rhode Island |
| | 2000 – 2006 Member, Professional Advisory Board |
| 1988- | Epilepsy Foundation of America |
| 1989- | National Association of Epilepsy Centers |
| 1989- | Canadian Neurosurgical Society |
| 1989- | Royal College of Physicians and Surgeons of Canada |
| 1989- | American Association of Neurological Surgeons |
| | 2000- Member, ABNS Liaison Committee |
| | 2000- Member, USA Today Advertorial Experts Panel |
| | 2001-2005 Member, Board of Directors, Ex-Officio |
| 1989- | American Board of Neurological Surgery |
| | 1999 Guest Examiner |
| 1990- | AANS/CNS Joint Section on Stereotactic and Functional Neurosurgery |
| | 1995-1999 Member, Executive Council |
| | 1996 Chairman, Task Force on Psychosurgery |
| | 1996 Member, Task Force on Epilepsy Surgery |
| | 1996 Member, Task Force on Pallidotomy |
| | 1997- 1998 Co-Chairman, Symposium on Current Trends in Epilepsy Surgery, Annual Meeting of the AANS |
| | 1999-2001 Secretary/Treasurer |
| | 2001-2003 Vice-President |
| | 2003-2005 President |
| | 2005-2006 Annual Meeting Chairman |

| | |
|-----------|---|
| 1990-1992 | Neurosurgical Society of the Virginias |
| 1994- | International Stereotactic Radiosurgery Society |
| 1998- | American Academy of Neurological Surgery |
| 2005- | AANS/CNS Joint Section on Tumors |
| 2006- | Society of Neurological Surgeons |

Major Research Interests

1. Stereotactic and functional neurosurgery
2. Surgical treatment of brain tumors
3. Functional imaging of human cerebral cortex
4. Radiosurgery

Research Funding Information

| | |
|------|---|
| 1992 | Radionics, Inc., Principal Investigator "RSA Stereoplan System for Neurosurgery" |
| 1992 | Photoelectron Corporation, Co- Principal Investigator "Photoelectron Interstitial Radiosurgery Source for Therapy of Malignant Brain Tumors" |
| 1993 | Radionics, Inc., Principal Investigator "Clinical Evaluation of an Operating Arm System" |
| 1994 | Radionics, Inc., Principal Investigator "Electronic Stereotactic Atlas for Functional Neurosurgical Procedures" |
| 1995 | Photoelectron Corporation, Principal Investigator "A Study of the Safety and Efficacy of the Photon Radio-surgery System and the Treatment of Brain Metastases" |
| 1995 | Radionics, Inc., Principal Investigator "RSA Optical tracking system for Neurosurgery" |
| 1995 | Medtronic Inc., Co- Principal Investigator " Intrathecal Baclofen for Spasticity of Cerebral Origin" |
| 1996 | Agency for Health Care Policy and Research, Consultant " A Formalized Protocol for Increasing Organ Donation" |
| 1997 | Rhone-Poulenc Rorer, Co-investigator "N96-01: Open Label, Multicenter, Dose Escalation Study of Gliadel for Patients with Recurrent Malignant Gliomas" |
| 1998 | NIH-NCI # 1R01 CA5768305, Co-investigator, "Toward a Molecular Classification of Human Gliomas" |
| 2001 | Cyberonics, Co-Investigator, "A Multi-center, Safety and Efficacy Study of Vagus Nerve Stimulation in Patients with Major Affective Disorders" |
| 2001 | Cyberonics, Co-Investigator, "A Multi-center, Safety and Efficacy Study of Vagus Nerve Stimulation in Patients with Anxiety Disorders" |
| 2002 | NIH # R01 NS18741, Co-investigator, "Neural basis of endogenous potentials in humans" |
| 2003 | Confluent Surgical Inc., Principal Investigator, "A Multi-Center Study to Evaluate the DuraSeal™ Dural Sealant System as an Adjunct to Sutured Dural Repair During Cranial Surgery" |
| 2005 | Confluent Surgical Inc., Principal Investigator, " A Prospective Multi-Center, Randomized Control Study to Compare the Spinal Sealant System as an Adjunct to Sutured Dural Repair with Standard of Care Methods during Spinal Surgery" |
| 2005 | Confluent Surgical Inc., Principal Investigator, "A Post Market Approval Study to Evaluate the DuraSeal™ Dural Sealant System as an Adjunct to Sutured Dural Repair During Cranial Surgery" |
| 2005 | BioNeuronics Inc., Principal Investigator, "Collection of digital EEG data from patients with epilepsy undergoing video/EEG telemetry" |

Principal Clinical and Hospital Service Responsibilities

| | |
|-----------|--|
| 1986-1990 | Attending Neurosurgeon, Beth Israel Hospital, Boston, MA |
| 1990-1992 | Attending Neurosurgeon, University of Virginia Health Sciences Center, Charlottesville, VA |
| 1990-1992 | Co-Director, University of Virginia Comprehensive Epilepsy Program, University of Virginia Health Sciences Center, Charlottesville, VA |
| 1992-2005 | Attending Neurosurgeon, East Neurosurgical Service, Massachusetts General Hospital, Boston, MA |
| 1992-2005 | Co-Director, MGH Epilepsy Center, Massachusetts General Hospital, Boston, MA |
| 1992-2005 | Director, Computer Aided Neurosurgical Planning Laboratory, Massachusetts General Hospital, Boston, MA |
| 2005- | Chairman, Department of Neurosurgery, Lahey Clinic Medical Center Attending Neurosurgeon, Lahey Clinic |

Teaching Experience

Local Contributions

McGill Medical School

| | |
|------|---|
| 1985 | Demonstrator in Neuroanatomy, McGill University |
| 1986 | Chief Resident, Montreal Neurological Institute |

Harvard Medical School

| | |
|-----------|--|
| 1986-1990 | Clinical instruction of interns and fellows, Neurosurgical service, Beth Israel Hospital |
| 1987-1990 | Instructor, Advanced Trauma and Life Support, American College of Surgeons |
| 1989-1990 | Preceptor, Introduction to Clinical Medicine, Harvard Medical School |
| 1994 | Lecturer, Neurobiology I, Health Sciences and Technology |
| 1995-2005 | Lecturer, Introduction to Neuroscience, HST 130 |

University of Virginia Health Sciences Center

| | |
|-----------|--|
| 1990-1992 | Didactic and clinical instruction of medical students, residents and fellows, Neurosurgical clerkship, University of Virginia Health Sciences Center |
|-----------|--|

University of Virginia School of Medicine

| | |
|-----------|--|
| 1990-1992 | Didactic instruction, Introduction to Neurosurgery |
|-----------|--|

Massachusetts General Hospital

| | |
|-----------|---|
| 1992-2005 | Didactic and clinical instruction of medical students, residents and fellows, Neurosurgical service, Massachusetts General Hospital |
| 1992-2005 | Developed and organized core curriculum for Neurosurgery subinternships, Neurosurgical service, Massachusetts General Hospital |

Lahey Clinic Medical Center

| | |
|-------|--|
| 2005- | Clinical instruction and supervision of Tufts' Neurosurgery residents and medical students |
| 2005- | Clinical instruction and supervision of Boston University ENT residents |
| 2005- | Clinical instruction and supervision of Harvard Physical Medicine and Rehabilitation residents |

Tufts University School of Medicine

| | |
|-------|-------------------------------|
| 2005- | Lecturer, Neuroscience Course |
|-------|-------------------------------|

2005- Preceptor, Introduction to Clinical Medicine

Regional, National and International Contributions

Invited Presentations

- 1987 Neurosurgery Grand Rounds, Brigham and Women's Hospital, "Colloid Cysts of the Third Ventricle", Boston, MA
- 1988 Neurology Grand Rounds, University Hospital, "Pre-surgical Evaluation of Intractable Epilepsy", Boston, MA
- 1989 Neurosurgery Grand Rounds, Hartford Hospital, "Stereotactic Depth Electroencephalography for Intractable Epilepsy", Hartford, CT
- 1989 Neurosurgery Grand Rounds, University of Virginia Health Sciences Center, "Surgical Treatment of Intractable Epilepsy", Charlottesville, VA
- 1990 Kluge Symposium on Spasticity, University of Virginia Health Sciences Center, "Surgical Treatment of Spasticity", Charlottesville, VA
- 1991 Neurology Grand Rounds, Fairfax Memorial Hospital, "Surgical Treatment of Epilepsy", Fairfax, VA
- 1992 Neurosurgery Grand Rounds, MGH, "Surgical Treatment of Epilepsy", Boston, MA
- 1993 Radiation Therapy Grand Rounds, "Stereotactic Cingulotomy - The Role of Bragg Peak Radiosurgery", Boston, MA
- MA 1993 Neurosurgery Grand Rounds, MGH, "Surgical Treatment of Epilepsy - Phase II", Boston, MA
- 1993 Movement Disorder Rounds, "Surgical Treatment of Movement Disorders", Boston, MA
- 1993 Neurology in the 90's, HMS CME Course, "Pre-surgical Evaluation and Treatment of Seizures", Boston, MA
- 1993 Facial Pain, HMS CME Course, "Surgical Treatment of Facial Pain", Boston, MA
- 1993 Neurosurgery Grand Rounds, MGH, "Mapping Cortical Function with PET and fMRI", Boston, MA
- 1993 Symposium on Minimally Invasive Therapy, MGH, "Minimal Access Neurosurgery", Boston, MA
- 1993 Congress of Neurological Surgeons, "Surgical Evaluation of Epilepsy of Non-temporal Origin", Vancouver, BC
- 1993 Congress of Neurological Surgeons, "Functional Neurosurgery", Vancouver, BC
- 1993 Child Neurology Course, HMS CME, "Pediatric Epilepsy Surgery", Boston, MA
- 1993 Anesthesia Grand Rounds, MGH, "Mapping Cerebral Cortical Function", Boston, MA
- 1993 Neurosurgery Grand Rounds, MGH, "Pediatric Epilepsy Surgery", Boston, MA
- 1994 Parkinson's Society Meeting, Newton-Wellesley Hospital, "Surgical Treatment of Parkinson's Disease", Boston, MA
- 1994 Johnson and Johnson Symposium on Minimally Invasive Therapy, MGH, "Advanced Neuroimaging for Neurosurgical Planning", Boston, MA
- 1994 Society of Neurosurgery, University of Virginia Health Sciences Center, "Complications of Invasive Intracranial Monitoring for Intractable Epilepsy", Charlottesville, VA
- 1994 Neurology for the 90's, HMS CME, "Neurosurgical Treatment of Cerebral Metastases", Boston, MA
- 1994 Neurology for the 90's, HMS CME, "Pallidotomy for Parkinson's Disease", Boston, MA
- 1994 Fifth International Cleveland Clinic/Bethel Epilepsy Program, "Imaging and Investigation of the Central Area", Cleveland, OH
- 1994 Fifth International Cleveland Clinic/Bethel Epilepsy Program, "Advanced Techniques for the Localization of Function", Cleveland, OH
- 1994 Radiation Therapy Grand Rounds, MGH, "Photoelectron Radiosurgery for Malignant Brain Tumors", Boston, MA
- 1994 MRI Techniques and Epilepsy Research Workshop, Yale-New Haven Medical Center, "Mapping Human Primary Sensorimotor Cortex with fMRI", New Haven, CT
- 1994 Update on Epilepsy, MGH, "Surgical Treatment of Epilepsy", Boston, MA

