

MATTHEW AGAM, MD

CURRICULUM VITAE

Education

Emory University Department of Neurosurgery | Atlanta, GA

- **Residency, Neurological Surgery,**
- **Enfolded Fellowship, Complex and Minimally Invasive Spine**
- **Global Health Track,** Emory University School of Medicine Global Health & Equity Office
 - o American Board of Neurological Surgery written board exam (2024): Pass – score 94%

Keck School of Medicine of USC | Doctor of Medicine | Los Angeles, CA

Alpha Omega Alpha Honors Society

- o **Graduation with “Distinction in Research”**
- o **Clinical Honors:** *Surgical Subspecialty (Neurosurgery, ENT), Obstetrics & Gynecology, Family Medicine, Psychiatry*

USC College of Letters, Arts and Sciences | BS, Neuroscience | Los Angeles, CA

USC Mork Family Scholar, full-tuition merit scholarship, inaugural recipient

- o **USC Baccalaureate/MD,** 8-year combined BA/MD program

Hebrew University of Jerusalem, Study Abroad Honors Program | Jerusalem, Israel

Awards & Honors

- o **Chief neurosurgery resident of the year award,** Grady Memorial Hospital chief (06/2026)
- o **Invited Faculty,** 7th Annual Society of Ethiopian Neurological Surgeons Meeting, Addis Ababa
- o **Resident Paper Contest Winner;** top resident paper; Georgia Neurosurgical Society Fall Meeting
- o **Integra Foundation Award;** best clinical research paper; tumors, *Congress of Neurological Surgeons Meeting*
- o **Innovations in Med. Education Stephen Abrahamson Award for Innovation**
- o **MEDSTARS Finalist** for best surgical research, Keck School of Medicine
- o **Most Meritorious Poster** at the 2017 Medical Student Research Forum & Poster Day
- o **Keck Summer Research Fellow**
- o **USC Provost’s Undergraduate Research Fellow,** 3-time recipient

Research

Publications:

Zohdy Y, Faraj R, **Agam M**, et al. The Utility of Hematologic Investigations as a Biomarker for Spheno-orbital Meningiomas. *Journal of Neurosurgery*. Submitted 2/2026.

Zohdy Y, Jahangiri A, Alawieh A, **Agam M**, et al. Superior Orbital Fissure Narrowing and Tumor-Associated Pain in Spheno-Orbital Meningiomas. *Acta Neurochirurgica*. 2024;166(113). PMID: 38416213

Zohdy Y, Jacob F, **Agam M**, et al. Volumetric analysis of spheno-orbital meningiomas: prognostic correlation and a compartmentalized approach. *Neurosurgery*. 2023;00(1-9). PMID: 37931131

Zohdy Y, **Agam M**, Maldonado J, Jahangiri A, Pradilla G, Garzon-Muvdi T. Symptomatic intracranial tumors is pregnancy: an updated management algorithm. Illustrative case. *Journal of Neurosurgery Case Lessons*. 2023;5(19).PMID: 37158391

Micko A, **Agam M**, Brunswick A, et al. Treatment strategies for giant pituitary adenomas in the era of endoscopic transsphenoidal surgery: a multicenter series. *Journal of Neurosurgery*. 2022;136(3). PMID: 34388714

Saad H, Bray DP, McMahon JT, et al. Permanent Cerebrospinal Fluid Diversion in Adults with Posterior Fossa Tumors: Incidence and Predictors. *Neurosurgery*. 2021;89(6). PMID: 34561703

Agam M, Wedemeyer MA, Wrobel B, Weiss MH, Carmichael JD, Zada G. Complications associated with microscopic and endoscopic transsphenoidal pituitary surgery: Experience of 1153 consecutive cases treated at a single tertiary care pituitary center. *Journal of Neurosurgery*. 2019;130(5). PMID: 29999459

Agam M, Zada G. Complications associated with transsphenoidal pituitary surgery: Review of the literature. In: *Clinical Neurosurgery*. Vol 65. ; 2018. PMID: 31076790

Olsen RHJ, **Agam M**, Davis MJ, Raber J. ApoE isoform-dependent deficits in extinction of contextual fear conditioning. *Genes, Brain and Behavior*. 2012;11(7). PMID 22883220

