Eben Alexander, III, M.D., F.A.C.S. Curriculum Vitae

Education:

1975 A.B. University of North Carolina at Chapel Hill 1980 M.D. Duke University School of Medicine

Postdoctoral Training

Internship and Residencies:

1980-1981 Intern in General Surgery, Duke University Medical Center, Durham, NC 1981-1983 Resident in Neurological Surgery, Duke University Medical Center, Durham, NC 1985 Acting Resident in Neurology, MA General Hospital, Boston, MA 1985-1987 Resident in Neurological Surgery, Duke University Medical Center, Durham, NC 1987 Senior Registrar and Cerebrovascular Fellow, Neurosurgical Service, Newcastle General Hospital, Newcastle-Upon-Tyne, England, U.K.

1988-1990 Instructor in Surgery, Brigham & Women's Hospital, Harvard Medical School, Boston, MA

Research Fellowships:

1983-1985 Research Fellow in Neurosurgery, MA General Hospital, Harvard Medical School, Boston, MA 1987 Research Fellow in Neurosurgery, Brigham and Women's Hospital, Harvard Medical School, Boston, MA

Licensure and Certification:

1980 Residents Training License, North Carolina
1987 30888 North Carolina [Expires December 2011]
1987 58762 MA License [Expires Dec 2011]
2004 12520 New Hampshire License [inactive]
2005 0101239440 Virginia License [Expires December 2012]
1991 91066 Diploma, American Board of Neurological Surgery, November, 1991 [Voluntarily involved in the Maintenance of Certification Program 29301, Recertification due 12/31/2019]
1996 Inducted as a Fellow, American College of Surgeons (F.A.C.S.)

Academic Appointments:

1978-1979 Research Assistant, Neuroendocrinology, Duke University Medical Center, Durham, North Carolina

1988-1990 Instructor in Surgery, Brigham and Women's Hospital, Harvard Medical School, Boston, MA 1990-1994 Assistant Professor in Surgery (Neurosurgery), Harvard Medical School, Boston, MA 1990-2001 Assistant Professor in Radiation Therapy, Joint Center for Radiation Therapy, Harvard Medical School, Boston, MA

1994-2001 Associate Professor in Surgery (Neurosurgery), Harvard Medical School, Boston, MA 2001-2003 Associate Professor in Surgery (Neurosurgery), UMass Medical School, Worcester, MA 2004-2006 Consultant, Gerson Lehrman, New York, NY

2008-present Assistant Professor of Research in Neurological Surgery, University of Virginia Medical School, Charlottesville, Virginia

Recent Appointments:

2008-2010 Clinical Director of the Brain Program, Focused Ultrasound Surgery Foundation, Charlottesville, Virginia

Hospital Appointments:

1988-2003 Associate Surgeon, Brigham and Women's Hospital, Harvard Medical School, Boston, MA 1988-2003 Associate Surgeon, The Children's Hospital, Harvard Medical School, Boston, MA 1988-2003 Associate Surgeon, Dana Farber Cancer Institute, Harvard Medical School, Boston, MA

1994-2001 Director of Stereotactic and Functional Neurosurgery, Brigham & Women's Hospital Boston, MA

1998-2003 Clinical Associate in Neurosurgery, MA General Hospital Boston, MA

2001-2003 Active Staff, Department of Surgery, Division of Neurosurgery, University of MA Medical Center, Worcester, MA

2004-2005 Sabbatical

2005-2006 Corporate Consulting: Gerson Lehrman Group, New York, NY

2006-2007 Active Staff, Department of Surgery, Division of Neurosurgery, Lynchburg General Hospital-CentraHealth, Lynchburg, Virginia

Other Professional Positions and Major Visiting Appointments:

1978 Research Assistant in Neurosurgery, University of Minnesota School of Medicine

1980 Research Assistant in Pathology, Bowman Gray School of Medicine, Wake Forest University 1989 Visiting Lecturer and Panelist, Department of Neurosurgery, University of Virginia School of

Medicine International Symposium on Stereotactic Radiosurgery

1989 Invited Lecturer, Neurology/Neurosurgery Grand Rounds, Harvard-Longwood Medical Area. 1989 Invited Faculty, Stereotactic Radiosurgery, Radionics Course in Stereotactic Techniques, Congress of Neurological Surgeons Meeting, Atlanta, Georgia

1989 Invited Lecturer, Nursing Grand Rounds, Brigham and Women's Hospital

1989 Invited Faculty, Luncheon Discussion Group on Stereotactic Radiosurgery, Congress of Neurological Surgeons Meeting, Atlanta, Georgia

1990 Co-Director, Panelist, Lecturer, Moderator, Harvard Medical School Continuing Education Course, Radiosurgery Update.