- 1994 Obstetrics and Gynecology Grand Rounds, MGH, "Interstitial Radiosurgery of Cerebral Metastases", Boston, MA
- 1995 Neurology Grand Rounds, MGH, "Imaging Human Cortical Function", Boston, MA
- 1995 Hematology/Oncology Grand Rounds, MGH, "Interstitial Radiosurgery for Cerebral Metastases", Boston, MA
- 1995 Society of Surgical Oncology, "Functional MRI of Cerebral Cortex for Tumor Excision", Boston, MA
- 1995 Neuroscience Visiting Committee, "Functional MRI: A New Perspective on Brain Structure and Function", Boston, MA
- 1995 American Association of Neurological Surgeons Annual Meeting, "Structural and Functional Mapping of Cerebral Cortex", Orlando, FL
- 1995 MNI Neurosurgical Symposium, McGill University, "Mapping Human Cerebral Cortex with fMRI", Montreal, PQ
- 1995 Society of Neurological Surgery, "3-D Structural and Functional Mapping of Human Cortical Function", Boston, MA
- 1995 International Stereotactic Radiosurgery Society, "Functional Radiosurgery - Psychosurgery", Boston, MA
- 1995 Lars Leksell Meeting, "3-D Functional and Anatomical Mapping of Human Cerebral Cortex", Charlottesville, VA
- 1995 Lars Leksell Meeting, "Psychosurgery - A New Approach", Charlottesville, VA
- 1995 Neurology and Neurosurgery Grand Rounds, "Mapping Cerebral Cortex with fMRI" Dartmouth-Hitchcock Medical Center, Hanover, NH
- 1995 St. Louis Society for Neuroscience, "Stereotactic Cingulotomy for Intractable Psychiatric Illness", St. Louis, MO
- 1995 Institute for Health Professionals, "Surgical Treatment of Epilepsy", Boston, MA
- 1995 First International Congress on Pallidotomy, "Stereotactic Pallidotomy for Parkinson's Disease without microelectrode guidance", San Diego, CA
- 1996 Neurosurgery Grand Rounds, MGH, "Pallidotomy for Parkinsons Disease- the MGH Experience", Boston, MA
- 1996 MGH Pain Clinic Grand Rounds, "Surgical Treatment of Chronic Pain", Boston, MA
- 1996 American Association of Neurological Surgeons Annual Meeting, Decade of the Brain Symposium, "Mapping human cortical function with fMRI", Minneapolis, MN
- 1996 American Association of Neurological Surgeons Annual Meeting, "Techniques for Mapping Cortical Function", Minneapolis, MN
- 1996 George Washington University Decade of the Brain Symposium, "Pallidotomy for Intractable Parkinsons Disease", Washington DC
- 1996 Congress of Neurological Surgeons Annual Meeting, "Outcome Assessment of Pallidotomy", Montreal, Quebec, Canada
- 1996 MGH Course in Neuroanaesthesia, "Mapping Human Cortical Function with fMRI", Boston, MA
- 1996 General Surgery Grand Rounds, "Pallidotomy for Parkinson's Disease", MGH, Boston, MA
- 1996 University of Freiburg Reichert Symposium, "Cingulotomy as Treatment for Severe Psychiatric Disease", Freiburg, Germany
- 1996 Neurosurgery Grand Rounds, MGH, "Pallidotomy for Dystonia - Case Report", Boston, MA
- 1996 Management of Spasticity, Spaulding Rehabilitation Hospital, HMS CME, "Surgical Treatment of Intractable Spasticity", Boston, MA
- 1996 Boston Society for Neurology and Psychiatry, "Surgery for Intractable Epilepsy", Boston, MA
- 1996 Hahneman Medical School, "Living with Brain Tumors, Future Directions", "Advances in Surgical Treatment of Brain Tumors", Philadelphia, PA
- 1996 Neurosurgery Grand Rounds, MGH, "Pallidotomy for Parkinsons Disease- A Three Year Experience", Boston, MA
- 1997 International Workshop on Pallidotomy, UCLA, "Non-microelectrode Guided Pallidotomy for Parkinson's Disease, Los Angeles, CA
- 1997 American Association of Neurological Surgeons Annual Meeting, Stereotactic Surgery for Movement Disorders, "Non-microelectrode-guided pallidotomy", Denver, CO

- 1997 American Association of Neurological Surgeons Annual Meeting, “Cortical Mapping with fMRI”, Denver, CO
- 1997 American Association of Neurological Surgeons Annual Meeting, “Epilepsy Surgery”, Denver, CO
- 1997 Emerson Hospital, Medical Grand Rounds, “Pallidotomy for Parkinson’s Disease”, Concord, MA
- 1997 American Association of Neurological Surgeons Professional Development Program, “Technique of Stereotactic Pallidotomy and Thalamotomy”, Orlando, Florida
- 1997 World Congress of Neurological Surgery, “Functional MRI of Human Cerebral Cortex”, Amsterdam, Netherlands
- 1997 World Society of Stereotactic and Functional Neurosurgery, “Psychosurgery”, Lyons, France
- 1997 Pennsylvania Neurosurgical Society, “Stereotactic Cingulotomy for the Treatment of Intractable Psychiatric Disorders”, Hershey, PA
- 1997 Neuroradiology Grand Rounds, MGH, “Pallidotomy for Parkinson’s Disease: Indications, Techniques and Results”, Boston, MA
- 1997 American Clinical Neurophysiologic Society, “Pallidotomy without Micro-electrode Recording”, Los Angeles, CA
- 1997 Congress of Neurological Surgeons Annual Meeting, “Pallidotomy without Micro-electrode Recording”, New Orleans, LA
- 1997 Child Neurology Course, HMS CME, “Neurosurgical Treatment of Childhood Intractable Epilepsy”, Boston, MA
- 1997 American Epilepsy Society Annual Meeting, “Mapping Human Cognitive Function with Imaging”, Boston, MA
- 1998 Neurosurgery Grand Rounds, “Mapping Human Cortical Function with fMRI”, University of Toronto Medical School, Toronto, Ontario, Canada
- 1998 Neurosurgery Grand Rounds, “Mapping Human Cortical Function with fMRI”, University of Western Ontario Health Sciences Center, London, Ontario, Canada
- 1998 American Association of Neurological Surgeons Professional Development Program, “Technique of Stereotactic Pallidotomy and Thalamotomy”, New Orleans, LA
- 1998 CIMIT Symposium, “Advances in Image Guided Neurosurgery”, Partners HealthCare, Boston, MA
- 1998 Washington Academy of Neurosurgery, “Mapping Human Cortical Function with fMRI”, Washington, DC
- 1998 Washington Academy of Neurosurgery, “Surgery for the Treatment of Intractable Psychiatric Disorders”, Washington, DC
- 1998 Washington Academy of Neurosurgery, “Pallidotomy for Parkinson’s Disease”, Washington, DC
- 1998 Second International Conference on Pallidotomy, “Pallidotomy without Micro-electrode Recording”, Princeton, NJ
- 1998 Neurology and Neurosurgery Grand Rounds, University of Manitoba School of Medicine, “Applications of fMRI in Epilepsy Surgery”, Winnipeg, Manitoba, Canada
- 1998 Third Annual Asian Society of Stereotactic, Functional and Computer-assisted Neurosurgery Meeting, “Pallidotomy for Intractable Parkinson’s Disease”, Singapore
- 1998 Third Annual Asian Society of Stereotactic, Functional and Computer-assisted Neurosurgery Meeting, “Cingulotomy for Intractable Psychiatric Disease”, Singapore
- 1998 Whitehead Institute for Biomedical Research, Brain and Psyche: The Neurobiology of the Self, “Pallidotomy for Intractable Parkinson’s Disease”, Boston, MA
- 1998 Canadian Congress of Neurological Sciences, Neurobiology Review Course, “Clinical Applications of Functional MRI”, Montreal, Quebec, Canada
- 1998 Canadian Congress of Neurological Sciences Annual Meeting, “Functional MRI and Epilepsy of Childhood”, Montreal, Quebec, Canada
- 1998 Ninth International Cleveland Clinic Epilepsy Surgery Symposium, “Cortical Mapping using Transcranial Electromagnetic Stimulation”, Cleveland, OH
- 1998 Ninth International Cleveland Clinic Epilepsy Surgery Symposium, “Epilepsy Surgery for Tumors, Vascular Malformations, Trauma and Cerebrovascular Diseases”, Cleveland, OH
- 1998 European Society of Stereotactic and Functional Neurosurgery, “Stereotactic Interstitial Radiosurgery for Cerebral Metastases”, Freiburg, Germany

