

AMANDIP SINGH GILL

CERTIFICATION

- **Board Certified** – American Board of Neurological Surgery

APPOINTMENTS

- **Chief of Staff** 2024-2026
Vice Chief of Staff 2021-2023
Adventist Health Simi Valley Hospital
- **Director of Neurosurgery and Neuroscience** – Adventist Health Simi Valley Hospital, January 2018 – December 2024
- **California Association of Neurosurgeons** – Bylaws Committee, January 2025 – Present
- **California Association of Neurosurgeons** – Website Committee, January 2025 – Present
- **Chief, Interventional and Operative Committee** 2022-2024
Vice Chief, Interventional and Operative Committee 2019-2021
Adventist Health Simi Valley Hospital
- **Committee Director, Multispecialty Peer Review Committee** 2023-2024
Member, 2022-2024
Adventist Health Simi Valley Hospital
- **Committee Director, Quality Council** 2022-2023
Adventist Health Simi Valley Hospital
- **Member, Medical Executive Committee** – Adventist Health Simi Valley Hospital, 2019 – Present
- **Chief, Neurological Surgery** – Gill Neurosurgery, 2016 – Present

EDUCATION

- **Fellow** – Skull Base Neurological Surgery – Frank P.K. Hsu
Department of Neurological Surgery, University of California, Irvine
7/2013 – 6/2014
- **Fellow** - Functional, Stereotactic, Pain, and Epilepsy Neurosurgery
Director – Frank P.K. Hsu
Department of Neurological Surgery, University of California, Irvine
7/2013 – 6/2014
- **Chief Resident** – Department of Neurological Surgery
University of California, Irvine 10/2014, 12/2014 – 6/2016

- **Resident** - Department of Neurological Surgery
University of California, Irvine 6/2009 – 6/2016
- **Doctor of Medicine** – School of Medicine, University of California,
Irvine 6/2009
ΑΩΑ Inductee, Junior Year
USMLE Step 1/2 Scores: 99/99
- **Bachelor of Science** – University of California, Los Angeles 6/2005
Highest Honors in Neuroscience
Thesis: Comparative karyotyping and molecular cytogenetics on
pediatric brain tumors and their derived cancer stem cells.

RESEARCH EXPERIENCE

Postgraduate

- Principal Investigator: Frank P.K. Hsu MD PhD
Department of Neurological Surgery, UC Irvine, 7/2012-Present
Currently investigating novel techniques in deep brain stimulation to
improve targeting and clinical outcomes.

Medical School/Postgraduate

- Principal Investigator: Devin K. Binder MD PhD
Department of Neurological Surgery, UC Irvine, 7/2006-12/2011
As an American Association of Neurological Surgeons (AANS)
Neurosurgery Education and Research Foundation (NREF) Medical
Student Fellow and after, investigated neurophotonics for use in the
detection of various pathologies, including focal and generalized
seizures as well as brain edema.

Undergraduate

- Principal Investigator: Dr. Paul S. Mischel MD
Department of Pathology and Laboratory Medicine, UCLA, 4/2004-
8/2005
Identification of subsets of patients with glioblastoma susceptible to
specific clinical therapies through the use of molecular cytogenetics.
- Principal Investigator: Dr. Nagesh P. Rao
Department of Pathology and Laboratory Medicine, UCLA, 2/2003-
8/2005
Characterization of the pathogenesis of various diseases, principally of
acute myeloid leukemia and gliomas, using molecular cytogenetics.
- Principal Investigator: Dr. Ramaswamy K. Iyer
Department of Pathology and Laboratory Medicine, UCLA, 2/2003-
8/2004
Examination of the role of key enzymes in polyamine metabolism in
the pathogenesis and treatment of prostate cancer.
- Principal Investigator: Dr. Eri S. Srivatsan
Department of Surgery, UCLA, 9/2002-12/2002

Delineation of novel tumor suppressor gene associated with cervical cancer.

