

Is There an Association Between Scholarly Productivity and Residency Competitiveness?

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Introduction

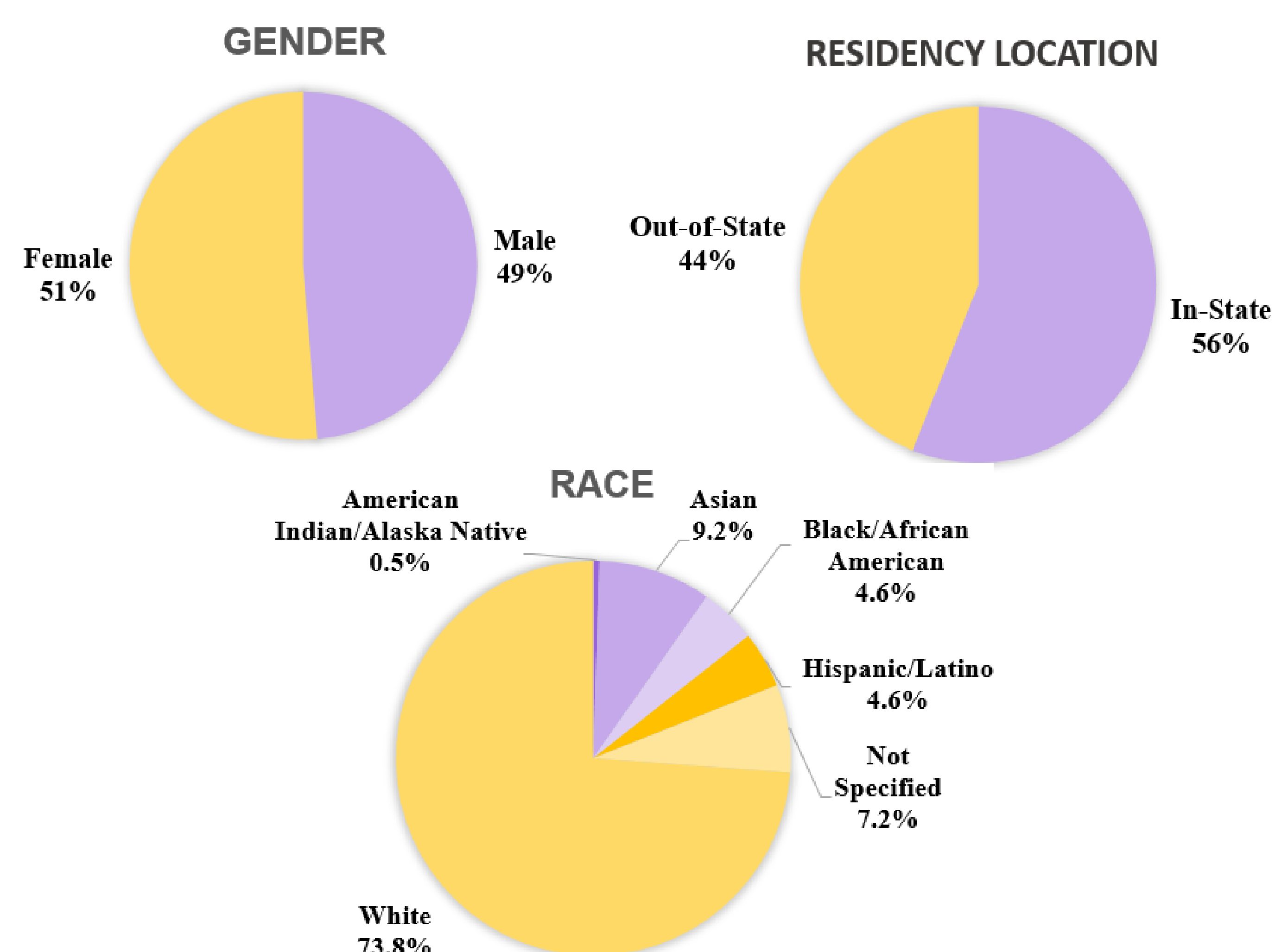
Each year, medical school seniors nationwide compete for residency positions through the Match program. While admissions teams consider a plethora of characteristics from each applicant, research appears to be a prominent acceptance factor. More than 32% of medical students nationwide perform research during their medical school career through a summer program or gap year [1]. As of 2018, 65 medical schools have a research requirement for all their students [2]. A paucity of research has studied the association between residency matching and scholarly productivity.

Objective: Investigate the association between scholarly productivity and residency program competitiveness within LSUHSC MD graduates.

