The Effect of the Neurosurgery Research and Education Foundation (NREF) on Skull Base Neurosurgery Careers

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Objective

Since 2010, the Neurosurgery Research and Education Foundation (NREF) has offered a Skull Base for Senior Residents Course, utilizing didactics and cadaveric dissections to teach senior neurosurgery residents the basics of skull base surgery. In the current work, the impact of this course on the careers of previous attendees was evaluated.

Practice Subspecialty

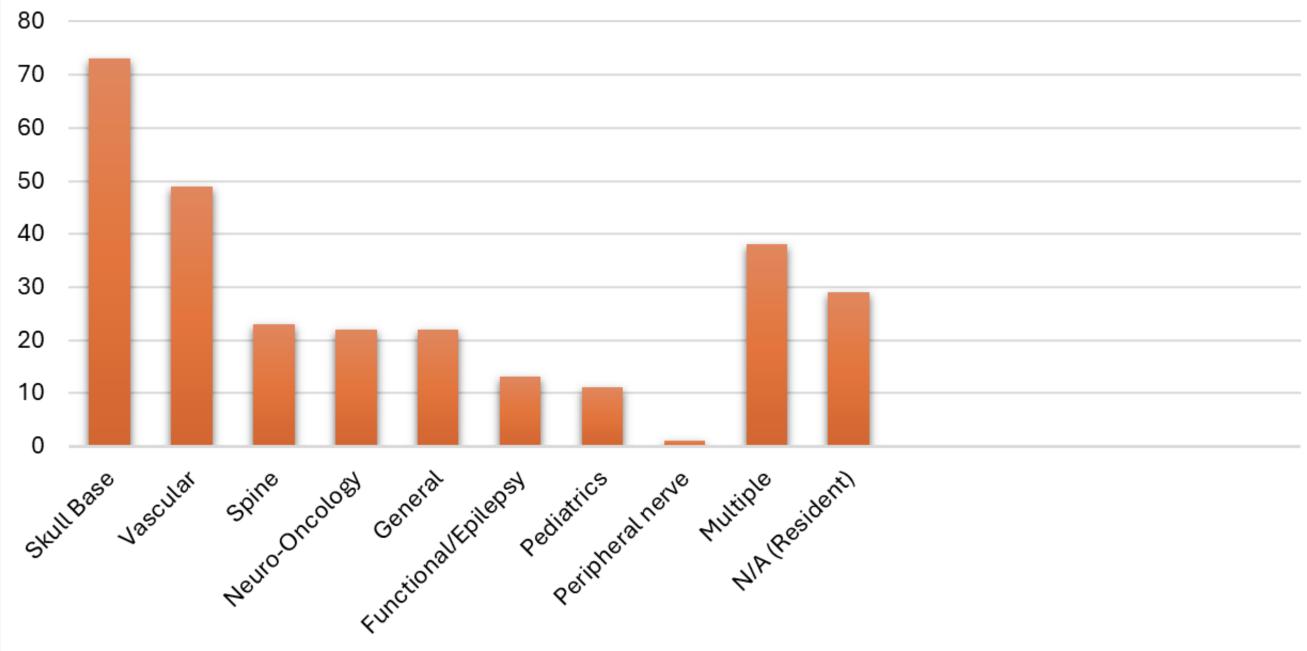


Figure 1. Current practice subspecialty of past participants. Of the 174 participants who have completed residency, 73 (41.9%) are pursuing careers in skull base neurosurgery.

PRACTICE SETTING

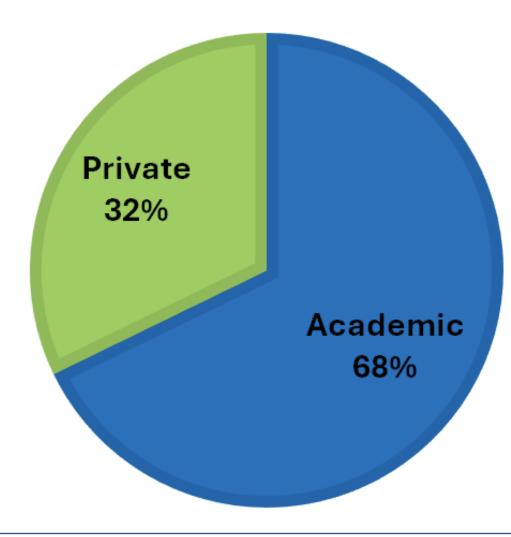


Figure 2. Current practice setting of past participants. Of the 174 participants who have completed residency, 118 (68%) of these have careers in academic skull base neurosurgery.

Results

From 2010 to 2023, 203 US neurosurgery residents attended the NREF Skull Base for Senior Residents Course. Of all attendees, 174 have graduated from residency with 73 (41.9%) of these pursuing careers in skull base neurosurgery. Of the 174 past participants currently in practice, 118 (67.8%) practice in an academic neurosurgery setting. Of these 174, 136 have completed fellowship (78.2%), with 43.3% of these being skull base fellowships. The mean ± SD number of publications after the course and total h-index were 29.4 ± 56.1 and 10.4 ± 9.5, respectively. Over one third of all papers published by attendees after the course (34.2%) were determined to be skull base publications. In survey responses, 81.8% of participants agree that course attendance influenced their decision to pursue their current specialty. Additionally, 91% agree that the course positively influenced their preparedness for fellowship, and 100% agree that the course has positively impacted their career.

Methods

A list of attendees between 2010 and 2023 from the NREF Skull Base for Senior Residents Course was obtained, and data was collected for each attendee, including demographic information, career advancement, and academic productivity. Outcomes included advancing into a skull base neurosurgery fellowship and career, clinical practice setting, and academic productivity measured via publication count and h-index. A survey of previous participants was also collected to assess perceived individual benefit of participation.

