

A Review of Online Search Tools to Identify Funded Dermatology Away Rotations for Underrepresented Medical Students

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PRACTICE POINTS

- Many funded away rotations are not listed on the most widely used databases for applying to dermatology residency programs.
- Underrepresented in medicine students who are seeking funded dermatology away rotations would benefit from a centralized, comprehensive, and well-organized database to improve equity of opportunity in the dermatology rotation application search process and further diversify the specialty.
- There are limited data assessing outcomes associated with participation in funded rotation and residency match outcomes.

Almost all medical students applying to dermatology residency will participate in an away rotation at an outside institution. In this study, we investigated the available search tools created to find rotations that cover costs for underrepresented in medicine (URiM) students and compared them to Google's search results and official program sites to elucidate their utility. A cross-sectional analysis of the Visiting Student Learning Opportunities (VSLO) Visiting Scholars Resources Database and the Funded Away Rotations for Minority Medical Students (FARMS) database was conducted for all programs with the term *dermatology* under the specialty column and listings tagged for dermatology. We also conducted a Google search by institution name using the phrase *underrepresented in medicine dermatology away rotation*. All queries were performed from October 24 to October 26, 2024. Our results suggest that the current search databases do not list most of the already limited funded rotation opportunities available for URiM students. Our findings emphasize a need for a centralized, comprehensive, and well-organized database to improve equity of opportunity in the dermatology rotation application search process and further diversify the specialty.

Most medical students applying to dermatology residency programs in the United States will participate in an away rotation at an outside institution. Prior to COVID-19–related restrictions, 86.7% of dermatology applicants from the class of 2020 reported completing one or more away rotations for their application cycle.^{1,2} This requirement can be considerably costly, especially since most programs do not offer financial support for travel, living expenses, or housing during these visiting experiences.³ Underrepresented in medicine (URiM) students may be particularly disadvantaged with regard to the financial obligations that come with away rotations.^{4,5} Visiting scholarships for URiM students can mitigate these challenges, creating opportunities for increasing diversity in dermatology. When medical students begin the residency application process, the Visiting Student Learning Opportunities (VSLO) program of the Association of American Medical Colleges (AAMC) is the most widely used third-party service for submitting applications. For many URiM students, an unforeseen challenge when applying to dermatology residency programs is the lack of an easily accessible and up-to-date search tool to find programs that offer funding, resulting in more time spent searching and thereby complicating the application process. The VSLO released the Visiting Scholars Resources Database, a search tool that aims to compile opportunities for additional support—academic, professional, and/or financial—to address this issue. Additionally, the Funded Away Rotations for Minority Medical Students (FARMS) database is an independent directory of programs that offer stipends to URiM students. In this study, we evaluated the efficacy of the

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VLSO's Visiting Scholars Resources Database search tool and the FARMS database in identifying funded dermatology rotations for URiM students.

Overview of Online Search Tools

We used the AAMC's Electronic Residency Application Service Directory to identify 141 programs offering dermatology residency positions. We then conducted a Google search using each program name with the phrase *underrepresented in medicine dermatology away rotation* to identify any opportunities noted in the Google results offering scholarship funding for URiM students. If there were no Google results for a webpage discussing URiM away rotation opportunities for a certain program, the individual program's website search box was queried using the terms *URiM*, *scholarship*, and *funding*. If there were no relevant results, the webpages associated with the dermatology department, away rotations, and diversity and inclusion on the respective institution's website were reviewed to confirm no indication of funded URiM opportunities. Of the 141 dermatology programs we evaluated, we identified 56 (39.7%) that offered funded away rotations for URiM students.

For comparison, we conducted a search of the VSLO's Visiting Scholars Resources Database to identify programs that listed dermatology, all (specialties), or any (specialties) under the Specialty column that also had a financial resource for URiM students. Our search of the VSLO database yielded only 12 (21.4%) of the 56 funded away rotations we identified via our initial Google and program website search. Program listings tagged for dermatology also were retrieved from the FARMS database, of which only 17 (30.4%) of the 56 funded away rotations we previously identified were included. All queries were performed from October 24 to October 26, 2024 (Figure).

Comment

The 2023-2024 AAMC Report on Residents indicated that 54.9% (800/1455) of active US dermatology medical residents identified as White, 27.5% (400/1455) identified as Asian, 8.9% (129/1455) identified as Hispanic, and 8.7% (126/1455) identified as Black or African American.⁶ By comparison, 19.5% of the general US population identifies as Hispanic and 13.7% identifies as Black.⁷ Within the field of dermatology, the proportion of Black dermatology academic faculty in the US is estimated to comprise only 18.7% of all active Black dermatologists.^{8,9} With a growing population of minority US citizens, the dermatology workforce is lagging in representation across all minority populations, especially when it comes to Hispanic and Black individuals. To increase the diversity of the US dermatology workforce, residency programs must prioritize recruitment of URiM students and support their retention as future faculty.