1990 Invited Lecturer and Consultant, Varian Corporation, Palo Alto, CA

1990 Invited Lecturer and panelist, MA General Hospital, Harvard Medical School, "Neurosurgery Update", post-graduate course

1990 Invited Lecturer, 14th annual New York Neurosurgery Symposium

1990 Invited Lecturer, Skull base tumor Workshop, Hannover, Germany

1990 Invited Lecturer, Framingham Union Hospital Medical Grand Rounds

1991 Invited Lecturer, Neurology/Neurosurgery Grand Rounds, Harvard-Longwood Medical Area.

1991 Invited Consultant, General Electric Medical Imaging Systems, Milwaukee, Wisconsin

1991 Invited Lecturer, First International Symposium on MR-Guided Laser Interventions, Harvard Medical School

1991 Invited Lecturer, Providence Medical Center, Portland, Oregon.

1991 International Organizing Committee, Invited Lecturer, Moderator, International Stereotactic

Radiosurgery Symposium, University of Pittsburgh School of Medicine.

1991 Invited Lecturer, Panelist, 9th European Congress on Neurosurgery, Moscow, USSR.

1991 Invited Lecturer, German-Austrian Stereotactic Workshop, Finkenberg, Austria.

1991 Invited Lecturer, Medical Grand Rounds, St. Anne's Hospital, New Bedford, MA

1991 Invited Lecturer, General Scientific Session, Congress of Neurological Surgeons, Orlando, Florida.

1991 Invited Lecturer, Boston Society of Neurology and Psychiatry.

1992 Invited Lecturer, Methodist Hospital Neurosurgical Grand Rounds, Indianapolis, Indiana

1992 Invited Lecturer, Pennsylvania State Neurosurgical Society, Philadelphia, Pennsylvania

1992 Invited Lecturer, Practical Course, American Association of Neurological Surgeons, San Francisco, California

1992 Invited Lecturer, Breakfast Seminar, American Association of Neurological Surgeons, San Francisco, California

1992 Invited Consultant, General Electric Medical Imaging Systems, Milwaukee, Wisconsin

1992 Invited Lecturer, Neurology/Neurosurgery Grand Rounds, University of MA, Worcester, MA

1992 Invited Lecturer, Workshop on Stereotactic Techniques, European Society of Stereotactic and Functional Neurosurgery, Stockholm, Sweden

1992 Invited Lecturer, Symposium on Neuro-Radio-Surgery, Vienna, Austria

1992 Invited Lecturer and Panelist, Joint Section on Tumors Session, Congress of Neurological Surgeons, Washington, D.C.

1992 Invited Lecturer, Practical Course on Radiosurgery, Congress of Neurological Surgeons, Washington, D.C.

1992 Invited Lecturer and Panelist, Radiosurgery Course, American Society of Therapeutic Radiology and Oncology, San Diego, California

1992 Invited Lecturer, Western Medical Center, Santa Ana, California

1992 Invited Lecturer, Tumors of the Central Nervous System, Harvard Medical School, Department of Continuing Education, Boston, MA.