Oral Presentations:

Agam M. Global Health Residency Scholars Program (GHRSP) debrief and global health overview. *Emory Neurosurgery Grand Rounds* | Atlanta, GA

Agam M, Greenhill M. Combined neurosurgery/neuroradiology case conference presentation. *Emory Neurosurgery Grand Rounds* | Atlanta, GA

Agam M. Ultra-minimally invasive spine surgery: advances and techniques. *7th Annual Society of Ethiopian Neurological Surgeons Annual Meeting* | Addis Ababa, Ethiopia

Agam M, Ahmad F. High grade L5-S1 spondylolisthesis: evaluation and management strategies. *Georgia Neurosurgical Society 2024 Fall Annual Meeting* | Lake Oconee, GA

Agam M, Steed T, Gutierrez JM, Gary M. Proximal junctional kyphosis after long segment thoracolumbar fusion: impact of upper segment screw trajectory on radiographic kyphosis and reoperation. *George T. Tindall Resident Research Day* | Atlanta, GA

Agam M, Ahmad F. High grade L5-S1 spondylolisthesis: evaluation and management strategies. *Emory Neurosurgery Grand Rounds, Complex Case Conference* | Atlanta, GA

Agam M, Steed T, Gutierrez JM, Gary M. Proximal junctional kyphosis after long segment thoracolumbar fusion: impact of upper segment screw trajectory on radiographic kyphosis and reoperation. *Georgia Neurosurgical Society 2023 Fall Annual Meeting* | Lake Oconee, GA

Agam M, Sanders J. Combined Neurosurgery/Neuroradiology Case Conference Presentation
Emory Neurosurgery Grand Rounds | Atlanta, GA

Agam M, Pasyk M. Combined Neurosurgery/Neuroradiology Case Conference Presentation
Emory Neurosurgery Grand Rounds | Atlanta, GA

Agam M, Nelson A, Nguyen DT, Shah I, Vo A. Keck Online Learning Initiative: Evaluating a Medical Education E-Learning Innovation. *American Evaluation Association 32nd Annual Conference | Cleveland, OH*

Nelson A, Nguyen DT, **Agam M**, Schooner L, Vo A. Keck Online Learning Initiative: Improving a Medical School Peer Education Model.
American Evaluation Association 32nd Annual Conference | Cleveland, OH

Nguyen BS, **Agam M**, Nelson A, Vo A. How do first year medical students study? Investigating an institutional E-learning initiative in its second year.
Innovations in Medical Education Conference 2018 | Los Angeles, CA

Agam M, Wedemeyer MA, Weiss MH, Carmichael JD, Zada G. Complications associated with transsphenoidal pituitary surgery: experience of 1,171 consecutive cases treated at a single tertiary care pituitary center.
Congress of Neurological Surgeons 2017 Annual Meeting | Boston, MA

Agam M, Inaba K, Recinos G, Lam L, Benjamin E, Grabo D, Demetriades D. The injured cyclist: an epidemiological analysis of cyclist trauma and the effects of drug and alcohol use on injury severity and outcome.
Surgical Grand Rounds MEDSTARS Competition, Keck SOM Dept. of Surgery | Los Angeles, CA

Agam M, Inaba K, Recinos G, Lam L, Benjamin E, Grabo D, Demetriades D. The injured cyclist: an epidemiological analysis of cyclist trauma and the effects of drug and alcohol use on injury severity and outcome.
Southern California Chapter of the American College of Surgeons 2017 Annual Scientific Meeting | Santa Barbara, CA

Poster Presentations:

Agam M, Gutierrez JM, Steed T, Gary M. Proximal junctional kyphosis after long segment thoracolumbar fusion: impact of upper segment screw trajectory on radiographic kyphosis and reoperation. *Congress of Neurosurgery 2023 Annual Meeting | Washington, DC*

Zohdy Y, Jacob F, **Agam M**, et al. Superior orbital Fissure Narrowing and Tumor Associated Pain in Spheno-orbital Meningiomas. *Congress of Neurosurgery 2023 Annual Meeting | Washington, DC*

Zohdy Y, Jacob F, **Agam M**, et al. Volumetric Analysis of Spheno-orbital Meningiomas: Prognostic Correlation and Novel Classification. *Congress of Neurosurgery 2023 Annual Meeting | Washington, DC*

Agam M, Gutierrez JM, Steed T, Gary M. Proximal junctional kyphosis after long segment thoracolumbar fusion: impact of upper segment screw trajectory on radiographic kyphosis and reoperation.

