

Introduction

The last few decades have seen a rapid expansion of medical student involvement in biomedical research during medical school training. Research within medical school has been shown to influence medical students with regard to medical knowledge, career development and residency specialty choice.

Methods

A retrospective study searching awards recipients utilizing the data available on the AANS, CNS, and NREF websites. Searched years included the first cycle of AANS/NREF (2007) and CSNS/CNS (2008-2009) grants awards until the 2015-2016 cycle — the latest award cycle to date.

Results

The initial search yielded a total of 163 research grants that were awarded to 158 students between the years of 2007 and 2016. There were 126 (77.3%) males among the 163 grants recipients. Among the 88 recipients who entered post-graduate residency programs, 51% (45/88) matched into neurosurgery residency. When considering both neurosurgery and neurology residency programs, the percentage increased to 59.1% (52/88).

Conclusions

Neurosurgery grants for medical students are highly successful in producing future neurosurgeons with over 50% of grants recipients match into neurosurgery. Women are underrepresented in neurosurgery grants and neurosurgery residency programs. This can be improved by providing insight about the field early in medical school perhaps through increased utilization of such neurosurgery medical student grants.

Table 1. Housing Institutions of Grant Recipients*	
Institution	Frequency
University of Toronto	9
Harvard University	8
Stanford University	8
University of Rochester	8
Columbia University	6
Duke University	5
New York University	5
University of Pennsylvania	5
University of California, San Francisco	5
University of Utah	5
*Hosting institutions with ≥5 grant recipients are listed.	

Table 2. Specialty Choice of Residency Programs for 88 Grants Recipients	
Specialty	Frequency
Neurosurgery	45
Internal medicine	7
Neurology	7
Orthopedics	5
Anesthesia	4
General surgery	4
Diagnostic radiology	3
Obstetrics and gynecology	3
Plastic surgery	2
Urology	2
Dermatology	1
Family medicine	1
Ophthalmology	1
Pediatrics	1
Psychiatry	1
Public Health and preventive medicine	1

Learning Objectives

By the conclusion of this session, participants should be able to find out:

1) The importance of assessing neurosurgery medical students grants and their impact on producing future neurosurgeons.

2) that women are underrepresented in grants and the neurosurgery field in general.

References

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