



Preface

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Figure 1: Rare photo of Halsted's associates and residents commemorating the 25th anniversary of Johns Hopkins Hospital on October 7, 1914. Halsted is seen in the middle of the first row (sitting) and Cushing is seen third from the left in the second row (standing). William Halsted is considered the father of American surgery who established the first model of surgical training in the United States. Many of his residents and associates (pictured here) went on to establish the different surgical subspecialties.

The following Medical Student Curriculum has been developed to provide students with accurate and concise information regarding the pursuit and match into a neurological surgery residency.

Matching into neurosurgery has become increasingly difficult over the last 5-10 years as the number of applicants has grown exponentially. In addition, these engaged students have become more competitive in terms of their USMLE Step 1 scores, AOA status, as well as their research productivity (including peer-reviewed publications, abstracts, and presentations at meetings and conferences). This fact has led to a

declining match rate among U.S. senior medical students graduating from allopathic medical schools.

Program directors and department chairs are invaluable resources and can provide their sage advice based on years of experience with the match process. Given the complexity of the application process and the increasing competitiveness of the neurosurgical match, I felt that it was important to provide an up-to-date viewpoint of the process and what it takes to successfully match. [A unique advantage of the information provided herein is that it is based on the most recent experiences of medical students and recently matched junior residents. This information will be updated yearly.](#)

The following sections have been included in this guide:

- [Interested in Neurosurgery as a Career](#)
- [Preclinical and Early Clinical Years](#)
- [Conducting and Presenting Research](#)
- [Subinternships and the Final Year of Medical School](#)
- [Applying to Neurosurgery](#)
- [Personal Statement](#)
- [Letters of Recommendation](#)
- [Interviews](#)
- [Ranking Programs](#)

Note the following conventions throughout this guide:

- Years of medical school are labeled according to the traditional four-year curriculum in place at most US allopathic medical schools; namely, MS1 and MS2 as preclinical years, MS3 as the first clinical year during which most core rotations are taken, and MS4 as the second clinical year during which most subinternships, away rotations, and electives are taken. We recognize that this model differs from most other countries in the world and apologize for any

inconvenience this may cause our international readers.

- We refer to audition rotations in neurosurgery taken during late MS3 or MS4 as subinternships, abbreviated as “sub-I” and sometimes called acting internships (AIs).
- Commonly used abbreviations include USMLE (United States Medical Licensing Examination), NBME (National Board of Medical Examiners), NRMP (National Resident Matching Program), ERAS (Electronic Residency Application Service), AANS (American Association of Neurological Surgeons), CNS (Congress of Neurological Surgeons), and ABNS (American Board of Neurological Surgery).

The immense contributions of Saman Sizdahkhani and David Purger to this guide cannot be overstated.

The information provided herein reflects those of the involved contributors and myself and does not reflect the opinions of other organizations involved with the matching process. Finally, I hope this offering is of benefit to our students for generations to come.

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