TEACHING EXPERIENCE

- **Neurosurgery Core Lecturer**, UC Irvine School of Medicine, 7/2010-Present
Provide neurosurgery core lectures to medical students rotating on the surgery and neuroscience core clinical clerkships.
- **Basic Science Tutorial Coordinator**, UC Irvine School of Medicine, 8/2006-6/2010
Selected to coordinate, as well as present, tutorials to medical students in a variety of basic science courses. Also provide individual tutoring for first and second year medical students.
- **Basic Science and Mathematics Tutor**, University High School, 2/2003-8/2004
Tutored students, many of whom were underprivileged, in English, mathematics through Calculus, and general and physical chemistry.

COMMUNITY SERVICE

- **Member**, UC Irvine School of Medicine Admissions Committee, 9/2006-6/2010
Selected to review applicant files for both interview and admission to the UC Irvine School of Medicine.
- **Medical Student Advisor**, UC Irvine College Student Interest Group in Neurology (CO-SIGN), 8/2006-6/2009
Present lectures and provide advice, guidance, and resources to the undergraduate student body, most commonly those interested in a career in medicine, neurology, or neurosurgery.
- **Volunteer**, National Youth Leadership Forum, 6/2006-7/2006
Mentored in an immersion program for high school students, many of whom were underserved, providing advice and a general description of the admissions process, curriculum, and experiences of medical school.
- **Clinic Coordinator (October/June)/Volunteer**, UC Irvine School of Medicine Clinica Carino, 9/2005-6/2007
Organized health clinics for the underserved population of Santa Ana, providing an array of basic health services and when appropriate, referrals to local physicians for further treatment.
- **Member**, UC Irvine School of Medicine Vaccination Clinic, 9/2005-9/2006
Vaccinated children in the community of Santa Ana.
- **Member**, UC Irvine School of Medicine Sight Savers Clinic, 9/2005-9/2006
Conducted glaucoma and vision screenings for the underserved population of Santa Ana.

- **Co-founder and Finance Chair**, UCLA International Outreach Project (IOP), 9/2003-6/2005
Headed the fundraising division of IOP, which had various medical supplies and equipment donated to a rural clinic in Pedro Escobedo, Mexico. Helped organize a health fair for the town's children and presented lectures to students on various health topics.
- **Volunteer and Member**, UCLA Pre-medical American Medical Student Association, 3/2002-6/2005
Helped organize health policy debates, run fundraisers for outreach projects, and offered many other resources for pre-health students.
- **Care Extender**, Santa Monica UCLA Medical Center, 10/2002-8/2004
Shadowed physicians, helped medical staff with daily duties, and observed numerous procedures, including cesarean sections, tubal ligations, emergency endoscopy, and CPR.

AFFILIATIONS

- **AANS/CNS Joint Cerebrovascular Section**, 7/2011-Present
- **American Association of Neurological Surgeons (AANS)**, member, 2/2007-Present
- **Congress of Neurological Surgeons (CNS)**, member, 7/2009-Present
- **American Medical Student Association**, member, 3/2002-6/2009
- **American Medical Association (AMA)/Orange County Medical Association**, 9/2005-6/2009

AWARDS AND RECOGNITIONS

- **Inductee, Gold Humanism Honor Society**, UC Irvine School of Medicine, 5/2014
- **Nurse Exemplar Award – Friend of Nursing**, UC Irvine School of Medicine, 6/2013
- **Resident of the Year – Sterling Staph Award for Excellence in Teaching**, UC Irvine School of Medicine, 7/2011
- **AANS NREF Best Medical Student Summer Research Fellowship (MSSRF) Submission, Awarded a Platform Presentation**, American Association of Neurological Surgeons Annual Meeting, 5/2008
- **Junior Year Inductee, Alpha Omega Alpha (ΑΩΑ) Honor Society**, 4/2008
- **Fellow, AANS NREF MSSRF**, American Association of Neurological Surgeons, 4/2007
- **Warren L. Bostick Award for Excellence in Clinical Pathology**, UC Irvine School of Medicine, 5/2007
- **Basic Science Award of Excellence**, UC Irvine School of Medicine, 5/2007
- **Inductee, Pathology Honor Society**, Association of Pathology Chairs, 5/2007
- **Fellow, Summer Research Training Grant in Neuroscience**, UC Irvine School of Medicine, 6/2006