Geographic Location of Training Location of U.S. Resident Participants

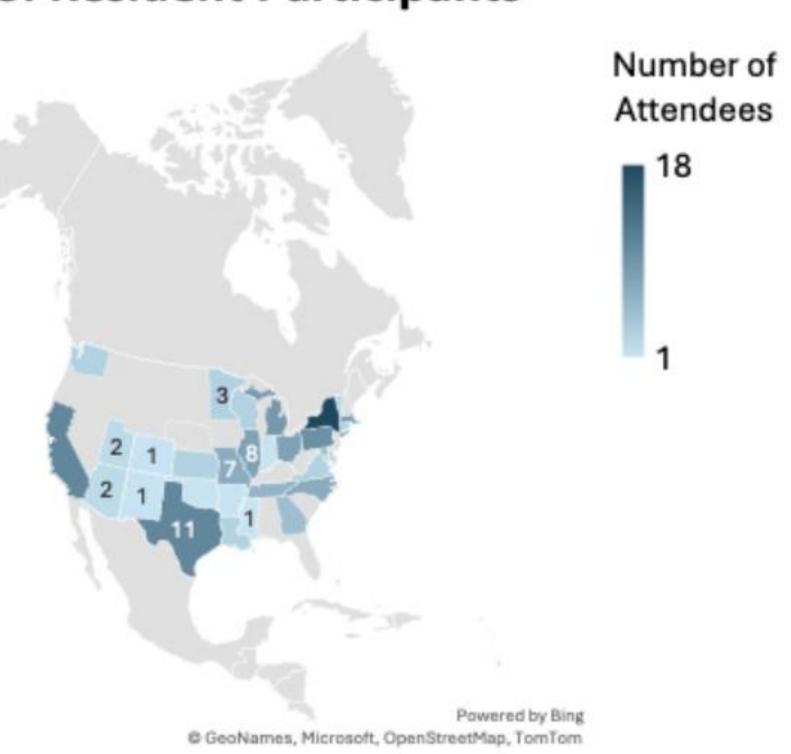


Figure 3. Of the 203 participants, 57 (55.3%) trained at residency programs in the Northeast, 47 (23.2%) in the Midwest, 55 (27.1%) in the South, 41(20.2%) in the West.

Current Geographic Location of Practice for Participants

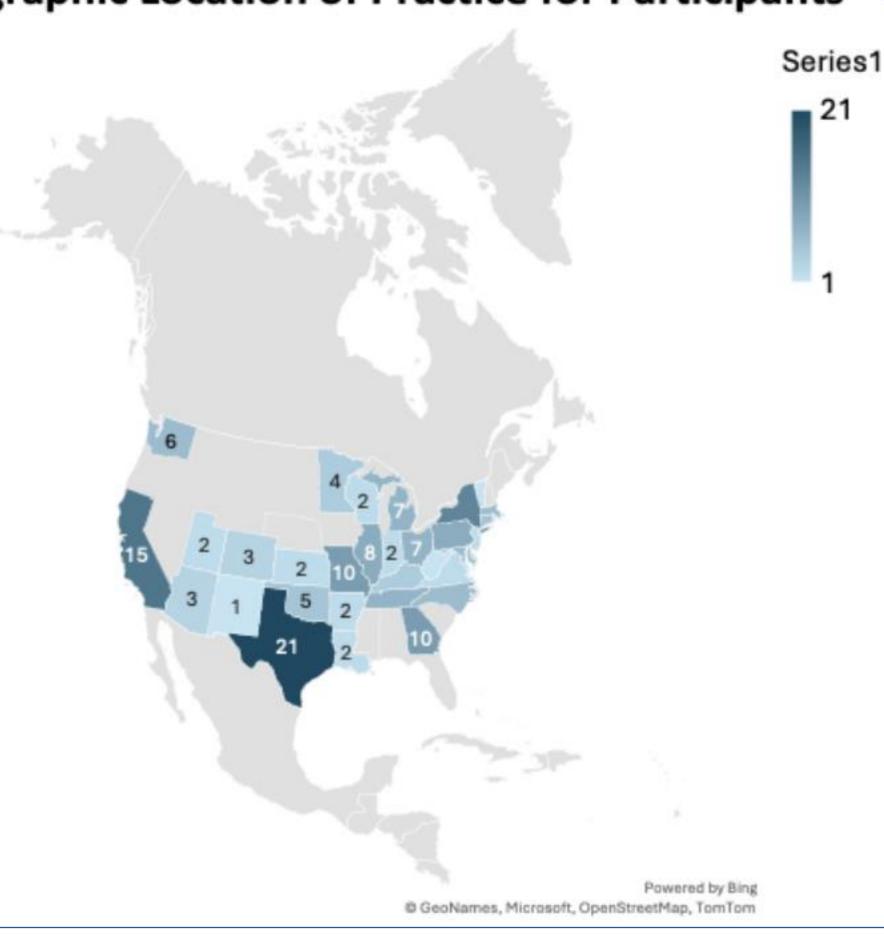


Figure 4. Of the 174 participants who have completed residency, 34 (19.5%) practice in the Northeast, 46 (26.4%) in the Midwest, 86 (49.4%) in the South, and 36 (20.7%) in the West, and 3 (1.7%) practice internationally.

Conclusions

Young neurosurgeons who attended the NREF Skull Base for Senior Residents Course have found success pursuing skull base neurosurgery across the United States, both clinically and academically. The course has afforded participants insights and meaningful connections in the field that has supported their progress.

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