- 1998 HMS-CME Tumors of the Central Nervous System, “Functional Techniques in Brain Tumor Surgery”, Boston, MA
- 1998 Congress of Neurological Surgeons Annual Meeting, “ Mapping Human Cortical and Subcortical Function”, Seattle, WA
- 1998 Congress of Neurological Surgeons Annual Meeting, “ Stereotactic Surgery for Movement Disorders”, Seattle, WA
- 1998 Congress of Neurological Surgeons Annual Meeting, “ Functional Brain Imaging”, Seattle, WA
- 1998 Clinical Applications of Functional MRI, “Brain Mapping: A Neurosurgeons Perspective”, Harvard Medical School CME, Boston, MA
- 1998 Epilepsy Foundation of Massachusetts and Rhode Island, “Surgical Treatment of Epilepsy”, Boston, MA
- 1999 Anaesthesia Grand Rounds, “Intraoperative Cortical Mapping Techniques”, Beth Israel Hospital, Boston, MA
- 1999 Neurosurgery Grand Rounds, “Functional MRI and Mapping of Human Cerebral Cortex”, Johns Hopkins University Hospital, Baltimore, MD
- 1999 Interurban Neurosurgical Society Annual Meeting, “Mapping Human Cerebral Cortex with fMRI”, Chicago, IL
- 1999 Stereotactic, Functional and Restorative Neurosurgery: Advances and Prospects for the New Millenium, “ Pyschosurgery: Radiofrequency Lesioning”, New York University Medical Center, New York, NY
- 1999 Society for Minimally Invasive Therapy 11th Annual Meeting, “Interstitial Radiosurgery”, Boston, MA
- 1999 Neurosurgery Grand Rounds, UTSW Medical School, “Non-microelectrode Guided Stereotactic Pallidotomy for Parkinson’s Disease”, Dallas, TX
- 1999 Neurology Grand Rounds, UTSW Medical School, “Cingulotomy for Intractable Psychiatric Disease”, Dallas, TX
- 1999 Congress of Neurological Surgeons Annual Meeting, “ Pallidotomy for Parkinson’s Disease”, Boston, MA
- 1999 Congress of Neurological Surgeons Annual Meeting, “ Neuroanatomy of the Cerebral Cortex, Ventricles and Blood Supply”, Boston, MA
- 2000 Boston Society of Neurology and Psychiatry, “Psychosurgery: A Modern Perspective”, Boston, MA
- 2000 Neurosurgery Grand Rounds, Henry Ford Hospital, “Mapping Human Cerebral Cortex with fMRI”, Detroit, MI
- 2000 Neurosurgery Grand Rounds, Massachusetts General Hospital, “Advanced Neuroimaging: Applications to Neurosurgery”, Boston, MA
- 2000 Neurosurgery Grand Rounds, Massachusetts General Hospital, “Limbic Leucotomy for Self Injurious Behaviour”, Boston, MA
- 2000 100 Years Of Neurosurgery at McGill, “Advanced Neuroimaging: A New Window on Brain Mechanisms”, Montreal Neurological Institute, Montreal, Quebec
- 2000 Clinical Functional MRI 2000, “Functional MRI: A Neurosurgeons Perspective”, Harvard Medical School CME, Boston, MA
- 2000 Neurosurgery Grand Rounds, University of Chicago Medical Center, “Surgery for Intractable Psychiatric Illness: A Modern Perspective”, Chicago, IL
- 2000 Congress of Neurological Surgeons Annual Meeting, “Management of Patients with Movement Disorders”, San Antonio, TX
- 2000 Human Nervous System and Behavior, “Advanced Neuroimaging and Epilepsy Surgery”, Harvard Medical School, Boston, MA
- 2000 European Society of Stereotactic Neurosurgery Meeting, “Optimizing Lesion Resection in Epilepsy Surgery”, London, England
- 2000 International Magnetic Resonance and Epilepsy Symposium, “Surgical Applications of Functional MRI”, Birmingham, AL
- 2000 Modern Treatment of Movement Disorders Symposium, “Macro-electrode Techniques in Movement Disorder Surgery”, Hyman-Newman Institute for Neurology and
Neurosurgery, New York, NY

- 2001 Neurosurgery Grand Rounds, Massachusetts General Hospital, "Catastrophic Epilepsy of Childhood: A Case Report", Boston, MA
- 2001 American Association of Neurological Surgeons Annual Meeting, "Present Status of Surgery for Psychiatric Illness", Toronto, Ontario, Canada
- 2001 Neurosurgery Grand Rounds, Yale/New haven Medical Center, "Surgery for Intractable Psychiatric Illness", New Haven, CT
- 2001 Clinical Functional MRI 2001, "Brain Mapping: A Neurosurgeons Perspective", Harvard Medical School CME, Boston, MA
- 2001 MGH Pain Clinic Grand Rounds, "Neurosurgical Management of Chronic Pain", Boston, MA
- 2001 Child Neurology Course 2001, "Recent Advances in Pediatric Epilepsy Surgery", Harvard Medical School CME, Boston, MA
- 2002 INSERM DBS-OCD Meeting, "Surgical Techniques in Psychosurgery", Aix les Bains, France
- 2002 Neurology Grand Rounds, Boston University School of Medicine, "Advanced Neuroimaging and Epilepsy", Boston, MA
- 2002 Neurology Grand Rounds, Massachusetts General Hospital, Harvard Medical School, "Surgery for Neuropsychiatric Disorders", Boston, MA
- 2002 American Association of Neurological Surgeons Annual Meeting, "Capsulotomy for Obsessive Compulsive Disorder", Chicago, IL
- 2002 American Association of Neurological Surgeons Annual Meeting, "Update on Psychosurgery", Chicago, IL
- 2002 Fourth Annual Boston University Neurology Update, "Advances in Epilepsy Surgery, Mashpee, MA
- 2002 Clinical Functional MRI 2002, "Functional MRI: A Neurosurgeons Perspective", Harvard Medical School CME, Boston, MA
- 2003 Center for Innovative and Minimally Invasive Technology, "A Synthetic Dural Sealant and Adhesion Barrier", MGH, Boston, MA
- 2003 American Association of Neurological Surgeons Annual Meeting, "DBS for Intractable Obsessive Compulsive Disorder: A Response", San Diego, CA
- 2003 American Association of Neurological Surgeons Annual Meeting, "Update on Psychosurgery", San Diego, CA
- 2003 American Association of Neurological Surgeons Annual Meeting, "Functional Mapping of Human Cerebral Cortex", San Diego, CA
- 2003 American Society of Stereotactic and Functional Neurosurgery Quadrennial Meeting, "Modern Neuroimaging and Epilepsy Surgery: Where are we Going?" New York, NY
- 2003 American Society of Stereotactic and Functional Neurosurgery Quadrennial Meeting, "Psychosurgery: Where are we Going?" New York, NY
- 2003 McGill Neuroscience Seminar, "Advanced Brain Imaging: A Neurosurgeon's Perspective", Montreal, QC
- 2004 University of Illinois Neurosurgery Grand Rounds. "Neuroimaging and Epilepsy Surgery: A Neurosurgeon's Perspective", University of Illinois, Chicago, IL
- 2004 Neurology and Neurosurgery Grand Rounds, Vancouver General Hospital, "Surgery for Intractable Neuropsychiatric Disorders" University of British Columbia Medical School, Vancouver, British Columbia
- 2004 British Columbia Neurosciences Day, PD Moyes Lecture, "Imaging and Epilepsy: A Neurosurgeon's Perspective", Vancouver, British Columbia
- 2004 American Association of Neurological Surgeons Annual Meeting, "Update on Psychosurgery", Orlando, FL
- 2004 American Association of Neurological Surgeons Annual Meeting, "Human Brain Mapping", Orlando, FL
- 2004 Basic Functional MRI Course, Massachusetts General Hospital, "Clinical Applications of fMRI: Presurgical Planning, Boston, MA
- 2004 President's Council on Bioethics, "Deep Brain Stimulation for Psychiatric Disorders" Washington, DC
- 2004 MGH Pain Service Grand Rounds, "Neurosurgical Interventions for Cancer Pain", Boston, MA

- 2004 Clinical Functional MRI 2004, “Functional MRI: A Neurosurgeons Perspective”, Harvard Medical School CME, Boston, MA
- 2004 MGH/BWH/CHMC Epilepsy Rounds, “Intracranial Recordings in Epilepsy Patients”, Boston, MA
- 2005 Neurosurgery Grand Rounds, Massachusetts General Hospital, Harvard Medical School, “The Cosgrove Years: A Retrospective”, Boston, MA
- 2005 Fager lecture, Lahey Clinic, “Advanced Neuroimaging: A Surgeon’s Perspective”, Burlington, MA
- 2005 Eastern Association of Electroencephalographers. “Mapping Human Cortical Function”, New York Neurological Institute, New York, NY
- 2005 New England Neurosurgical Society, Sweet Lecturer, “Advanced Brain Imaging: A Neurosurgeon’s Perspective”, Boston, MA
- 2005 Neurology Grand Rounds, Lahey Clinic, “Advances in the Surgical Treatment of Epilepsy”, Burlington, MA
- 2005 Child Neurology Course 2005, “Recent Advances in Pediatric Epilepsy Surgery”, Harvard Medical School CME, Boston, MA
- 2005 Clinical Applications of Functional MRI, “Brain Mapping: A Neurosurgeons Perspective”, Harvard Medical School CME, Boston, MA
- 2005 King Edward Memorial Hospital, Trauma Rounds, “Head and Cervical Spine Trauma” Hamilton, Bermuda
- 2005 Congress of Neurological Surgeons Annual Meeting, Luncheon Seminar, “Advances in Stereotactic and Functional Neurosurgery”, Boston, MA
- 2005 Tufts University School of Medicine Neuroscience Course, “The Thalamus”, Boston, MA
- 2005 Advanced Technologies in the Neurosciences, CIMIT/Dartmouth, “Advanced Techniques in NeuroImaging”, American Academy of Arts and Sciences, Cambridge, MA
- 2005 Advanced Technologies in the Neurosciences, CIMIT/Dartmouth, “Neurostimulation in Pain, Epilepsy, Movement Disorders and Psychiatry”, American Academy of Arts and Sciences, Cambridge, MA
- 2006 Neurology Grand Rounds, NEMC, “Advances in the Surgical Treatment of Epilepsy”, Boston, MA
- 2006 Intraoperative Neurophysiologic Monitoring in Neurosurgery, “Functional Neurosurgery for Psychiatric Disorders” Beth Israel Medical Center, New York, NY
- 2006 Neurology Grand Rounds, Lahey Clinic Medical Center, “Surgery of Neuropsychiatric Disorders”, Burlington, MA
- 2006 Bermuda Health Services, “Imaging the Brain: Form and Function”, Hamilton, Bermuda
- 2006 Neurosurgery Grand Rounds, “Advanced NeuroImaging and Epilepsy: A Surgeon’s Perspective”, Northwestern University Feinberg School of Medicine, Chicago, IL
- 2006 Neurosurgery Grand Rounds, “Surgery for Neuropsychiatric Illness”, Northwestern University Feinberg School of Medicine, Chicago, IL
- 2007 American Association of Neurological Surgeons Annual Meeting, “Neurosurgery with the Masters – Stereotactic and Functional”, Washington, DC
- 2007 American Association of Neurological Surgeons Annual Meeting, “Update on Psychosurgery”, Washington, DC
- 2007 International Workshop on Functional Neurosurgery for Movement Disorders and Mental Illness, National Hospital for Neurology and Neurosurgery, Queen’s Square, “Is There Still a Place for Capsulotomy and Cingulotomy for OCD?” London, England