1993 Invited Lecturer, Practical Clinic, American Association of Neurological Surgeons Annual Meeting, Boston, MA

1993 Invited Lecturer, Breakfast Seminars, American Association of Neurological Surgeons Annual Meeting, Boston, MA 1993 Invited Lecturer, Royal Australasian College of Surgeons, Adelaide, Australia 1993 Invited Lecturer, Stereotactic Radiosurgery/Brachytherapy Workshop, Adelaide, Australia 1993 Invited Lecturer, Auckland Hospital Neurosurgery, Auckland, New Zealand 1993 Invited Lecturer, International Stereotactic Radiosurgery Society, 1st Congress Meeting, Stockholm, Sweden 1993 Invited Speaker, Santorini Radiosurgery Workshop, Santorini, Greece 1993 Invited Consultant, General Electric Medical Imaging Systems, Milwaukee, Wisconsin 1993 Invited Lecturer, UCLA Stereotactic Neurosurgery/Radiosurgery Course, Los Angeles, California 1993 Invited Lecturer, Practical Course, Congress of Neurological Surgeons, Vancouver, British Columbia, Canada 1993 Invited Lecturer, Luncheon Discussion Group, Congress of Neurological Surgeons, Vancouver, British Columbia, Canada 1993 Panelist and Moderator, XI th Meeting of the World Society for Stereotactic and Functional Neurosurgery, Ixtapa, Mexico 1993 Invited Lecturer, Tumors of the Central Nervous System, Harvard Medical School, Department of Continuing Education, Boston, MA 1993 Invited Lecturer, Intensive Review in Neurology, Harvard Medical School, Department of Continuing Education, Boston, MA 1993 Invited Lecturer, Grand Rounds, Neurology and Neurosurgery, Duke University Medical Center, Durham, NC 1994 Fischer-Leibinger Visiting Professor in Stereotactic Neurosurgery, University of Arizona, Tucson, AZ 1994 Invited Lecturer, Asia-Pacific Minimally Invasive Neurosurgery Conference, Singapore General Hospital, Singapore 1994 Visiting Professor, Ministry of Health, Government of Singapore, Tan Tock Seng Hospital, Singapore 1994 Visiting Professor, Pramongkutklao Medical School, Bangkok, Thailand 1994 Invited Lecturer, Chulalongkorn University, Bangkok, Thailand 1994 Invited Lecturer, The Chinese University of Hong Kong, Prince of Wales Hospital, Shatin, N.T., Hong Kona 1994 Invited Lecturer, Beijing, China 1994 Invited Lecturer, Zhong Shan Hospital, Shanghai, China 1994 Invited Lecturer, Guangxhou, China 1994 Invited Lecturer, Australian Stereotactic Workshop, Saint Vincent's Hospital, Sydney, Australia 1994 Director and Speaker, Practical Course, American Association of Neurological Surgeons, San Diego, CA 1994 Invited Speaker, Breakfast Seminars, American Association of Neurological Surgeons, San Diego, CA 1994 Invited Speaker, Harvard Longwood Oncology Group Spring Symposium, Boston, MA 1994 Invited Speaker, Interactive Neurology, MA General Hospital, Harvard Medical School Continuing Education, Boston, MA (6/23/94) 1994 Invited Lecturer, UCLA Course on Minimally Invasive Therapy of the Brain, Los Angeles, CA (8/25-27/94) 1994 Invited Lecturer and Panelist, First Brazilian Workshop of Stereotactic Radiotherapy and Radiosurgery, San Paulo, Brazil (9/1-3/94) 1994 Invited Lecturer and Panelist, XX Congresso Brasileiro de Neurocirurgia, Belo Horizonte, Brazil (9/4-8/94) 1994 Invited Speaker, Grand Rounds, The Brockton Hospital Symposium, Brockton, MA (9/16/94) 1994 Invited Speaker, The Preuss Foundation Symposium on Stereotactic Radiation Treatments for Brain Tumors, Boston, MA (9/28-30/94) 1994 Invited Lecturer, Breakfast Seminar, Congress of Neurological Surgeons, Chicago, Illinois (10/1-6) 1994 Invited Lecturer, Interventional MRI Symposium, Society for Magnetic Resonance, Boston, MA (10/8-9)1994 Invited Lecturer, Stereotactic Neurosurgery - Hands On, American Association of Neurological Surgeons, New Orleans, LA (10/28-29) 1994 Invited Lecturer, Radiosurgery for Brain Tumors, Loyola University Medical Center, Maywood, IL (11/4-5)1994 Invited Lecturer, Intensive Review in Neurology, Harvard Medical School, Department of Continuing Education, Boston, MA 1995 Invited Lecturer, Medical Grand Rounds, Brigham & Women's Hospital 1995 Invited Lecturer, Practical Course, American Association of Neurological Surgeons, Orlando, FL (4/22)

1995 Invited Lecturer, Tumor Section Symposium, American Association of Neurological Surgeons, Orlando, FL (4/26)

1995 Invited Speaker, Breakfast Seminars, American Association of Neurological Surgeons, Orlando, FL (4/22-27)

1995 Invited Lecturer and Panelist, 2nd Congress of the Spanish Radiosurgery Society, Madrid, Spain (4/28)

1995 Invited Special Lecturer, Panelist, 10th European Congress on Neurosurgery, Berlin, Germany (5/9). 1995 Invited Lecturer and Panelist, Virtual Reality in Medicine and Developer's Expo, Boston, MA

1995 Invited Lecturer, X-knife Consortium Meeting, Boston (6/13/95)

1995 Program Chairman, Lecturer, Moderator, International Stereotactic Radiosurgery Society 2nd Congress Meeting, Boston, MA 6/14-17/95)