- **Excellence in Physiology Award**, UC Irvine School of Medicine, 5/2006
- **Highest Honors in Neuroscience** upon graduation from UCLA, 6/2005
- **Inductee, Phi Beta Kappa**, 1/2006
- **Graduate of College Honors Program**, UCLA, 6/2005
- **Dean's Honors List**, UCLA, 2003-2005
- **Chancellor's Service Award**, UCLA, 6/2005
- **Inductee, Golden Key International Honour Society**, 6/2005
- **Inductee, Phi Eta Sigma/Alpha Lambda Delta Honor Societies**, 1/2004
- **Valedictorian**, St. Genevieve High School, 6/2001
- **Bausch and Lomb Science Award**, Bausch and Lomb, 6/2000

ABSTRACTS AND PRESENTATIONS

- Gill AS, Cruz AS, Pelargos P, Feldman DM, Babur SH, Kehal IS, Handwerker J, Hicks G, Field RR, Hsu FPK. Intraoperative multi-modality imaging and its benefits in Deep Brain Stimulation for Parkinson's Disease. *University of California, Irvine Institute for Clinical and Translational Research Conference*. May 2014.
- Gill AS, Cruz AS, Pelargos P, Handwerker J, Hicks G, Hsu FPK. Validation of intraoperative 32-slice computed tomography as a useful adjunct to MR- and MER-guided DBS implantation in STN-targeted Parkinson's Disease: Exciting prospects on the horizon. *American Association for Stereotactic and Functional Neurosurgery*. May 2014.
- Gill AS, Yanni DS, Chaturbedi A, Johnson JP, Ghostine S. Stabilizing parieto-occipito-cervical fusion in the setting of suboccipital craniectomy and far lateral craniotomy. *2011 AANS/CNS Joint Section on Disorders of Spine and Peripheral Nerves*. March 2011.
- Yanni DS, Gill AS, Ghostine S. Sublaminar fixation for traumatic lumbar lateral listhesis in a 2 year-old patient. *2011 AANS/CNS Joint Section on Disorders of Spine and Peripheral Nerves*. March 2011.
- Yanni DS, Gill AS, Ghostine S. Minimally invasive robotic guided percutaneous lumbar spine stabilization and fusion for traumatic lumbar chance fractures. *AANS/CNS Joint Section on Disorders of Spine and Peripheral Nerves*. March 2011.
- Gill AS, Owen CM, Mathews MS, Abookasis D, Durkin A, Cuccia D, Tromberg BJ, Binder DK. Optical detection of the pre-seizure state. *First Medical Student Fellow selected to attend and present fellowship project at the 2008 AANS Annual Meeting as a Platform Presentation*. April 2008.
- Owen CM, Gill AS, Binder DK. Early detection of brain edema through an implanted optical probe. *Abstract invited for platform presentation at the 2008 AANS Annual Meeting*. April 2008.

- Department of Neurological Surgery, University of California, Irvine, CA. *Invited Grand Rounds presentation*: “Clinical challenges presented by vasospasm.” February 2011.
- Department of Neurological Surgery, University of California, Irvine, CA. *Invited Grand Rounds presentation*: “Trephination, neurosurgery of antiquity.” October 2009.
- Department of Neurological Surgery, University of California, Los Angeles, CA. *Invited Grand Rounds presentation*: “Rasmussen’s Encephalitis.” September 2008.
- Department of Neurological Surgery, University of California, San Francisco, CA. *Invited Grand Rounds presentation*: “Optical detection of the pre-seizure state.” August 2008.
- Department of Neurological Surgery, University of California, Irvine, CA. *Invited Grand Rounds presentation*: “Optical detection of the pre-seizure state.” April 2008.