Teaching Awards

- 1990 Longwood Neurology Residents Award for Teaching, Beth Israel Hospital
- 1993 Residents Award for Teaching, Neurosurgical Service, Massachusetts General Hospital
- 1994 Residents Award for Teaching, Neurosurgical Service, Massachusetts General Hospital
- 1995 Residents Award for Teaching, Neurosurgical Service, Massachusetts General Hospital
- 2000 Daniel D Federman Outstanding Clinical Educator Award, Harvard Medical School

Visiting Professor

| | |
|------|--|
| 1989 | University of Connecticut, Hartford, Connecticut |
| 1989 | University of Virginia, Charlottesville, Virginia |
| 1995 | Dartmouth Medical School, Hanover, New Hampshire |
| 1996 | University of Freiburg, Freiburg, Germany |
| 1997 | State University of New York, Syracuse, New York |
| 1998 | University of Toronto, Toronto, Ontario |
| 1998 | George Washington University, Washington, DC |
| 1998 | University of Manitoba, Faculty of Medicine, Winnipeg, Manitoba |
| 1998 | University of Heidelberg, Mannheim, Germany |
| 1999 | Johns Hopkins University, Baltimore, Maryland |
| 1999 | University of Texas, Southwestern Medical Center, Dallas, Texas |
| 2000 | Henry Ford Hospital, Detroit, MI |
| 2000 | Stanford University Medical School, San Francisco, CA |
| 2001 | University of Chicago, Chicago, IL |
| 2001 | Yale University School of Medicine, New Haven, CT |
| 2003 | University of Ottawa Medical School, Ottawa, Ontario, Canada |
| 2003 | McGill University, Montreal, Quebec, Canada |
| 2004 | University of Illinois, Chicago, IL |
| 2004 | University of Medicine and Dentistry of New Jersey, Newark, NJ |
| 2005 | University of British Columbia Medical School, Vancouver, BC, Canada |
| 2006 | Stanford University Medical School, San Francisco, CA |
| 2006 | Northwestern University School of Medicine, Chicago, IL |

Bibliography**Original Reports**

1. Cosgrove GR, Villemure J-G, Melanson D: Traumatic intracranial aneurysm due to arterial injury at surgery. Case Report. **J Neurosurg** **58**:291-294, 1983.
2. Cosgrove GR, LeBlanc R, Meagher-Villemure K, Ethier R: Cerebral amyloid angiopathy. **Neurology** **35**:625-631,1985.
3. Cosgrove GR, Villemure J-G, Melanson D, Robitaille Y: Extra-axial ependymoma of the posterior fossa. **Surg Neurol** **24**:433-436,1985.
4. Theron J, Cosgrove GR, Melanson D, Ethier R: Spinal arteriovenous malformations. Advances in therapeutic embolization. **Radiology** **158**:163-169,1986.
5. Theron J, Cosgrove GR, Melanson D, Ethier R: Embolization with temporary balloon occlusion of the internal carotid or vertebral arteries. **Neuroradiology** **28**:246-253,1986.
6. Cosgrove GR, Theron J: Vertebral arteriovenous fistula following anterior cervical surgery. **J Neurosurg** **66**:297-299,1987.
7. Sayette V de la, Cosgrove GR, Melanson D, Ethier R: CT findings in late-onset epilepsy. **Can J Neurol Sci** **14**:286-289,1987.
8. Cosgrove GR, Fontaine S, Bertrand G, Robitaille Y, Melanson D: Cavernous angiomas of the spinal cord. **J Neurosurg** **68**:31-36,1988.

9. Fontaine S, Melanson D, Cosgrove GR, Bertrand G: Cavernous hemangiomas of the spinal cord: MR imaging. **Radiology** **166**:839-841,1988
 10. O'Reilly G, Kleefield J, Blume H, Dubuisson D, Klein L, Cosgrove GR: Embolization of spinal metastases from renal cell carcinoma. **Surg Neurol** **31**:268-271,1989.
 11. Farmer J-P, Cosgrove GR, Villemure J-G, Meagher-Villemure K, Melanson D: Intracerebral cavernous angiomas. **Neurology** **38**:1699-1704,1989.
 12. Mintz A, Cosgrove GR: Multiple peripheral aneurysms of the posterior inferior cerebellar artery associated with cerebellar arteriovenous malformation. Case report. **Neurosurgery** **26**:533-537,1990.
 13. Cohen D, Cuffin BN, Yunokuchi K, Maniewski R, Purcell C, Cosgrove GR, Ives JR, Kennedy J, Schomer D: MEG versus EEG localization test using implanted sources in the human brain. **Ann Neurol** **28**:811-817,1990.
 14. Herzog AG, Drislane FW, Schomer DL, Levesque LA, Ives JR, Blume HW, Dubuisson D, Cosgrove GR: Abnormal pulsatile secretion of luteinizing hormone in men with epilepsy: Relationship to laterality of discharges. **Neurology** **40**:1557-1561,1990.
 15. Lam CH, Cosgrove GR, Drislane FW, Sotrel A: Spinal leptomeningeal metastasis from cerebral glioblastoma: Appearance on magnetic resonance imaging. **Surg Neurol** **35**:377-380,1991.
 16. Daffner KR, Schomer DL, Cosgrove GR, Rubin N, Mesulam MM: Broca's aphasia following damage to Wernicke's area: For or against traditional aphasiology? **Arch Neurol** **48**:766-768,1991.
 17. Mesulam MM, Geula C, Cosgrove GR, Mash D, Brimijoin S: Immunocytochemical demonstration of axonal and perikaryal acetylcholinesterase in human cerebral neocortex. **Brain Res** **539**:233-238,1991.
 18. Mainwaring NR, Ives JR, Cosgrove GR, Blume HW, Schomer DL: High resolution EEG output using a laser printer. **Electroenceph Clin Neurophysiol** **79**:73-77,1991.
 19. Ives JR, Mainwaring NR, Gruber LJ, Cosgrove GR, Blume HW, Schomer DL: A 128 channel cable-telemetry EEG recording system for long-term invasive monitoring. **Electroenceph Clin Neurophysiol** **79**:69-72,1991.
- Clin**
20. Cosgrove GR: Neurosurgical treatment of spasticity. **Curr Surg** **48**:332-337,1991.
 21. Ahern GL, Schomer DL, Kleefield J, Blume HW, Cosgrove GR, Weintraub S, Mesulam MM: Right hemisphere advantage for evaluating emotional facial expressions. **Cortex** **27**:193-202,1991.
 22. Cuffin BN, Cohen D, Yunokuchi K, Maniewski R, Purcell C, Cosgrove GR, Ives JR, Kennedy J, Schomer D: Tests of EEG localization accuracy using implanted sources in the human brain. **Ann Neurol** **29**:132-138,1991.
 23. Kramer JR, Kleefield J, Cosgrove GR, Carrazanna E: Transventricular migration of cysticercus cyst. **J Neurosurg** **77**:956-958,1992.
 24. Malik JM, Cosgrove GR, VandenBerg SR: Remote recurrence of craniopharyngioma in the epidural space. Case report. **J Neurosurg** **77**:804-807,1992.