1995 Invited Lecturer, Joint International Congress on Minimally Invasive Techniques in Neurosurgery and Otolaryngology, Pittsburgh, PA (6/19)

1995 Invited Panelist, Practical Course, Congress of Neurological Surgeons, San Francisco, California (10/15)

1995 Invited Lecturer, Luncheon Discussion Groups, Congress of Neurological Surgeons, San Francisco, California (10/16,18)

1995 Invited Speaker, General Electric Intraoperative MR Symposium, Congress of Neurological Surgeons, San Francisco, California (10/18)

1995 Invited Lecturer, General Scientific Plenary Session, Congress of Neurological Surgeons, San Francisco, California (10/19)

1995 Invited Panelist and Consultant, Center for Health Care, Lawrence Livermore National Laboratories, San Francisco, California (10/20)

1995 Invited Professor, Overlook Hospital, Summit, New Jersey (10/27)

1995 Invited Lecturer, New Jersey State Neurosurgical Society, New Brunswick, New Jersey (10/27) 1995 Invited Lecturer, Tumors of the Central Nervous System, Harvard Medical School, Department of Continuing Education, Boston (11/14-15)

1995 Invited Lecturer, Stereotactic Neurosurgery - Hands On, American Association of Neurological Surgeons, New Orleans, LA (11/17-18)

1995 Invited Lecturer, XKnife Consortium, Orlando, FL (12/5)

1995 Invited Lecturer, LINAC Radiosurgery, 1995, University of Florida, Orlando, FL (12/6-10)

1996 Visiting Professor, Chicago Institute of Neurosurgery and Neuroresearch, Chicago, IL (12/22) 1996 Invited Lecturer and Panelist, 2nd International Skull Base Congress, VII Annual Meeting North

American Skull Base Society, San Diego, CA, (6/29-7/4)

1996 Invited Lecturer and Panelist, Conference on Stereotactic Target Localization Techniques, Boston, MA, (7/20-7/21)

1996 Invited Lecturer, LINAC Stereotactic Radiosurgery/Radiotherapy Symposium, Samsung Medical Center, Seoul, Korea (9/7)

1996 Invited Lecturer, Stereotactic Radiosurgery Workshop, Tokyo University, Tokyo, Japan (9/8) 1996 Invited Lecturer, Stereotactic Radiosurgery and Radiotherapy Workshop, Queen Elizabeth Hospital, Hong Kong (9/10)

1996 Invited Lecturer, Symposium on Stereotactic Radiosurgery and Computer-Assisted Neurosurgery, Apollo Hospital, New Delhi, India (9/12)

1996 Special Guest Lecturer, Oregon Neurosurgical Society, Salishan Lodge, Oregon (10/18)

1996 Special Guest Lecturer, Oregon Neurosciences: Cost Effectiveness

1996, Salishan Lodge, Oregon (10/18)

1996 Visiting Professor, New Jersey Medical School, Newark NJ (10/22-23)

1996 Neurosurgery Grand Rounds, Hackensack Medical Center, Hackensack, NJ (10/23)

1996 Invited Lecturer, UCLA - XKnife User Group, Los Angeles, CA (10/26)

1996 Invited Lecturer, Tumors of the Central Nervous System, Harvard Medical School, Department of Continuing Education, Boston (11/26)

1996 Anesthesia Grand Rounds, Brigham & Women's Hospital, Boston, MA (11/27)

1997 Pain Service Grand Rounds, Brigham & Women's Hospital, Boston, MA (2/24)

1997 Invited Lecturer, MRI Basic to Advanced, General Electric Meeting, Breckenridge, CO (3/16)

1997 Visiting Professor, Maine Neurosurgical Society Meeting, Sugarloaf, ME (4/4-6)

1997 Invited Lecturer, Practical Course, American Association of Neurological Surgeons, Denver, CO (4/14)

1997 Invited Lecturer, General Electric Intraoperative MR Symposium, American Association of Neurological Surgeons, Denver, CO (4/16)

1997 Invited Speaker, Breakfast Seminars, American Association of Neurological Surgeons, Denver, CO (4/15,18)

1997 Invited Lecturer, Anesthesia/Critical Care Grand Rounds, Beth Israel Hospital, Boston, MA (5/21)

1997 Invited Lecturer and Moderator, International Stereotactic Radiosurgery Society 2nd Congress Meeting, Madrid, Spain (6/25-28/97)

1997 Speaker, Panelist and Moderator, XIIth Meeting of the World Society of Stereotactic and Functional Neurosurgery, Lyon, France (7/1-4/97)

