

Mitchel S. Berger

Professor and Chairman, Department of Neurological Surgery

UCSF Neurological Surgery Faculty since 1997

Clinical interests

Dr. Berger's main clinical interests are the treatment of brain tumors in adults and children and of epilepsy related to brain tumors. He has extensive expertise in intraoperative mapping of the brain to identify the sites of motor, sensory, and language function and thereby avoid their involvement or injury during surgery. Dr. Berger is Director of the Adult Hydrocephalus and Shunt Program, and he also practices in the Neuro-Oncology Program and the Radiosurgery Program.

Research interests

His current research interests involve identifying molecular markers in gliomas as correlates of tumor progression and prognosis. This is done in conjunction with the Molecular Marker Core of the BTRC. He also works in conjunction with Dr. Krys Bankiewicz to test small molecule inhibitors in brain tumors using the drug delivery technique of [convection enhanced delivery](#). He is a co-investigator with Dr. John Park in UCSF's Comprehensive Cancer Center to develop immunoliposome-directed targeted therapy for treating gliomas that express EGF receptors. Other collaborations include functional mapping localization of language pathways in the brain in conjunction with Dr. Robert Knight and the Cognitive Neuroscience Graduate Program at UC Berkeley. Dr. Berger is currently the Principal Investigator of UCSF's SPORE Brain Tumor Program, funded by the National Cancer Institute and NINDS.

Education, Training, and Previous Positions

1974: BA, Harvard College, Cambridge, Massachusetts 1979: MD, University of Miami School of Medicine 1979-1980: Internship, UCSF 1980-1985: Residency in Neurological Surgery, UCSF 1985: Clinical Fellowship in Neuro-oncology, Brain Tumor Research Center at UCSF 1986: Fellowship in Pediatric Neurosurgery, Department of Neurosurgery, Hospital for Sick Children of the University of Toronto, Ontario, Canada 1986: Assistant Professor, Department of Neurosurgery at the University of Washington School of Medicine in Seattle/Concomitant appointments as Chief of Pediatric Neurosurgical Oncology at the Children's Hospital and Medical Center in Seattle and Chief of the Northwest Neuro-Oncology Research & Therapy Section at the University of Washington 1990: Associate Professor at the University of Washington 1996: Professor of Neurosurgery at the University of Washington

Selected Professional Memberships and Appointments

Board of Directors, American Association of Neurological Surgeons (AANS) American Academy of Neurological Surgery American Association for the Advancement of Science American Association for Cancer Research American College of Surgeons American Society of Clinical Oncology American

Society of Gene Therapy American Society for Stereotactic and Functional Neurosurgery California Association of Neurological Surgeons Congress of Neurological Surgeons (CNS) Joint Tumor Section, AANS and CNS National Tuberous Sclerosis Association Neurosurgical Society of American Pediatric Section, AANS and CNS San Francisco Medical Society Society of Neurological Surgeons Society for Neuro-Oncology Society of Surgical Oncology Vanderbilt Meacham Society World Federation of Neurosurgical Societies Medical Advisor, North American Brain Tumor Coalition Executive Council, American Brain Tumor Association Advisory Council, National Brain Tumor Foundation NFL Head, Neck and Spine Medical Committee Editorial board: The American Journal of Neuroradiology Editorial board: The Journal of Neuro-Oncology Editorial board: Journal of Neurosurgery Editorial board: Neuro-Oncology Editorial board: Neurosurgery Editorial board: Operative Neurosurgery Editorial board: Techniques in Neurosurgery

Selected Honors and Awards

1979: Lange Medical Publishing Company Medical Student Award for Outstanding Academic Performance, University of Miami School of Medicine 1979: Alpha Omega Alpha Award for Best Patient-Student Physician Relationship During Clinical Clerkships, University of Miami School of Medicine 1983: Donald Matson Award in Pediatric Neurosurgical Research from the American Association of Neurological Surgeons (AANS) 1991: Diplomate of the American Board of Neurological Surgery 1993: Fellow of the American College of Surgeons (FACS) 1994: Appointed to the Executive Committee of the Congress of Neurological Surgeons 1997-1999: President of the Society for Neuro-Oncology 1997-1998: Vice President of the Congress of Neurological Surgeons 1997-present: Director of the Brain Tumor Research Center, UCSF 1999: Appointment to the Board of Directors of the California Division of the American Cancer Society (ACS) 2002-present: America's Top Doctors, Castle Connolly Medical Ltd. 2004: UCSF Medical Center THANKS Star Award for exceptional contribution 2005-2006: Appointed Chairman of the Scientific Program Committee, AANS Annual Meeting 2006: Ronald L. Bittner Lecturer, Tumor Section, AANS Annual Meeting 2006: Farber Award, AANS Annual Meeting 2006: Jeannette and Bernard S. Post MD Endowed Lecturer, Mt. Sinai School of Medicine 2006: UCSF Medical Center THANKS Star Award for exceptional contribution 2007-2010: Director, American Board of Neurological Surgery 2007-2010: Board of Directors, American Association of Neurological Surgeons 2009: Winn Prize, Society of Neurological Surgeons 2009: Elected Member, UCSF Institute of Molecular Medicine 2010: Vice President, American Association of Neurological Surgeons 2010-2013: Secretary, American Academy of Neurological Surgery 2011: President Elect, American Association of Neurological Surgeons 2012: President, American Association of Neurological Surgeons