25. Cosgrove GR: Lateral orthogonal approach for depth electrode insertion using the Leksell frame. Technical note. **Stereotact Funct Neurosurg** **60**:210-214,1993.
26. Cosgrove GR, Steiner L: Stereotactic microsurgical resection of cerebral lesions. **Stereotact Funct Neurosurg** **61**:182-194,1993.
27. Seeck M, Mainwaring NR, Ives JR, Blume HW, Dubuisson D, Cosgrove GR, Mesulam MM, Schomer DL: Differential neural activity in the human temporal lobe evoked by faces of family members and friends. **Ann Neurol** **34**:369-372, 1993.
28. Cosgrove GR, Villemure J-G: Cerebral hemispherectomy for epilepsy. **J Neurosurg** **79**:473-474,1993.
29. Tatter SB, Cosgrove GR: Hemorrhage into a lumbar synovial cyst causing an acute cauda equina syndrome. **J Neurosurg** **81**:449-452,1994.
30. Aronen HJ, Gazit IE, Louis DN, Pardo FS, Buchbinder BR, Harsh GR, Cosgrove GR, Hochberg FH, Rosen BR: Functional imaging of gliomas using susceptibility contrast CBV mapping: A comparison with tumor grade and histological features. **Radiology** **191**:41-51,1994.
31. Baer L, Rauch SL, Ballantine HT, Martuza R, Cosgrove GR, Cassem E, Manzo P, Dimino C, Jenike MA: Cingulotomy for intractable obsessive-compulsive disorder: A prospective long-term follow-up of 18 patients. **Arch Gen Psych** **52**:384-392,1995.
32. Seeck M, Schomer DL, Mainwaring NR, Ives JR, Blume HW, Dubuisson D, Cosgrove GR, Ransil BJ, Mesulam MM: Selectively distributed processing of visual object recognition in the temporal and frontal lobes of the human brain. **Ann Neurol** **37**:538-545,1995.
33. Rauch SL, Baer L, Cosgrove GR, Jenike MA: Neurosurgical treatment of Tourette's Disorder: A critical review. **Comp Psychiatry** **36**:141-156,1995.
34. Chapman P, Cosgrove GR, Buchbinder BR, Jiang H: Functional magnetic resonance imaging for cortical mapping in pediatric neurosurgery. **Ped Neurosurg** **23**:122-126,1995
35. Spangler W, Cosgrove GR, Ballentine HT, Cassem N, Rauch SR, Neirenberg A, Price B: MR-guided stereotactic cingulotomy for intractable psychiatric disease. **Neurosurgery** **38**:1071-1078,1996.
36. Kalkanis SN, Blumenfeld H, Sherman JC, Krebs DE, Irizarry MC, Parker SW, Cosgrove GR. Delayed complications thirty-six years after hemispherectomy: A case report. **Epilepsia** **37(8)**:758-762,1996.
37. Benson RR, Logan WJ, Cosgrove GR, Cole AJ, Jiang H, LeSueur LL, Buchbinder BR, Rosen BR, Caviness VS. Functional MRI localization of language in a 9-year-old child. **Can J Neuro Sci** **23**:213-219, 1996.
38. Douglas RM, Beatty J, Cosgrove GR, Biggs P, Gall K, Valenzuela RF, Okunieff P, Hochberg FH, Harsh GR, Thornton AF, Choi NC, Zervas NT: Dosimetric results from a feasibility study of a novel radiosurgical source for irradiation of intracranial metastases. **Int J Radiat Oncol Biol Phys** **36**:443-450,1996.
39. Spangler W, Cosgrove GR, Moumdjian RA, Montes JL: Cerebral arterial ectasia and aneurysm formation in tuberous sclerosis. Case report. **Neurosurg** **40**:191-194,1997.
40. Cosgrove GR, Hochberg FH, Pardo FS, Valenzuela RF, Chapman, P, Zervas NT: Interstitial irradiation of brain tumors using a miniature radiosurgery device: initial experience. **Neurosurgery** **40**:518-525,1997.

41. Krings T, Buchbinder BR, Butler WE, Chiappa KH, Jiang HJ, Cosgrove GR, Rosen BR. Functional magnetic resonance imaging and transcranial magnetic stimulation: Complementary approaches in the evaluation of cortical motor function. **Neurology** **48**:1406-1416,1997.
42. Roberts DW, Newell KL, Hoch DB, Cosgrove GR, Cole AC. Case Records of the Massachusetts General Hospital: A 30-year-old women with intractable seizures despite a temporal lobectomy. **NEJM** **336**:1373-1379,1997.
43. Krings T, Buchbinder BR, Butler WE, Chiappa KH, Jiang HJ, Rosen BR, Cosgrove GR. Stereotactic transcranial magnetic stimulation: Correlation with direct electrical cortical stimulation. **Neurosurgery** **41**:1319-1326,1997.
44. Fitzgerald DB, Cosgrove GR, Ronner S, Jiang H, Buchbinder BR, Rosen BR, Benson RR. Location of language in the cortex: a comparison between functional MR and electrocortical stimulation. **AJNR** **18**:1-12,1997.
45. Seeck M, Michel CM, Mainwaring N, Cosgrove R, Blume H, Ives J, Landis T, Schomer D: Evidence for rapid face recognition from human scalp and intracranial electrodes. **Neuroreport** **8**:2749-2754,1997.
46. Seeck M, Mainwaring NR, Cosgrove GR, Blume HW, Dubuisson D, Mesulam MM, Schomer DL: Neurophysiologic correlates of implicit face memory in intracranial visual evoked potentials. **Neurology** **49**:1312-1316,1997.
47. Eskandar E, Cosgrove GR, Shinobu L, Penney J: The importance of accurate lesion placement in posteroventrolateral pallidotomy: Case report. **J Neurosurg** **89**:630-634,1998.
48. Maxwell M, Shih SD, Galanopoulos T, Hedley-White ET, Cosgrove GR: Familial meningioma: Analysis of expression of neurofibromatosis 2 protein Merlin. **J Neurosurg** **88**:562-569,1998.
49. Evanisko M, Beasley C, Brigham L, Capossela C, Cosgrove R, Light J, Mellor S, Poretsky A, McNamara P: Readiness of critical care physicians and nurses to handle requests for organ donation. **Am J Crit Care** **7**:4-12,1998.
50. Krings T, Chiappa KH, Cuffin BN, Buchbinder BR, Cosgrove GR: Accuracy of EEG dipole localization of epileptiform activities associated with focal brain lesions. **Ann Neurol** **44**:76-86,1998.
51. Butler WE, Piaggio CM, Constantinou C, Niklason L, Gonzalez RG, Cosgrove GR, Zervas NT: A mobile CT scanner with intraoperative and intensive care unit applications. **Neurosurgery** **42**:1304-1311,1998.
52. Krings T, Chiappa KH, Cuffin BN, Cocchius JI, Connolly S, Cosgrove GR: Accuracy of EEG dipole source localization using implanted sources in the human brain. **Clin Neurophysiol** **110**:106-114,1999.
53. Mendola JD, Corkin S, Schiller PH, Rizzo JF, Cosgrove GR, Cole AJ, Black PM: Visual discrimination after anterior temporal lobectomy in human subjects. **Neurology** **52**:1028-1037,1999.
54. Benson RR, Fitzgerald DB, Lesueur LL, Kennedy DN, Kwong KK, Buchbinder BR, Davis TL, Weiskoff RM, Talavage TM, Logan WJ, Cosgrove GR, Belliveau JW, Rosen BR: Language dominance determined by whole brain fMRI in patients with brain lesions. **Neurology** **52**:798-809, 1999.

55. Wiederin TBJ, Chiappa KH, Krings T, Cuffin BN, Hoch DB, Cole AJ, Cosgrove GR: The utility of dipole source analysis of seizures onsets in the localization of epileptogenic zones as assessed by postsurgical outcome. **J Contemp Neurol** 1:1-10, 1999.
56. Cosgrove GR, Cole AJ: Occult Vascular Malformations and Seizures. **Neurosurg Clin N Am** 10:527- 535, 1999.
57. Eskandar, EN, Shinobu LA, Penney JB, Cosgrove GR: Nonmicroelectrode-guided stereotactic pallidotomy for Parkinson's Disease: Surgical technique and 2 year results. **J Neurosurg** 92:375-383, 2000.
58. Cosgrove GR: Thalamic stimulation or thalamotomy for suppression of refractory tremor? **Journal Watch: Neurology** 2:54-55, 2000.
59. Rauch SL, Kim H, Makris N, Cosgrove GR, Cassem EH, Savage CR, Price BH, Neirenberg AA, Shera D, Baer L, Buchbinder BR, Caviness VS, Jenike MA, Kennedy DN. Volumetric reduction in caudate nucleus following stereotactic lesions of anterior cingulate cortex in humans: A morphometric magnetic resonance imaging study. **J Neurosurg** 93:1019-1025, 2000.
60. Cosgrove GR. Surgery for psychiatric disorders. **CNS Spectrums** 5(10):43-52, 2000.
61. Ochsner KN, Kosslyn SM, Cosgrove GR, Cassem EH, Price BH, Neirenberg AA, Rauch SL. Deficits in visual cognition and attention following bilateral anterior cingulotomy. **Neuropsychologia** 39:219-230, 2001.
62. Ross J, Kearse LE, Houghton KJ, Barlow MK, Cosgrove GR: Alfentanil- induced epileptiform activity: A simultaneous surface and depth electroencephalographic study in complex partial epilepsy. **Epilepsia** 42(2):200-225, 2001.
63. Rauch SL, Makris N, Cosgrove GR, Kim H, Cassem EH, Price BH, Baer L, Savage CR, Caviness VS, Jenike MA, Kennedy DN. A magnetic resonance imaging study of regional cortical volumes following stereotactic anterior cingulotomy. **CNS Spectrums** 6(3):214-222, 2001.
64. Counihan TJ, Shinobu LA, Eskandar EN, Cosgrove GR, Penney JB. Outcomes following bilateral pallidotomy in advanced Parkinson's Disease. **Neurology** 56:799-802, 2001.
65. Rauch SL, Dougherty DD, Cosgrove GR, Cassem EH, Alpert NM, Price, BH, Nierenberg AA, Mayberg HS, Baer L, Jenike MA, Fischman AJ. Cerebral metabolic correlates as potential predictors of response to anterior cingulotomy for obsessive compulsive disorder. **Biol Psychiatry** 50:659-667, 2001.
66. Curry WT, Cosgrove GR, Buchbinder BR, Ojemann RG. Resection of a dominant-hemisphere intraventricular meningioma facilitated by functional magnetic resonance imaging. **Neurosurg Focus** 10 (6): article 1, 2001.
67. Price BH, Baral I, Cosgrove GR, Rauch SL, Nierenberg AA, Jenike MA, Cassem EH. Improvement in severe self-mutilation following limbic leucotomy: A series of 5 consecutive cases. **J Clin Psychiatry** 62:925-932, 2001.
68. Krings T, Reinges MH, Foltys H, Cosgrove GR, Thron A. Multimodality neuroimaging: research and clinical applications. **Neurol Clin Neurophysiol** 1:2-11, 2001.
69. Krings T, Chiappa KH, Foltys H, Reinges MH, Cosgrove GR, Thron A. Introducing navigated transcranial magnetic stimulation as a refined brain mapping methodology. **Neurosurg Rev** 24(4): 171-179, 2001.