1997 Invited Speaker and Moderator, 11th International Congress of Neurological Surgery, Amsterdam, The Netherlands (7/6-11/97)

1997 Visiting Professor, Tulsa Neurosciences Society, Tulsa, OK (9/11-12)

1997 Invited Panelist, Practical Course, Congress of Neurological Surgeons, New Orleans, LA (9/27-10/1) 1997 Invited Lecturer, Luncheon Discussion Groups, Congress of Neurological Surgeons, New Orleans, LA (9/27-10/1)

1997 Invited Speaker, General Electric Intraoperative MR Symposium, Congress of Neurological Surgeons, New Orleans, LA (9/27-10/1)

1997 Invited Lecturer, General Scientific Plenary Session, Congress of Neurological Surgeons, New Orleans, LA (9/27-10/1)

1997 Invited Lecturer, Brain Tumor Society, Boston, MA (11/1)

1997 Invited Lecturer, Tumors of the Central Nervous System, Harvard Medical School, Department of Continuing Education, Boston (11/25)

1998 Invited Speaker and Moderator, XKnife Radiosurgery Society Meeting, Philadelphia, PA (4/25) 1998 Invited Speaker, "Meet the Professor Session", American Society of Clinical Oncology Annual Meeting, Los Angeles, CA (5/16)

1998 Invited Speaker, General Electric Intraoperative MR Symposium, UHUHS: Uniformed Services University of the Health Sciences, Washington, DC (6/3)

1998 Invited Lecturer, Pain Management Seminar, Harvard Medical School, Department of Continuing Education, Boston (6/13)

1998 Invited Lecturer, Tumors of the Central Nervous System, Harvard Medical School, Department of Continuing Education, Boston (9/28)

1999 Invited Lecturer, "Entering the Mind Zone: A Comprehensive Neuroscience Program", Brigham & Women's Hospital Nurse Education (1/13)

1999 Invited Lecturer, West Virginia Medical Society, Charleston, WV (1/22)

1999 Invited Speaker, AANS Joint Section on Cerebrovascular Surgery, Nashville, TN (2/2)

1999 Invited Speaker and Moderator, XKnife Radiosurgery Society Meeting, Sydney, Australia (2/23)

1999 Invited Lecturer, Panelist and Moderator, International Stereotactic Radiosurgery Society 3rd Congress Meeting, Sydney, Australia (2/24-2/27)

1999 Invited Lecturer, Panelist and Moderator, 50th Anniversary of Neurosurgery in Egypt, Cairo, Egypt (3/9-3/12)

1999 Invited Lecturer, Panelist and Moderator, International Stereotactic Radiosurgery Society 3rd Congress Meeting, Sydney, Australia (2/24-2/27)

1999 Invited Lecturer, Panelist and Moderator, Japanese Society of Skull Base Surgery / Conference on Neurosurgical Techniques and Tools, Osaka, Japan (3/22-25)

1999 Invited Lecturer, Practical Course, American Association of Neurological Surgeons, New Orleans, LA (4/24)

1999 Invited Lecturer, General Electric Intraoperative MR Symposium, American Association of Neurological Surgeons, New Orleans, LA (4/26)

1999 Invited Speaker, Breakfast Seminars, American Association of Neurological Surgeons, New Orleans, LA (4/27)

1999 Invited Lecturer and Moderator, New England Neurosurgical Society, Dedham, MA (6/11) 1999 Invited Lecturer, Panelist and Moderator, American Society of Stereotactic and Functional Neurosurgery, Snowbird, UT (7/7-11)

1999 Invited Lecturer, Tumors of the Central Nervous System, Harvard Medical School, Department of Continuing Education, Boston (9/14)

1999 Visiting Professor, Stanford University Medical Center, Stanford, CA (10/1)

1999 Invited Lecturer, Neuroradiology, Head & Neck Radiology and Clinical Functional MRI and Spectroscopy, Harvard Medical School, Department of Continuing Education, Boston (10/4)

1999 Invited Panelist, Practical Course, Congress of Neurological Surgeons, Boston, MA (10/30-11/4) 1999 Invited Lecturer, Luncheon Discussion Groups, Congress of Neurological Surgeons, Boston, MA (10/30-11/4)