William E. Booth & James Zaidan Resident Research Day | Atlanta, GA

Agam M, Chesney K, Memel Z, Fredrickson V, Rutkowski M, Shiroishi M, Carmichael JD, Weiss MH, Zada G. Endoscopic Transsphenoidal Approach for Resection of Giant Pituitary Adenomas: Surgical Outcomes in 37 Patients Treated at a Single Tertiary Academic Center.
American Association of Neurological Surgeons 2019 Annual Meeting | San Diego, CA

Agam M, Chesney K, Memel Z, Carmichael JD, Weiss MH, Zada G. Microscopic versus Endoscopic Transsphenoidal Approach for Resection of Giant Pituitary Adenomas: Surgical Outcomes in 44 Patients. *Congress of Neurological Surgeons 2018 Annual Meeting | Houston, TX*

Nguyen BS, **Agam M**, Nelson A, Vo A. How do first year medical students study? Investigating an institutional E-learning initiative in its second year. *AAMC Western Group on Educ. Affairs Conference | Denver, CO*

Agam M, Inaba K, Recinos G, Lam L, Benjamin E, Grabo D, Demetriades D. The injured cyclist: an epidemiological analysis of cyclist trauma and the effects of drug and alcohol use on injury severity and outcome. *Keck SOM Required Scholarly Project research fair | Los Angeles, CA*

Nguyen, BS, Ananth, A, Brown M, Sarma A, Wu G, **Agam M**, Roy D, Vo A. An Extended Exploratory Investigation of Study Methods and Exam Score Expectation and Satisfaction at a Single Institution. *AAMC Western Group on Educ. Affairs conference | Salt Lake City, UT*

Extracurricular Activities

Global Health Residency Scholars Program | Emory University School of Medicine
Participant in yearlong global health program through Emory School of Medicine global health track, with a 1-month international neurosurgery experience in May 2025 in Addis Ababa, Ethiopia

House Staff Organization Resident Representative | Emory University School of Medicine

Program Evaluation Committee Resident Member | Emory University Dept. of Neurosurgery

Neurosurgery Grand Rounds Conference Team | Emory University Dept. of Neurosurgery
Organized weekly department conference including resident, faculty and guest lectures, M&M, etc.

Teaching

Academic Coach | Office of Academic Support | USC
Individual and group tutor for 1st year medical students

Step 1 Coach | Office of Academic Support Services | USC

Keck Peer Instruction Program Coordinator and Tutor | Office of Academic Support | USC
Planned and facilitated review lectures in physiology, immunology, biochemistry and pharmacology

Keck Anatomy Mentorship Program Tutor | Office of Academic Support Services | USC
Planned and implemented weekly gross anatomy lessons for 1st year medical students

Head & Neck Anatomy TA | USC Herman Ostrow School of Dentistry
TA'ed dental school course in head and neck anatomy after earning top score in MS1 class

Volunteering

Bravo Mentorship Program Mentor & Treasurer | Keck School of Medicine of USC

Oversaw program budget for all activities with Bravo High School freshmen interested in healthcare

Project Leader and Ambassador, USC Interaxon | Los Angeles, CA

Coordinated and supervised bimonthly neuroscience lessons at limited resource schools, K-12

- Wrote lesson plans and trained general members in how to teach and excite kids in a classroom setting
- Was part of a team to facilitate NeuroCamp, a daylong neuroscience camp on USC's campus for high school students

Writing Mentor Program Assistant, Joint Education Project | Los Angeles, CA

Mentored high school seniors in the USC Neighborhood Academic Initiative (NAI) program, focusing on college applications

Languages

Native speaker of Hebrew and English