70. Eskandar EN, Cosgrove GR, Shinobu LA. Surgical treatment of Parkinson's disease. **JAMA** **286(24):3056-3059**, 2001.
71. Montoya A, Weiss AP, Price BH, Cassem EH, Dougherty DD, Nierenberg AA, Rauch SL, Cosgrove GR. Magnetic resonance image-guided stereotactic limbic leucotomy for intractable psychiatric disease. **Neurosurgery** **50:1043-1052**, 2002.
72. Dougherty DD, Baer L, Cosgrove GR, Cassem EH, Price BH, Nierenberg AA, Jenike MA, Rauch SL. Prospective long-term follow-up of 44 patients who received cingulotomy for treatment refractory obsessive-compulsive disorder. **Am J Psychiatry** **159:269-275**, 2002.
73. Rabinov JD, Lee PL, Barker FG, Louis DN, Harsh GR, Cosgrove GR, Chiocca EA, Thornton AF, Loeffler JS, Henson JW, Gonzalez RG. In vivo 3T spectroscopy in the distinction of recurrent glioma versus radiation effects: initial experience. **Radiology** **225(3):871-879**, 2002.
74. Brisman JL, Cosgrove GR, Cole AJ: Phosphorylation of P42/P44 MAP kinase and DNA fragmentation in the rat perforant pathway stimulation model of limbic epilepsy. **Brain Res** **933:50-59**, 2002.
75. Brisman JL Cole AJ, Cosgrove GR, Thornton AF, Rabinov JD, Bussiere M, Bradley-Moore M, Hedley-Whyte T, Chapman P. Radiosurgery of the rat hippocampus: magnetic resonance imaging, neurophysiological, histological and behavioral studies. **Neurosurgery** **53:951-962**, 2003.
76. Eskandar EN, Flaherty A, Cosgrove GR, Shinobu LA, Barker FG, Surgery for Parkinson's Disease in the United States: Practice patterns, short-term outcomes and hospital charges in a nationwide sample. **J Neurosurg** **99:863-871**, 2003
77. Hord ED, Cohen SP, Cosgrove GR, Ahmed SU, Vallejo R, Chang Y, Stojanovic MP. The predictive value of sympathetic block for the success of spinal cord stimulation. **Neurosurgery** **53:626-632**, 2003.
78. Dougherty DD, Weiss AP, Cosgrove GR, Alpert NM, Cassem EH, Nierenberg AA, Price, BH, Mayberg HS, Fischman AJ, Rauch SL. Cerebral metabolic correlates as potential predictors of response to anterior cingulotomy for major depression. **J Neurosurgery** **99:1010-1017**, 2003.
79. Rauch SL, Cosgrove GR, Dougherty DD, Price BH, Greenberg BD, Rasmussen SA, Cassem EH. What is the role of psychiatric neurosurgery in the 21st century? *Rev Bras Psiquiatr* **26:4-5**, 2004.
80. Doherty C, Cole A, Grant PE, Fischman A, Dooling E, Hoch D, Hedley-White T, Cosgrove GR. Multi-modal longitudinal imaging of focal status epilepticus. *Can J Neu Sci* **31:276-281**, 2004.
81. Rabinov JD, Brisman JR, Cole A, Lee PL, Bussiere MR, Chapman PH, Loeffler JS, Cosgrove GR, Chaves T, Gonzalez RG. MRI changes in the rat hippocampus following proton radiosurgery. **Stereotact Funct Neurosurg** **82:156-164**, 2004.
82. Amirnovin R, Williams Z, Cosgrove GR, Eskandar EN. Visually guided movements suppress subthalamic oscillations in Parkinson's Disease patients. **J Neuroscience** **24(50):11302-6**, 2004.
83. Williams Z, Bush G, Rauch SL, Cosgrove GR, Eskandar EN. Human anterior cingulate neurons and the integration of monetary reward with motor responses. **Nat Neurosci** **12:1370-1375**, 2004.

84. Amirnovin R, Williams Z, Cosgrove GR, Eskandar E. Responses of subthalamic neurons during visually guided movements in patients with Parkinson's Disease. **Clin Neurosurgery** **51**:307-313, 2004.
85. Cosgrove GR. Deep brain stimulation and psychosurgery. **J Neurosurgery** **101**:574-576, 2004.
86. Williams Z, Niemat JS, Cosgrove GR, Eskandar EN. Timing and direction selectivity of subthalamic and pallidal neurons in patients with Parkinson's Disease. **Exp Brain Res** **162(4)**:407-416, 2005.
87. Voloschin AD, Louis DN, Cosgrove GR, Batchelor TT. Neoadjuvant temozolimide followed by complete resection of a 1p- and 19q-deleted anaplastic oligoastrocytoma: Case study. **Neuro-oncol** **7**:97-100, 2005.
88. Brisman JR, Lee PL, Bussiere MR, Chapman PH, Loeffler JS, Cosgrove GR, Cole AJ. Hyperacute neuropathological findings after proton beam radiosurgery of the rat hippocampus. **Neurosurgery** **56**:1330-1337, 2005
89. Curry WT, Cosgrove GR, Hochberg FH, Loeffler JL, Zervas NT. Stereotactic interstitial radiosurgery for cerebral metastases. **J Neurosurg** **103**:630-635, 2005.
90. Chang M, Brisman JR, Steiner L, Cosgrove GR. Radiosurgery for intractable lesional epilepsy. **Stereotact Funct Neurosurg** (submitted)
91. Cosgrove GR, High W. Reduction of epidural adhesions in a canine laminectomy model with a synthetic resorbable hydrogel. **J Neurosurg:Spine** (submitted)
92. Porter DH, Cosgrove GR, Senanayke F, Bilsky M, Black P McL, Loeffler JJ, Zervas NT. A multi-center prospective trial evaluating a miniature X-ray device for interstitial radiosurgery of brain metastases. **Stereo Funct Neurosurg** (submitted)
93. Tanabe SM, Grant PE, Cosgrove GR, Hoch DB, Cole AJ. Delayed diagnosis of lesional epilepsy: Utility of modern imaging. **Neurol Clin Neurophys** (submitted)
94. Barna SA, Cosgrove GR, Hu MM, Buxo C, Trella J. Spinal cord stimulation for treatment of meralgia paraesthetica. **Pain Phys** **8**:315-318, 2005.
95. Flaherty AW, Williams ZM, Amirnovin R, Kasper E, Rauch SL, Cosgrove GR, Eskandar EN. Deep brain stimulation of the anterior internal capsule for the treatment of Tourette's Disease: technical case report. **Neurosurgery** **57**:403-406, 2005.
96. Rabinov JD, Cheng LL, Lee PL, Brisman JL, Loeffler JS, Cole AJ, Cosgrove GR, Bussiere MR, Chaves T, Gonzalez RG. MR Spectroscopic changes in the rat hippocampus following proton beam radiosurgery. **Stereotact Funct Neurosurg** **84**:147-154, 2006.
97. Amirnovin R, Williams Z, Cosgrove GR, Eskandar E. Experience with microelectrode guided subthalamic nucleus deep brain stimulation. **Neurosurgery** **58**:96-102, 2006.
98. Knake S, Halgren E, Shiraishi H, Hara K, Hamer HM, Grant PE, Carr VA, Foxe D, Camposano S, Busa E, Witzel T, Hamalainen MS, Ahlfors SP, Bromfield EB, Black PL, Bourgeois BF, Cole AJ, Cosgrove GR, Dworetzky BA, Madsen JR, Larsson PG, Schomer DL, Thiele EA, Dale AM, Rosen B, Stufflebeam SM. The value of multichannel MEG and EEG in the presurgical evaluation of 70 epilepsy patients. **Epilepsy Res** **69**:80-86, 2006.

Abstracts

1. Cosgrove GR, LeBlanc R, Meagher-Villemure K, Ethier R: Cerebral amyloid angiopathy. **Can J Neurol Sci** **11**:328-329, 1984.
2. LeBlanc R, Cosgrove GR, Meagher-Villemure K, Ethier R: Intracerebral hemorrhage from cerebral amyloid angiopathy. **Stroke** **15**:185,1984.
3. Ives JR, Mainwaring NR, Gruber LJ, Schomer DL, Schacter SC, Drislane FW, Blume HW, Cosgrove GR: Seizure mapping. **J Clin Neurophysiol** **5**:331,1988.
4. Herzog AG, Drislane F, Schomer D, Levesque L, Ives J, Blume H, Dubuisson D, Cosgrove GR: Abnormal pulsatile secretion of luteinizing hormone in men with epilepsy: Relationship to lateralization of epileptiform discharges. **Neurology** **39**:239,1989.
5. Herzog AG, Drislane F, Schomer D, Levesque L, Ives J, Blume H, Cosgrove GR: Altered patterns of pituitary secretion in men with epilepsy. **Neurology** **37(Suppl)**:39,1989.
6. Ives JR, Mainwaring NR, Gruber LJ, Cosgrove GR, Blume HW, Schomer DL: A network based 128 channel seizure monitoring system. **Epilepsia** **30**:717,1989.
7. Ives JR, Mainwaring NR, Gruber LJ, Cosgrove GR, Schomer DL: 128 channel cable telemetry system for patients with depth electrodes. **Electroencephal Clin Neurophysiol** **75**:6,1990.
8. Cuffin BN, Cohen D, Yunokuchi K, Maniewski R, Purcell C, Cosgrove GR, Ives JR, Kennedy J, Schomer D: Using implanted sources in the human brain to determine EEG localization accuracy. **Epilepsia** **31**:622, 1990.
9. Cuffin BN, Cohen D, Yunokuchi K, Maniewski R, Purcell C, Cosgrove GR, Ives JR, Kennedy J, Schomer D: Using implanted sources in the human brain to determine EEG localization accuracy. **Epilepsia** **31**:622, 1990.
10. Schomer DL, Cosgrove GR, Blume HW, Ives JR: EEG effects of intracarotid amobarbital administration: A depth electrode study. **Epilepsia** **31**:688,1990.
11. Schomer DL, Cosgrove GR, Blume HW, Ives JR, Cuffin BN, Cohen D: Using dipole sources implanted in the human brain to compare MEG vs. EEG localization accuracy: The clinical significance. **Epilepsia** **31**:623, 1990.
12. Seeck M, Mainwaring NR, Blume HW, Dubuisson D, Cosgrove GR, Mesulam M-M, Schomer DL: Visual evoked potentials recorded from depth electrodes with highly familiar and unfamiliar faces as stimuli. **Neurology** **41**: 57, 1992.
13. Seeck M, Mainwaring NR, Cosgrove GR, Blume H, Dubuisson D, Mesalum MM, Schomer DL: Previously seen faces elicit early and late EEG responses in patients with depth electrodes. **Epilepsia** **34 (suppl)**:81,1993.
14. Seeck M, Mainwaring NR, Ives JR, Blume H, Dubuisson D, Cosgrove GR, Schomer DL: Evoked activity from averaged depth electrode acquired interictal spikes. **Epilepsia** **34 (suppl)**:81,1993.
15. Harsh GR, Aronen H, Cosgrove GR, Rosen BR: MRI-CBV mapping identifies glioma grade and distinguishes tumor from radiation necrosis. **Neurosurgery** **29**: 345, 1993.