1999 Invited Examiner, AANS Professional Development Course: Mock Oral Board Examination, Houston, TX (11/15-16)

2000 Invited Speaker, North American Skull Base Society, Phoenix, AZ (3/17-19)

2000 Invited Speaker, Practical Course, American Association of Neurological Surgeons, San Francisco, CA (4/9)

2000 Invited Speaker, Breakfast Seminars, American Association of Neurological Surgeons, San Francisco, CA (4/11)

2000 Invited Speaker, Society of University Neurosurgeons, Boston, MA (6/14-17) 2000 Invited Panelist, Practical Course, Congress of Neurological Surgeons, San Antonio, TX (9/23-28) 2000 Invited Lecturer, Luncheon Discussion Groups, Congress of Neurological Surgeons, San Antonio, TX (9/23-28)

2000 Invited Lecturer, Tumors of the Central Nervous System, Harvard Medical School, Department of Continuing Education, Boston (12/4)

2001 Invited Lecturer and Panelist, International Stereotactic Radiosurgery Society 4th Congress Meeting, Las Vegas, Nevada (6/10-13)

2004 Medical Grand Rounds, Melrose-Wakefield Hospital, Melrose, MA (10/20)

Awards and Honors:

1977 The Engel Society

1980 Alpha Omega Alpha

1982 Brody Scholar in the History of Neuroscience

1983 American College of Surgeons Scholarship

1985 R.M.P. Donaghy Prize in Neurosurgery, Quebec and New England Neurosurgical Societies

1985 Award for Best Resident Paper, New England Neurosurgical Society

1993 Elected to "Ten Outstanding Young Leaders" (TOYL) by Greater Boston Jaycees

1995-96 Who's Who Among Outstanding Americans

1997-99 Listed in "Best Doctors in America -- Northeast Region" Grant Support:

1996 Investigator, Brigham Surgical Group Research Grant, Rapid Rate Magnetic Cortical Stimulation for MR Cortical Mapping. \$42,000 direct costs

Memberships, Offices and Committee Assignments in Professional Societies:

1980-present American Medical Association

1980-1987 North Carolina Medical Society

1980-1987 Durham-Orange Counties Medical Society

1983-2005 Massachusetts Medical Society

1983-2001 Suffolk County Medical Society

1988 Congress of Neurological Surgeons:

1987 General Scientific Session Committee

1988 Joint Committee on Education Self-assessment and Sponsorship SANS IV Committee

1989 Luncheon Seminars Committee, Poster Sessions Co-chairman, Sergeant-At-Arms Committee

1989-present American Society for Stereotactic and Functional Neurosurgery (ASSFN)

1993-1995 ASSFN Board of Directors

1989-present World Society for Stereotactic and Functional Neurosurgery

1989-present Joint Section on Stereotactic and Functional Neurosurgery of the American Association of Neurological Surgeons

1991-1992 Chairman, Resources Committee, Joint Section on Tumors, American Association of Neurological Surgeons and Congress of Neurological Surgeons

1991-1993 Self-Assessment for Neurological Surgery SANS V Committee

1991-1995 Stereotactic Radiosurgery Task Force Member, American Association of Neurological Surgeons

1991-1992 Chairman, Registration Committee, Congress of Neurological Surgeons

1992-1993 Chairman, Registration Committee, American Association of Neurological Surgeons

1992-1994 Joint Committee on Self-Assessment, AANS/CNS

1983-1987 Joint Committee on Continuing Medical Education, AANS/CNS

1992-1997 Chairman, Subcommittee on Education, Joint Section on Tumors, American Association of Neurological Surgeons and Congress of Neurological Surgeons

1992-1997 Executive Council, Joint Section on Tumors, American Association of Neurological Surgeons and Congress of Neurological Surgeons

1992-1995 Editor, World Directory of Neurological Surgeons (North American Edition), Congress of Neurological Surgeons

1993-2001 Affiliate Member, American Society for Therapeutic Radiology and Oncology

1994-1996 Executive Council, Joint Section on Stereotactic and Functional Neurosurgery, American Association of Neurological Surgeons and Congress of Neurological Surgeons

1994-1995 Program Chairman, International Stereotactic Radiosurgery Society Meeting, Boston 1995

1994-1996 Chairman, Membership Committee, International Stereotactic Radiosurgery Society 1994-1998 Member, Board of Directors, American Association of Stereotactic and Functional

Neurosurgery

1994 Scientific Program Committee, Congress of Neurological Surgeons, San Francisco, CA 1995

1997-1999 Chairman, Scientific Program Committee, International Stereotactic Radiosurgery Society Meeting, Sydney 1999

1997-1998 President, XKnife Radiosurgery Society

Editorial Boards:

1987-1993 Congress of Neurological Surgeons: Clinical Neurosurgery 1994-2003 Journal of Image Guided Surgery 1994-1999 Journal of Stereotactic and Functional Neurosurgery 1994-2003 Ad Hoc Reviewer, Neurosurgery 1999-2000 Methods in Biomedical Magnetic Resonance Imaging and Spectroscopy

Maior Research Interests:

1) Advances in 3-dimensional imaging capabilities for enhancement of intraoperative Management of intracranial tumors and vascular lesions, including image fusion between CT, MRI and SPECT, Magnetic stimulation preoperative cortical Mapping, and the Intraoperative MRI (MR/T) Project with the General Electric Corporation

2) Development of technical advances in the use of stereotactic radiosurgery using a modified linear accelerator and the proton beam in the treatment of neoplastic, vascular and functional lesions in the central nervous system

3) MR-guided Focused Ultrasound Surgery for the treatment of tumors (benign and Malignant), clot dissolution in stroke and intracerebral hemorrhage, neuromodulation, creation of focal brain lesions, and precise targeted delivery of drugs and genes within the brain.

Principal Clinical and Hospital Service Responsibilities:

1988-2003 Attending neurosurgeon 2006-2007 Attending neurosurgeon

Teaching Experience:

1988-89 Neurobiology Course, Tutorial Leader, New Pathway, Harvard Medical School.

1988-93 Clinical Instructor, Physical Diagnosis Course, Second Year Medical Students, Harvard Medical School.

1988-93 Surgery Elective, Neurosurgery Didactic Sessions, Harvard Medical School.

1990 Invited Lecturer, Postgraduate Medical Series Neurosurgery Session, Brigham & Women's Hospital 1993 Thesis Review, Graduation with Honors Program, Harvard Medical School

1993 Invited Lecturer, Human Nervous System and Behavior, Harvard Medical School

Professional Publications:

Peer Reviewed Publications:

1. Soules, MR, Hughes, CL Jr., Garcia JR, Livengood, CH, Prystowsky, MR, Alexander, E III. Nausea and vomiting of pregnancy: Role of human chorionic gonadotropin and 17- hydroxyprogesterone. Obstetrics and Gynecology. 1980: 55(6): 696-700.

2. Alexander, E., Jr., Alexander E., III. German influence on the work of Harvey Cushing, the pioneer of neurosurgery in America. Neurosurgery. 1981: 9 (5) 501-505.

3. Alexander, E., III, Friedman, AH. Characteristics of adrenergic receptors in human pial arterioles. Surgical Forum. 1983: 43: 508.

4. Alexander, E, III, Black, P McL, Liszczak, TM, Zervas, NT. Delayed CSF lavage for arteriographic and morphological vasospasm after experimental SAH. J Neurosurg. 1985: 63: 949-958.

5. Rossitch, E, Jr, Alexander, E, III, Schiff, SJ, Bullard, DE. Computer tomography guided stereotactic aspiration of a brainstem abscess. Clinical Neurology and Neurosurgery. 1988: 90:365-368.

6. Rossitch E, Jr., Carrazana, EJ, Ellenbogen, RG, Alexander, E, III. Kluver-Bucy syndrome following recovery from transtentorial herniation. British Journal of Neurosurgery. 1989: 3: 503-506.

7. Alexander E, III, Siddon, RL, Loeffler, JS. The acute onset of nausea and vomiting following stereotactic radiosurgery: Correlation with total dose to area postrema. Surgical Neurology. 1989:32: 40-44.

8. Loeffler, JS, Alexander E, III, Siddon RL, Saunders, WM, Coleman, CN, Winston, KR. Stereotactic radiosurgery for intracranial arteriovenous malformations using a standard linear accelerator. International J Radiation Oncology, Biology and Physics. 1989: 17: 673-677.

9. Alexander, E, III, Rossitch, E, Jr., Small, K, Rossenwasser, GO, Abson, P. Merkel cell carcinoma: long term survival in a patient with proven brain metastasis and presumed choroid metastasis. Clinical Neurology and Neurosurgery. 1989: 91 (4):317-320.

10. Small, KW, Rosenwasser, GO, Alexander, E III, Rossitch, E Jr, Dutton JJ. Presumed choroidal metastasis of Merkel cell carcinoma. Annals of Ophthalmology. 1990: 22:187-190.

11. Loeffler, JS, Alexander, E, III. The role of stereotactic radiosurgery in the management of intracranial tumors. Oncology. 1990: 4(3): 21-31.

12. Loeffler, JS, Kooy, HM, Wen, PY, Fine, HA, Cheng, C-W, Mannarino, EG, Tsai, JS, Alexander, E, III. The treatment of recurrent brain metastases with stereotactic radiosurgery. Journal of Clinical Oncology. 1990: 8(4): 576-582.