PUBLICATIONS

- Gill AS, Gill R, Kaloostian P, Elias D, Roufail JS, Cruz AS, Pelargos PE, Hsu FPK, Kim RC, Ayer RE, Ghostine S. 2017. Intracranial myeloid sarcoma mimicking acute subdural hematoma. *Case Reports in Surgery*. 2017: 3056285.
- Gill AS, Cruz AS, Khahera AS, Walia SS, Engall JR, Pelargos PE, Babur SH, Morenkova A, Phielipp N, Hermanowicz N, Vadera S, Hicks GE, Field RR, Handwerker J, Hsu FPK. 2016. A pilot study on asleep and robotic DBS. *Submitted to New England Journal of Medicine*.
- Ghostine S, Kaloostian PE, Ordookhanian C, Kaloostian S, Zarrini P, Kim T, Scibelli S, Clark-Schoeb SJ, Samudrala S, Laurysen C, Gill AS, Johnson PJ. 2017. Improving C1-C2 complex fusion rates: an alternative approach. *Cureus*. 2017 Nov; 9(11): e1887.
- Yanni DS, Cruz AS, Halim AY, Gill AS, Muhonen M, Heary RF, Goldstein IM. 2018. Sublaminar fixation for traumatic lumbar fracture subluxation with lateral listhesis in a 2-year-old patient. *Accepted for publication, Journal of Neurosurgery: Pediatrics*.
- Vadera S, Chan A, Lo T, Gill AS, Morenkova A, Phielipp NM, Hermanowicz N, Hsu FPK. 2015. Frameless stereotactic robot-assisted subthalamic nucleus deep brain stimulation: case report. *World Neurosurgery*. S1878-8750(15)01524-7
- Chan AY, Tran KD, Gill AS, Vadera S. 2015. Stereotactic robotic assisted MRI-guided laser thermal ablation of radiation necrosis in the posterior cranial fossa. *Accepted Neurosurgical Focus*.
- Gill AS, Hsu FPK. 2014. Book review: Neurovascular surgical techniques. *Journal of the Neurological Sciences, in press*.

- Gill AS, Chaturbedi A, Mbabuike N, Linskey ML, Bota DA. 2011. Previously unrecognized gliomatosis cerebri presenting with central neurogenic hyperventilation successfully treated with aggressive critical care and radio-chemotherapy. *In preparation.*
- Gill AS, Ghostine S, Bhandarkar N. 2011. Modern anatomical and surgical considerations of the pituitary fossa. *Invited book chapter in preparation.*
- Gill AS, Rajneesh KF, Owen CM, Yeh J, Hsu M, Binder DK. 2011. Early optical detection of cerebral edema in vivo. *Journal Neurosurgery* 114(2):470-7.
- Gill AS, Binder DK. 2007. Wilder Penfield, Pío Del Río-Hortega, and the discovery of oligodendroglia. *Neurosurgery* 60(5):940-948.
- Gill AS, Binder DK. 2007. Harvey Cushing's approach to the posterior fossa. In: A.A. Cohen-Gadol and D.D. Spencer (eds.), The Legacy of Harvey Cushing: Profiles of Patient Cases, New York, NY: Thieme Scientific Publishers.
- Shankar DB, Cheng JC, Kinjo K, Federman N, Moore TB, Gill AS, Rao NP, Landaw EM, Sakamoto KM. 2005. The role of CREB as a proto-oncogene in hematopoiesis and in acute myeloid leukemia. *Cancer Cell* 7(4):351-62.
- Rajneesh KF, Owen CM, Mathews MS, Abookasis D, Gill AS, Durkin A, Cuccia D, Tromberg BJ, Binder DK. Optical detection of the pre-seizure state. *In preparation.*
- Gill AS, Rao NP. Comparative karyotyping and molecular cytogenetics on pediatric brain tumors and their derived cancer stem cells. *In preparation.*