16. Cosgrove GR, Baer L, Rauch SL, Ballantine HT, Cassem E, Manzo P, Jenike MA: Prospective long-term follow-up study of cingulotomy for intractable OCD. **Acta Neurochir** **129**:216, 1994.
17. Cosgrove GR, Zervas NT, Hochberg FH, Valenzuela R, Pardo F, Biggs P, Beatty J: Interstitial photonic radiosurgery for intracranial tumours. **Acta Neurochir** **129**:220, 1994.
18. Prasad D, Steiner M, Cosgrove GR, Steiner L: Seizure outcome of Gamma Knife surgery for AVM. **Acta Neurochir** **129**:225, 1994
19. Cochius JI, Cole AJ, Cosgrove GR, Buchbinder BR, McKee A, Dooling EC, Hoch DB: Intractable seizures and focal cortical dysplasia: Role of early surgery and specialized neuroimaging. **Neurology** **44**:48, 1994.
20. Cosgrove GR, Buchbinder BR, Jiang H, Butler W: 3-Dimensional functional mapping of sensorimotor cortex by activated PET scanning: Correlation with MR and intraoperative cortical stimulation. **Stereotact Funct Neurosurg** **63**:36, 1994.
21. Logan WJ, Benson RR, Cosgrove GR, Buchbinder BR, Jiang H, Lesueur LL, Caviness VS, Rosen BR, Cole A: Functional MRI (fMRI) localization of language in children. **Can J Neurol Sci** **22(suppl)**: 24, 1995.
22. Benson RR, Belliveau JW, Kwong KK, Buchbinder BR, Jiang H, Cosgrove GR, Rosen BR: Preoperative mapping of language cortex with functional MRI. **Human Brain Mapping (suppl)** **1**:351,1995.
23. Cosgrove GR, Buchbinder BR, Jiang H, Cole AJ, Rosen BR: Mapping human sensorimotor cortex with functional MRI. **Epilepsia** **36(suppl)** **4**:23,1995.
24. Cole AJ, Jiang H, Buchbinder BR, Cosgrove GR: 3-D volumetric MR imaging of developmental migrational abnormalities: Role in pre-morbid pathological diagnosis and classification. **Epilepsia** **36(suppl)** **4**:57,1995.
25. Mendola JD, Bricolo E, Cole AJ, Cosgrove GR, Bulthoff HH, Corkin S: Immediate visual recognition is impaired after left or right temporal lobe excision. **Soc Neuroscience** **21**:754, 1995.
26. Bricolo E, Mendola JD, Cole AJ, Cosgrove GR, Corkin S, Bulthoff HH: Impairment of immediate visual recognition after unilateral temporal lobectomy. **Perception** **24 (suppl)**:113, 1995.
27. Spangler WJ, Frim DM, Tatter SB, Barker FG, Hedley-Whyte, ET, Cosgrove GR: Clinical impact of stereotactic brain biopsy: A retrospective review of 484 cases. **J Neurosurg** **84**: 350,1996.
28. Cosgrove GR, Buchbinder BR, Jiang H, Rosen B: Mapping human cortical sensorimotor function with MRI. **Acta Neurochir** **138**: 632,1996.
29. Buchbinder BR, Hiang HJ, Cosgrove GR: Functional mapping of sensorimotor cortex: Correlation between functional MRI, O-15 PET, and intraoperative cortical stimulation in individual patients. **Proc Amer Soc Neuradiol** **48**:62,1996.
30. Tang G, Butler B, Cosgrove GR: Frameless stereotactic neuroendoscopy: Early experience. **J Neurosurg** **86**: 339,1997.
31. Eskandar E, Shinobu L, Counihan T, Penney JB, Cosgrove GR: Non-micro-electrode guided pallidotomy for Parkinson's Disease: Analysis of 73 cases. **Neurosurgery** **41**:738, 1997.
32. Krings T, Chiappa KH, Cuffin BN, Hoch D, Cole AJ, Buchbinder BR, Cosgrove GR: Dipole source: Relation to MRI findings and operative outcome. **Epilepsia** **38(suppl)****8**:67,1997.

33. Brisman JL, Koh S, Mian AY, Cosgrove GR, Cole AJ: DNA fragmentation pattern after 24 hours of perforant pathway stimulation in the rat: Demonstration of granule cell injury in an animal model of temporal lobe epilepsy. **Epilepsia** **38(suppl)8**:29,1997.
34. Cosgrove GR: Mapping human cognitive function with imaging. **Epilepsia** **38(suppl)8**:121,1997.
35. Ross J, Cosgrove GR, Houghton KJ, Barlow MK, Kearse LA: Alfentanil induced epileptiform activity: A simultaneous surface and depth electroencephalographic study in complex partial epilepsy. **Epilepsia** **39(suppl)8**:29,1998.
36. Shinobu LA, Counihan TJ, Eskandar EN, Cosgrove GR Penney JB: Sensorimotor and neuropsychiatric phenomena in a pallidotomy population. **Neurology** **57(suppl)4**:129,1998.
37. Krings T, Foltys H, Butler WE, Boroojerdi B, Buchbinder BR, Chiappa KH, Spetger U, Graf v Keyserlingk D, Cosgrove GR, Topper R: Introducing stereotactic transcranial magnetic stimulation as a refined brain mapping methodology. **NeuroImage** **7(suppl)**:687, 1998.
38. Krings T, Chiappa K, Cuffin BN, Hoch D, Weiderin TB, Buchbinder BR, Cole AJ, Cosgrove GR: Clinical applications of human brain mapping. Relationship between EEG dipole source localization and postoperative outcome in patients with medically refractory epilepsy. **NeuroImage** **7(suppl)**:467, 1998.
39. Shinobu LS, Counihan TJ, Eskandar EN, Cosgrove GR Penney JB: Sensorimotor and neuropsychiatric phenomena in a pallidotomy population. **Movement Disorders** **13(suppl)**:265, 1998.
40. Cosgrove GR, Zervas NT, Spiro I, Loeffler J, Beatty J, Biggs P: Stereotactic interstitial radiosurgery for cerebral metastases. **Acta Neurochir** **140(suppl)**:865,1998.
41. Ross J, Kearse LE, Houghton KJ, Barlow MK, Cosgrove GR: Alfentanil-induced epileptiform activity: A simultaneous surface and depth electroencephalographic study in complex partial epilepsy. **Epilepsia** **39(suppl)6**:73, 1998.
42. Counihan TJ, Shinobu LA, Cosgrove GR and Penney JB: Outcomes following staged bilateral pallidotomy in advanced Parkinson's Disease. **Neurology** **50(S4)**:A389, 1998.
43. Tanabe SM, PE Grant, GR Cosgrove, DB Hoch, AJ Cole: Delayed diagnosis of lesional epilepsy: Utility of modern imaging. **Epilepsia** **40(suppl)7**:189-190, 1999.
44. Eskandar, EN, Shinobu LA, Penney JB, Cosgrove GR: Nonmicroelectrode-guided stereotactic pallidotomy for Parkinson's Disease: Surgical technique and results. **Stereotact Funct Neurosurg** **72**:245, 1999.
45. Cosgrove GR, Spiro I, Loeffler J, Biggs P, Beatty J, Zervas NT: Stereotactic interstitial radiosurgery for malignant brain tumors. **Stereotact Funct Neurosurg** **73**:37, 1999.
46. Shinobu LA, McCarthy C, Sherman J, Cosgrove GR: Sustained post-surgical benefit four or more years following non-micro-electrode guided unilateral posteroventral pallidotomy. **Movement Disorders** **15**:1046, 2000.
47. Cosgrove GR, Price BN, Rauch SL, Nierenberg A, Cassem E: Limbic leucotomy for self-mutilation: A series of five consecutive cases. **Acta Neurochir** **142**:1175, 2000.

48. Christensen MD, O'Reilly C, Rosen BR, Buchbinder BR, Cosgrove GR: Use of functional MR imaging in neurosurgical planning: The Massachusetts General Experience. **J Neurosurg** **94**:384, 2001.
49. Brisman JR, Cosgrove GR, Moore MB, Thornton AF, Bussierre M, Shay C, Beer T, Hedley-Whyte ET, Loeffler JS Chapman PH, Cole AJ: Acute effects of stereotactic proton beam irradiation on the rat hippocampus. **J Neurosurg** **94**:411, 2001.
50. Curry WT, Cosgrove GR, Loeffler J, Hochberg F, Zervas NT: Stereotactic interstitial radiosurgery for cerebral metastases. **Neurosurgery** **49**:513,2001.
51. Kim K, Wariungi M, Cosgrove R, Hoch D, Cole AJ: Temporal lobe epilepsy due to pathologically proven hippocampal sclerosis versus temporal lobe lesion: Clinical, electroencephalographic and neuroimaging findings and surgical outcome. **Epilepsia** **42(suppl)7**:193, 2001.
52. Wariungi M, Hoch D, Cosgrove R, Cole AJ: Surgical treatment of medically refractory seizure disorders at the Massachusetts General Hospital. **Epilepsia** **42(suppl)7**:202, 2001.
53. Knake S, Grant PE, Shiraishi H, Stufflebeam S, Salat D, Wald L, Hara K, Busa E, Schomer DL, Bromfield EB, Dworetzky B, Bourgeois B, Madsen J, Cole A, Cosgrove GR, Dale AM, Halgren E: Multimodal image acquisition and analysis improves the presurgical evaluation in patients with intractable focal epilepsies: A prospective study of 50 patients. **Epilepsia** **44(suppl)9**:169, 2003.
54. Flaherty A, Williams ZM, Amirnovin R, Kasper E, Rauch SL, Cosgrove GR, Eskandar EN: Deep brain stimulation of the anterior internal capsule for the treatment of Tourette's Syndrome: technical case report. **Neurosurgery** **57(suppl)4**:403, 2005.
55. Amirnovin R, Cosgrove GR: Minimal access temporal lobectomy: Surgical technique and clinical outcome. **Neurosurgery** **58 (suppl) 3**:113, 2005.