13. Rossitch, E Jr, Moore, MR, Alexander, E, III, Black, PMcL. The neurosurgeon's neurosurgeon. Cushing operates on a Penfield. Surgical Neurology. 1990: 33:150-153.

14. Crawford, JM, Rossitch, E, Jr., Oakes, WJ, Alexander, E, III. Arteriovenous malformation of the great vein of Galen associated with patent ductus arteriosus: Report of three cases and review of the literature. Child's Nervous System. 1990: 6:18-22.

15. Loeffler, JS, Rossitch E, Jr., Siddon, RL, Moore, MR, Rockoff, MA, Alexander, E, III. The role of stereotactic radiosurgery with a linear accelerator in the treatment of intracranial arteriovenous malformations and tumors in children. Pediatrics. 1990: 85(5): 774-782.

16. Alexander E III, Moore, MR, Siddon, RL, Rossitch E, Jr., Loeffler, JS. Successful management of intracranial arteriovenous malformations (AVM) with stereotactic external beam using a standard linear accelerator. Stereotactic and Functional Neurosurgery. 1990: 54 + 55: 548-549.

17. Alexander E III, Rossitch E, Jr., Siddon, RL, Moore, MR, Loeffler, JS. The role of stereotactic radiosurgery with a linear accelerator in the treatment of pediatric intracranial tumors. Stereotactic and Functional Neurosurgery. 1990: 54 + 55: 549-550.

18. Loeffler JS, Siddon RL, Wen PY, Nedzi LA, Alexander E III. Stereotactic radiosurgery of the brain using a standard linear accelerator: study of early and late effects. Radiotherapy and Oncology. 1990: 17:311-321.

19. Nashold, BS, Jr., Rossitch, E, Jr., Alexander, E, III. Dorsal root entry zone surgery for pain management: An update. Pain Management. 1991: 4(1): 15-23.

20. Alexander E III, Friedman, AH. Radioligand binding to adrenergic receptors in human pial membranes. Neurosurgery. 1990: 27(1):52-59.

21. Loeffler JS, Alexander E III, Hochberg FH, Wen PY, Morris J, Siddon RL, Schoene W, Morse RH, Black PMcL. Clinical patterns of failure following stereotactic interstitial irradiation in malignant gliomas. Int J Radiat Oncol Biol Phys 1990:19:1455-1462.

22. Carvalho PA, Schwartz RB, Alexander E III, Loeffler JS, Zimmermann RE, Nagel JS, Holman BL. Extracranial metastatic glioblastoma: appearance on T1-201 chloride/Tc- 99m-hmpao SPECT. J Nucl Med 1991: 32:322-324.

23. Rossitch E Jr, Alexander, E III, Black, PM, Cooke JP. L-arginine normalizes endothelial function in cerebral vessels from hypercholesterolemic rabbits. J Clin Invest. 1991: 87: 1295-1299.

24. Loeffler JS, Alexander E III, Wen PY, Shea WM, Coleman CN, Kooy HM, Fine HA, Nedzi LA, Silver B, Riese NE, Black PM. Results of stereotactic brachytherapy used in the initial management of patients with glioblastoma. J Nat Cancer Inst. 1990: 82:1918- 1921.

25. Tsai J-S, Buck BA, Svensson GK, Alexander E III, Cheng C-W, Mannarino EG, Loeffler JS. Quality assurance in stereotactic radiosurgery using a standard linear accelerator. Int J Radiat Oncol Biol Phys 21: 737-748, 1991.

26. Kooy HM, Nedzi LA, Loeffler JS, Alexander E III, Cheng CW, Mannarino E, Holupka E, Siddon RL. Treatment planning for stereotactic radiosurgery of intracranial lesions. Int J Radiat Oncol Biol Phys. 21: 683-693, 1991.

27. Nedzi LA, Kooy H, Alexander E III, Gelman RS, Loeffler JS. Variables associated with the development of complications from radiosurgery of intracranial tumors. Int J Radiat Oncol Biol Phys. 21: 591-599, 1991.

28. Holman BL, Zimmerman RE, Johnson KA, Carvalho PA, Schwartz RB, Loeffler JS, Alexander E, Pelizzari CA, Chen GTY. Computer-assisted superimposition of magnetic

resonance and high resolution Technetium-99m-HMPAO and Thallium-201 SPECT images of the brain. J Nucl Med 32(8):1478-1484, 1991.

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