Selected Recent Publications Books

Bernstein M, Berger MS (eds): Neuro-Oncology: The Essentials, Second Edition. Thieme, New York, 2008, 496 pp.

Bernstein M, Berger MS (eds): Neuro-Oncology: The Essentials. Thieme, New York, 2000, 528 pp.

Berger MS, Wilson CD (eds): The Gliomas. WB Saunders, Philadelphia, 1998, 796 pp.

Berger MS (guest ed): Neurosurgery Clinics of North America, Pediatric Neuro-Oncology (vol 3, no 4). WB Saunders, Philadelphia, October 1992. Articles

Cage TA, Pekmezci M, Prados M, Berger MS. Subependymal spread of recurrent glioblastoma detected with the intraoperative use of 5-aminolevulinic acid [published online ahead of print February 19, 2013]. J Neurosurg. DOI: 10.3171/2013.1.JNS121537

Shchors K, Persson AI, Rostker F, Tihan T, Lyubynska N, Li N, Swigart LB, Berger MS, Hanahan D, Weiss WA, Evan GI. Using a preclinical mouse model of high-grade astrocytoma to optimize p53 restoration therapy [published online ahead of print March 29, 2013]. *Proc Natl Acad Sci U S A*. doi: 10.1073/pnas.1219142110. Free Article

Barajas RF Jr, Hess CP, Phillips JJ, Von Morze CJ, Yu JP, Chang SM, Nelson SJ, McDermott MW, Berger MS, Cha S. Super-Resolution Track Density Imaging of Glioblastoma: Histopathologic Correlation [published online ahead of print February 14, 2013]. *AJNR Am J Neuroradiol*. doi: 10.3174/ajnr.A3400

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Kaur G, Kane AJ, Sughrue ME, Madden M, Oh MC, Sun MZ, Safaee M, El-Sayed I, Aghi M, McDermott MW, Berger MS, Parsa AT. The prognostic implications of Hyam's subtype for patients with Kadish stage C esthesioneuroblastoma. *J Clin Neurosci* 2013;20(2):281-6.

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Lau CY, Greysen SR, Mistry RI, Han SJ, Mummaneni PV, Berger MS. Creating a culture of safety within operative neurosurgery: the design and implementation of a perioperative safety video. *Neurosurg Focus* 2012;33(5):E3.

Bloch O, Han SJ, Cha S, Sun MZ, Aghi MK, McDermott MW, Berger MS, Parsa AT. Impact of extent of resection for recurrent glioblastoma on overall survival: clinical article. *J Neurosurg* 2012;117(6):1032-8.

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glioma resection. *Neurosurg Focus* 2010;28(2):E1.

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First Author

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3: Berger MS, Wachter RM, Greysen SR, Lau CY. Changing our culture to advance patient safety: the 2013 AANS Presidential Address. *J Neurosurg*. 2013 Dec;119(6):1359-69. doi: 10.3171/2013.10.JNS132034. PubMed PMID: 24289847.

4: Berger MS, Carter BS. Low grade gliomas. *Neurosurg Focus*. 2013 Feb;34(2):1. doi: 10.3171/2012.12.FOCUS12407. PubMed PMID: 23373455.

5: Berger MS. Glioma surgery: a century of challenge. *Clin Neurosurg*. 2011;58:7-9. PubMed PMID: 21916122.

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11: Berger MS. Surgery of low-grade gliomas-technical aspects. *Clin Neurosurg*. 1997;44:161-80. Review. PubMed PMID: 10080007.

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20: Berger MS. Neurosurgery: intrauterine surgical procedures and the management of hydrocephalic fetuses. *West J Med*. 1986 Jul;145(1):87. PubMed PMID: 18750026; PubMed Central PMCID: PMC1306827.

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