Book Chapters

1. Treatment of Intractable Psychiatric Illness and Chronic Pain by Stereotactic Cingulotomy, Ballantine HT and Cosgrove GR in Operative Neurosurgical Techniques. Schmidek HH and Sweet WH (eds), WB Saunders and Co:Philadelphia, 1995.
2. Motor Sequelae and Involuntary Movement Disorders, Frim DM and Cosgrove GR in Outcome After Head, Neck and Spinal Trauma: A Medico-legal Guide. MacFarlane R and Hardy D (eds), Butterworth-Heinemann, London, 1995..
3. An Approach to Neurosurgical Interventions for Persistent Pain, Frim DM and Cosgrove GR in The MGH Manual for Pain. Boorsok D (ed), 1995.
4. Psychosurgery, Cosgrove GR and Rauch SL in Neurosurgical Clinics of North America. Gildenberg PH (ed), WB Saunders and Co:Philadelphia, 1995.
5. Interstitial Radiosurgery, Zervas NT and Cosgrove GR in A Textbook of Stereotactic and Functional Neurosurgery. Gildenberg PH and Tasker R (eds), McGraw-Hill, Philadelphia, 1996.
6. Cingulotomy for Psychiatric Illness, Cosgrove GR and Ballantine HT in A Textbook of Stereotactic and Functional Neurosurgery. Gildenberg PH and Tasker R (eds), McGraw-Hill, Philadelphia, 1996.

7. Functional Magnetic Resonance Imaging for Intracranial Navigation, Cosgrove GR, Buchbinder BR and Jiang H in Neurosurgical Clinics of North America. Maciunas R (ed), WB Saunders and Co:Philadelphia, 1996.
8. The Surgical Treatment of Epilepsy, Cosgrove GR and Cole AJ in University Reports on Epilepsy. Dreifuss FE (ed), AAMC, Newtown, 1996.
9. Interstitial Brachytherapy for Intracranial Metastases, McDermott MW, Cosgrove GR, Larson Sneed PK, Gutin PH in Neurosurgical Clinics of North America. Harsh GR (ed), WB Saunders and Co:Philadelphia, 1996.
10. Psychosurgery, Cosgrove GR and Rauch SL in Encyclopedia of Neuroscience. Adelman G and Smith B (eds), Elsevier, Amsterdam, 1997.
11. Outcomes Assessment of Pallidotomy, Cosgrove GR, Shinobu L and Penney J in Clinical Neurosurgery. Grady S (eds) Williams and Wilkins Co: Baltimore, MD, 1997.
12. Thalamotomy and Pallidotomy, Cosgrove GR and Eskandar E in Operative Neurosurgery. Kaye AH and Black P (eds), Churchill Livingstone: London, UK, 1997.
13. Interstitial Radiosurgery: The Photoelectron Device, Cosgrove GR, Abdelaziz O and Zervas NT Advanced Neurosurgical Navigation. Alexander E and Maciunas R (eds), Thieme: New York, 1998.
14. Neurosurgical Treatment of Neuropsychiatric Disorders, Marino R, Cosgrove GR, in Psychiatric Clinics of North America. Miguel EC, Leckman JF, Rauch S (eds), WB Saunders Co:Philadelphia, 1997.
15. Functional MRI for Planning Cortical Resections, Cosgrove GR and Buchbinder BR in Advanced Neurosurgical Navigation. Alexander E and Maciunas R (eds), Thieme: New York, NY, 1998.
16. MR Guided Stereotactic Cingulotomy for Intractable Psychiatric Disease, Abdelaziz O and Cosgrove GR in Neurosurgical Operative Atlas. Rengachary SS and Wilkins RH (eds), Williams and Wilkins Co: Baltimore, MD, 1998.
17. Psychosurgery: Current Status, Johnston KR and Cosgrove GR in Contemporary Neurosurgery. Tindall GT (ed), Williams and Wilkins Co: Baltimore, MD, 1998.
18. Cortical Activation MR Studies in Brain Disorders, Buchbinder BR and Cosgrove GR in Magnetic Resonance Imaging Clinics of North America. Mirowitz SA and Castillo M (eds), WB Saunders and Co:Philadelphia, 1998.
19. Invasive EEG in Mesial Temporal Lobe Epilepsy, Ross J, Cosgrove GR and Cole AJ in The Epilepsies: Etiologies and Prevention. Kotagal P and Luders HO (eds), Academic Press, San Diego, 1998.
20. Cingulotomy for Chronic Pain, Abdelaziz O and Cosgrove GR in Pain Surgery. Burchiel KJ (ed), Thieme: New York, NY, 1999.
21. Functional MRI and PET Scanning as an Adjunct to Surgery, Cosgrove GR and Buchbinder BR Techniques in Neurosurgery: Cerebral Cortical Surgery with Functional Mapping. Black PM, Loftus CM and Batjer HH (eds), Lippencott-Raven:Philadelphia, PA, 1999.
22. Epilepsy Surgery for Tumors, Vascular Malformations, Trauma and Cerebrovascular Diseases, Cosgrove GR in Epilepsy Surgery. Luders H and Comair Y (eds), Lippencott-Raven:Philadelphia, PA, 2001.

23. Functional Cortical Mapping using Transcranial Electromagnetic Stimulation, Krings T, Cosgrove GR and Butler WW in Epilepsy Surgery. Luders H and Comair Y (eds), Lippincott-Raven:Philadelphia, PA, 2001.
24. Neurosurgical Treatments, Rauch SL and Cosgrove GR in Comprehensive Textbook of Psychiatry. Kaplan HI and Sadock BJ (eds), Williams and Wilkins Co: Baltimore, MD, 1999.
25. Cingulotomy for the Treatment of Intractable Psychiatric Illness, Cosgrove GR in Operative Neurosurgical Techniques. Schmidek HH and Sweet WH (eds), WB Saunders and Co:Philadelphia, PA, 2000.
26. Stereotactic Interstitial Radiosurgery, Cosgrove GR and Zervas NT in Operative Neurosurgical Techniques. Schmidek HH and Sweet WH (eds), WB Saunders and Co:Philadelphia, 2000.
27. Surgical Treatment of Tourette's Syndrome and Tics, Cosgrove GR and Rauch SL in Movement Disorders Surgery. Krauss JK, Jankovic J and Grossman RG (eds), Lippincott-Williams and Wilkins Co:Philadelphia, PA, 2001.
28. An Approach to Neurosurgical Interventions for Persistent Pain, Cosgrove GR and Eskandar E in The MGH Manual for Pain. Ballantyne J, Fishman S and Salahadin A (eds), 2001.
29. Identification of Epilepsy Surgical Candidates, Cosgrove GR and Cole AJ in Youmans Neurological Surgery. Winn HR (eds), 2002
30. Intractable Tremor: Ablation versus Stimulation, Eskandar E and Cosgrove GR in Surgical Treatment of Movement Disorders. Schulder M (ed), Marcel Dekker Inc, NY, NY, 2003.
31. Image Guided Localization for Movement Disorder Surgery, Christiansen M and Cosgrove GR in Contemporary Surgical Management of Movement Disorders. Couldwell W and Cosgrove GR (eds) Lippincott-Williams and Wilkins Co:Philadelphia, PA, 2002.
32. Neurosurgery for Psychiatric Disorders, Cosgrove GR in Neurosurgery. Rengachary SS, Maciunas RJ and Wilkins RH (eds), Williams and Wilkins Co: Baltimore, MD, 2003.
33. Stereotactic Cingulotomy, Cosgrove GR, Rauch SL in Neurosurgical Clinics of North America. Rasmussen S, Greenberg B, Rezaei A (eds), WB Saunders and Co:Philadelphia, 2003.
34. Surgery for Neuropsychiatric Disorders, Cosgrove GR and Rauch SR in Youmans Neurological Surgery. Winn HR (eds), 2004.
35. Neurosurgery for Treatment Refractory Psychiatric Disorders: Obsessive-Compulsive Disorder and Major Depressive Disorder. Martis B, Cosgrove GR and Jenike ML in Psychiatry. Tasman, Kay Lieberman (eds), Wiley Co: Philadelphia, PA, 2005.
36. MRI-Guided Stereotactic Cingulotomy for Intractable Psychiatric Illness, Cosgrove GR in Neurosurgical Operative Atlas 2E: Functional Neurosurgery. Starr P, Barbaro N and Larson P (eds), Thieme: New York, NY, 2007

Book Reviews

1. Clinical Electroencephalography and Topographic Brain Mapping. Frank H. Duffy, Vasudeva G. Iyer and Walter W. Surwillo. Journal of Neurosurgery, 1991.

2. Neurosurgical Aspects of Epilepsy. Michael L.J. Apuzzo (ed) Neurosurgery, 1992.
3. The Human Brain. Surface, Three-dimensional Sectional Anatomy and MRI. Henri Duvernoy. Journal of Neurosurgery, 1993.
4. Electrical and Magnetic Stimulation of the Brain and Spinal Cord. Advances in Neurology, Vol. 63. Orin Devinsky, Alexander Beric and Michael Dogali. Neurosurgery, 1994.
5. Nerve Injuries: Operative Results for Major Nerve Injuries, Entrapments and Tumors. David G. Kline and Alan R. Hudson. New England Journal of Medicine, 1996.
6. Surgical Treatment of Parkinson's Disease and Other Movement Disorders. Daniel Tarsy, Jerrold L. Vitek and Andres M Lozano. Journal of Neurosurgery, 2003.
7. The Lobotomist: A Maverick Medical Genius and his Tragic Quest to Rid the World of Mental Illness. Jack El-Hai. Journal of Neurosurgery, 2005.