Materials and Methods

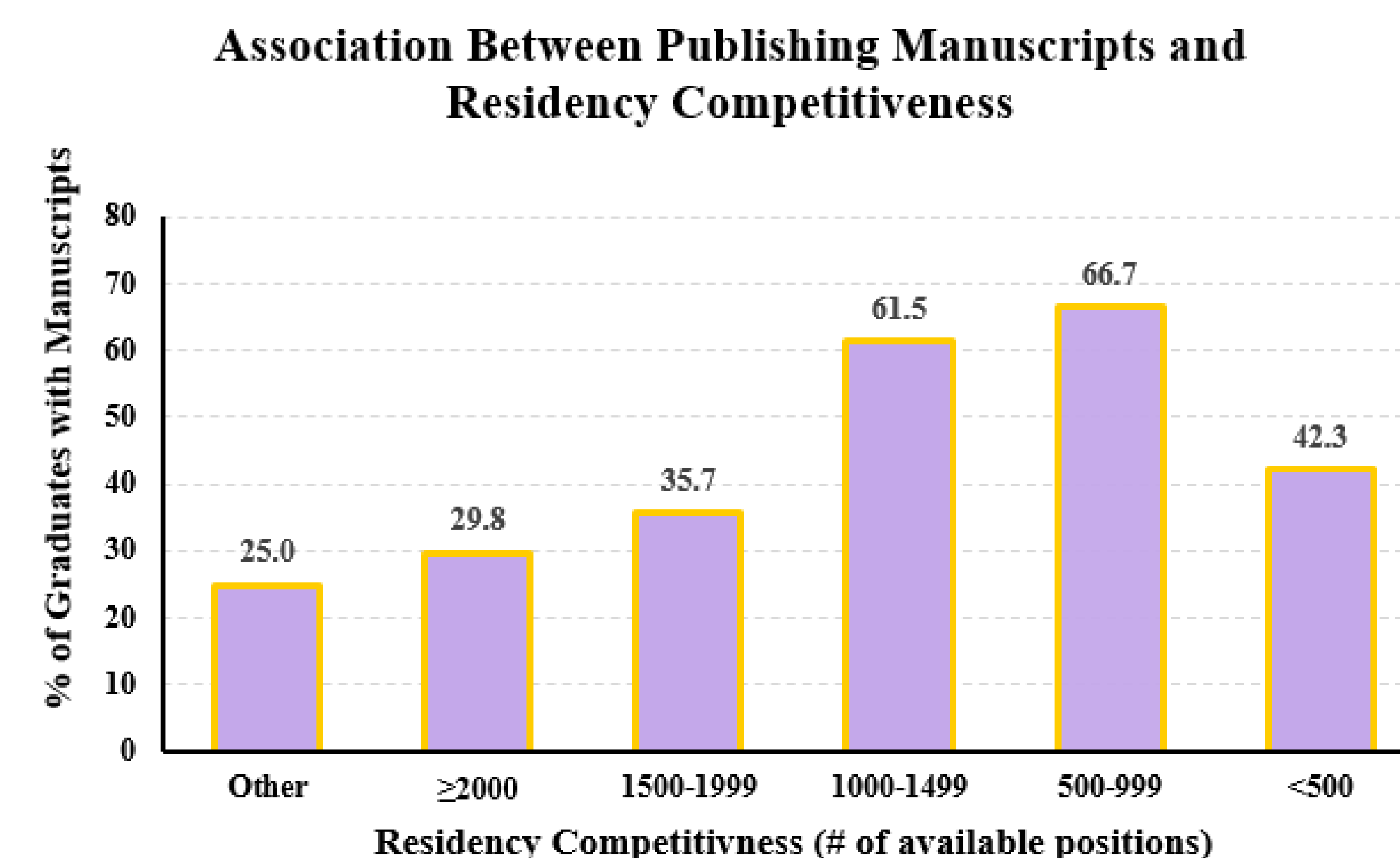
- A list with full name and residency program attending of the LSUHSC Medical School Class 2021 graduates was obtained from:
 - LSUHSC Ische Library (Graduation Program, n=192)
 - LSUHSC Foundation
 - 3 were excluded because in 2020 Class
- Medical School Office of the Dean provided summary demographics (n=195).
- A search of scholarly activities for each graduate was conducted in:
 - PubMed (NLM)
 - Scopus (Elsevier).
 - Google and LinkedIn
- Scholarly activities were categorized as either Abstract, Manuscript, or Other.
- Residency programs' competitiveness was categorized in five levels from least to most competitive based on the number of available positions from The Match 2021 Recap Report [3].
- The linear association was assessed using Mantel-Haenszel Chi-Square (MH Chi-square).

Demographics (n=195)



Results (n=189)

- Graduates were mostly of White race (74%) and female (51%) with In-State residency (56%).
- 40.7% of graduates published ≥ 1 scholarly activity
- 36.5% of graduates published ≥ 1 manuscript
- The median publication was 2 (min-max: 1 - 29)
- The median manuscript was 1 (min-max: 1 - 29)



- As the number of positions for a specialty decreased, the percentage of students that published at least one manuscript increased (MH Chi-Square=3.1, p=0.015)
- When 'Other' category was excluded the linear association was still present (MH Chi-Square=4.9, p=0.027)

Conclusion

- In the current study, graduates that were attending a more competitive residency were also more likely to have published one or more manuscripts.
- Completing scholarly activity is one of many aspects important in matching to a residency position.

References:

- Pathipati AS, Taleghani N. Research in Medical School: A Survey Evaluating Why Medical Students Take Research Years. Cureus. 2016 Aug 18;8(8):e741. doi: 10.7759/cureus.741.
- Meyer CR. The research requirement. Minn Med. 2014 May;97(5):4.
- National Resident Matching Program, Results and Data: 2021 Main Residency Match®. National Resident Matching Program, Washington, DC.

Competitiveness (n=189)

Positions Available	Specialty	# of Graduates
<500 (n=26)	Medicine-Pediatrics	3
	Neurosurgery	2
	Oral Maxillofacial Surgery	4
	Otolaryngology	4
	Physical Medicine & Rehab	6
	Plastic Surgery	2
	Urology	4
	Vascular Surgery	1
500-999 (n=12)	Dermatology	1
	Neurology	5
	Ophthalmology	2
	Orthopaedic Surgery	3
	Pathology	1
1000-1499 (n=13)	Ob/Gyn	10
	Radiology	3
1500-1999 (n=27)	Anesthesiology	8
	Child Psychiatry	1
	Psychiatry	10
	Surgery	8
≥ 2000 (n=94)	Emergency Medicine	13
	Family Medicine	15
	Internal Medicine	45
	Pediatrics	21
Other (n=17)	Preliminary Year	11
	Graduate School	1
	Unmatched	5