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"Is there an association between scholarly productivity and Residency type: a medical student match?"

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. The current study aims to investigate the association between scholarly productivity and residency program competitiveness within LSUHSC.

A list with first, middle and last name and residency program attending of the LSUHSC Medical School Class 2021 (MD2021) graduates was obtained from the graduation program archived within the LSUHSC Ische Library and the LSUHSC Foundation. Summary demographics for the graduating class was provided by the Medical School Office of the Dean. A literature search of scholarly activities for each graduate was conducted in PubMed (National Library of Medicine) and Scopus (Elsevier). When no scholarly activities were identified for a graduate, a secondary search to ascertain publishing name was conducted in Google and LinkedIn. Scholarly activities published from undergraduate years to June 2022 were included and categorized as either Abstract, or Manuscript, or Other. Residency programs' competitiveness was categorized in five levels from least to most competitive based on the number of available positions as determined by The Match 2021 Recap Report [3]. Therefore, graduates were categorized based on their matched residency specialty's available positions: >2,000 (n=94), 1,500-1,999 (n=28), 1,000-1,499 (n=13), 500-999 (n=12), <500 (n=26). Those not in a residency program and/or participating in additional graduate studies during the 2021-2022 academic year were listed below the previously mentioned subsections in a sixth category (n=16).

The graduation program from MD2021 listed 192 graduates; however, three graduates were excluded from this analysis as they were noted as having already graduated in previous years. Summary demographics from the LSUHSC Foundation were provided for 195 MD2021 graduates. Of the 195 graduates, 51.3% were female and had the following race distribution: 73.8% White, 9.2% Asian, 4.6% Black/African American, 4.6% Latino, 0.5% Native American, and 7.2% Other. A total of 36.5% of graduates published a manuscript prior or during Medical School. As the number of positions for a specialty decreased, the percentage of students that published at least one manuscript increased (M-H Chi-Square=3.1, p=0.015): 29.8% (>2,000), 35.7% (1,500-1,999), 61.5% (1,000-1,499), 66.7% (500-999), 42.3% (<500). In conclusion, scholarly activity is associated with attendance in more competitive residencies.

References

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2. Meyer CR. The research requirement. Minn Med. 2014 May;97(5):4. PMID: 24941579.
3. National Resident Matching Program, Results and Data: 2021 Main Residency Match®. National Resident Matching Program, Washington, DC. 2021.