Reports in the literature suggest that clinical grades, US Medical Licensing Examination scores, letters of recommendation/networking, and the risk of not matching are among the primary concerns that URiM students face as potential barriers to applying for dermatology residency.⁴ Meanwhile, dermatology program directors ranked diversity characteristics, perceived interest in the program, personal prior knowledge of an applicant, and audition rotation in their department as important considerations for interviewing applicants.¹⁰ As a result, URiM students may have the diverse characteristics that program directors are looking for, but obtaining away rotations and establishing mentors at other institutions may be challenging due to the burden of accruing additional costs for visiting rotations.^{2,10,11} Other reports have indicated that expanding funded dermatology visiting rotations and promoting national programs such as the American Academy of Dermatology Diversity Mentorship

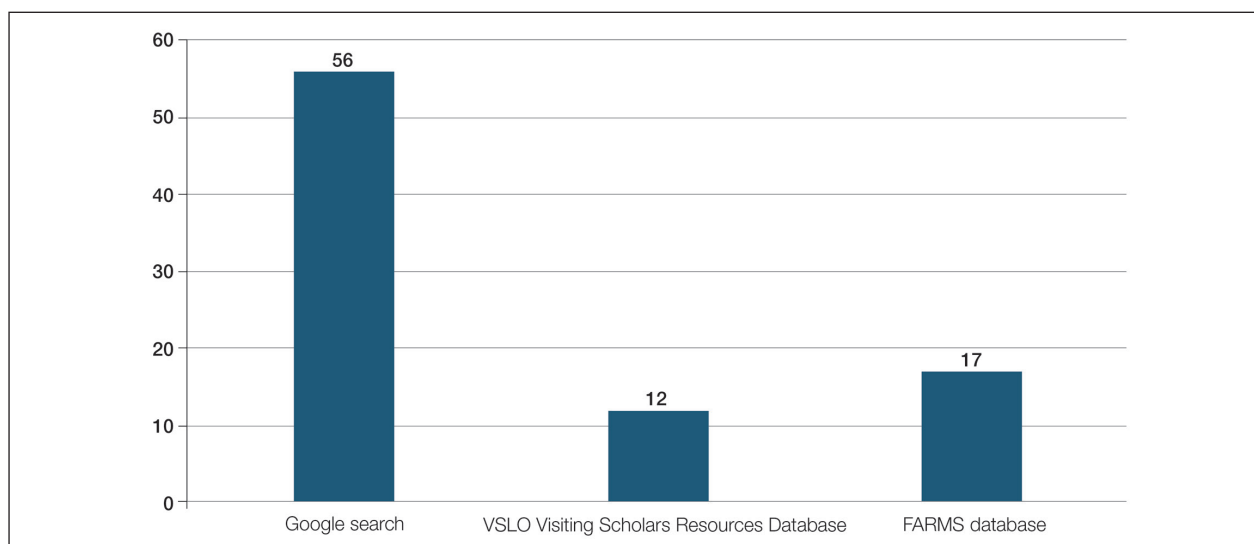


FIGURE. Number of programs listed with funded underrepresented-in-medicine dermatology away rotation opportunities across sources.

Abbreviations: FARMS, Funded Away Rotations for Minority Medical Students; VSLO, Visiting Student Learning Opportunities.

Program (<https://www.aad.org/member/career/awards/diversity>) or the Skin of Color Society Observership Grant (<https://skinofcolorsociety.org/what-we-do/mentorship/observership-grant>) can be alternative routes for mentorship and networking.³

Our review demonstrated that, of the 141 dermatology residency programs we identified, only around 40% offer funded rotations for URiM students; however, the current databases that applicants use to find these opportunities do not adequately present the number of available options. A search of the VSLO database—the most widely used third-party database for applying to dermatology away rotations—yielded only 12 (21.4%) of the rotations that we identified in our initial Google search. Similarly, a search of the FARMS database yielded only 17 (30.4%) of the dermatology rotations we previously identified. Aside from missing more than half of the available funded dermatology away rotations, the search process was further complicated by the reliance of the 2 databases on user input rather than presenting all programs offering funded opportunities for dermatology applicants without the need to enter additional information. As of October 26, 2024, there were only 22 inputs for Visiting Scholars Resources across all specialties and programs in the VLSO system.

Our findings indicate a clear need for a reliable and accurate database that captures all funded dermatology rotations for prospective URiM applicants because of the strong emphasis on visiting rotations for application success. Our team created a Google spreadsheet compiling dermatology visiting student health equity and inclusion scholarships from inputs we found in our search. We shared this resource via the Association of Professors of Dermatology listserve so program members could verify the opportunities we compiled to create an accurate and updated resource for finding funded dermatology rotations. The program verification process was conducted by having residency program directors or their respective program coordinators mark “yes” on the spreadsheet to confirm the funded rotation is being offered by their program. Our spreadsheet will continue to be updated yearly through cooperation with participating programs to verify their funded electives and through partnership with the AAMC to include our database in their Visiting Students Resources Database that will be released each year within VSLO as applications open for the following season.

The main limitation of our review is that we presume the information provided in the VSLO and FARMS databases has not changed or been updated to include more programs since our initial search period. Additionally, the information available on dermatology residency program websites limits the data on the total programs obtained, as some website links may not be updated or may be invalid for online web user access. The benefit to creating and continually updating our Dermatology Visiting Student Health Equity and Inclusion Scholarship Database spreadsheet will be to ensure that programs regularly verify their offered funded electives and capture the true total of funded rotations offered for URiM

students across the country. We also acknowledge that we did not investigate how URiM student attendance at funded rotations affected their outcomes in matching dermatology programs for residency; however, given the importance of away rotations, which positively influence the ability of URiM students to receive interviews, it is understood that these opportunities are viewed as widely beneficial.

Final Thoughts

The current online search tools that URiM students can use to find funded away rotations in dermatology exclude many of the available opportunities. We aimed to provide an updated and centralized resource for students via the shared spreadsheet we created for residency program directors, but further measures to centralize the most up-to-date information on visiting programs offering scholarships to URiM students would be beneficial.



Check out the authors' Dermatology Visiting Student Health Equity and Inclusion Database spreadsheet

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