

Home Is Where the Match Is: Mentorship and Dermatology Residency Match Trends Before and During the COVID-19 Pandemic

Christopher Yeh BA,^a Amar D. Desai MPH,^a Cindy Wassef MD,^b Shari R. Lipner, MD PhD^c

^aRutgers New Jersey Medical School, Newark, NJ

^bDepartment of Dermatology, Rutgers Robert Wood Johnson Medical School, Somerset, NJ

^cDepartment of Dermatology, Weill Cornell Medicine, New York, NY

To the Editor,

Dermatology is one of the most competitive residencies for matching amongst medical school applicants. A strong connection with a residency program through research or clinical rotations may distinguish between similarly qualified applicants. Our previous study of research-mentor relationships among matched dermatology applicants corroborated the importance of program connections.¹ However, the 2020-2021 residency match cycle was uniquely affected by the COVID-19 pandemic, which prevented applicants from fostering connections with faculty at outside institutions. Our study objectives were to evaluate research-mentor relationships among matched dermatology applicants in the 2020-2021 pandemic match cycle with comparisons to pre-pandemic match cycles.

We searched for publicly available 2021 residency match lists from all U.S. allopathic medical schools. We found the names of 118 matched dermatology applicants from 34 medical school match lists (Table 1). The senior authors of applicants' PubMed-indexed articles published before September 15, 2020 were also identified. The senior author who published with an applicant most often was considered the research-mentor. Mentor and home program connections appeared to play a significant role, with 31.3% of successful dermatology applicants matching at their mentors' institutions, and 30.5% matching at their home programs where their mentors also practiced (Table 2).

We previously evaluated research-mentor relationships among matched dermatology applicants in the top 25 dermatology residencies from 2016-2018 ranked by Doximity Residency Navigator, which combines physician feedback with objective data.² We found that 26.2% of successful applicants matched at their mentors' institutions, and 10.3% matched at their home programs where their mentors also practiced.¹ While the subset of matched applicants in our current study differs from that of our previous study, mentor and home program connections appeared to be equally or more important for matching in

the 2020-2021 pandemic cycle compared to pre-pandemic match cycles. In a survey-based study of 44 applicants to a dermatology residency program from 2013-2015, all under-represented minorities (URMs) and the majority of matched non-URMs reported having a mentor. Therefore, mentorship likely confers a strong benefit for matching, as faculty provide networking opportunities that build on applicants' social capital while sharing knowledge and experience.³

Similarly, Abdelwahab et al. investigated the impact of the COVID-19 pandemic on the proportion of dermatology residency applicants matching into their home programs during the 2021 match.⁴ The authors reported that there were statistically significant greater odds of matching at least 1 home applicant in the 2021 vs 2017-2019 cycles (odds ratio=2.3; $P=0.02$). Home matching occurred more frequently with programs having more spots than the national median (4) and less often with programs having <4 spots ($P=0.00001$). The authors hypothesized that during the pandemic, with virtual rotations and interviews the norm, programs and outside applicants had difficulty connecting, resulting in applicants and their home programs ranking each other relatively higher.

Abdelwahab et al's findings may be at least partially explained by our study demonstrating that a significant proportion of matched applicants worked with mentors at their home programs. Together, these studies demonstrate that limited exposure of programs to outside applicants and mentor relationships at home programs likely impacted match outcomes during the pandemic. Dermatology applicants without home programs, who have limited mentorship opportunities, are significantly disadvantaged. Novel solutions, such as formal mentorship programs and their promotion through social media,⁵ can help make the residency application process more equitable for applicants.

TABLE 1.

Allopathic Medical Schools With Publicly Available Match Lists Containing Applicant Names From 2020-2021 Match Cycle		
Allopathic medical schools	Number of matched dermatology applicants	Number of applicants matched at mentors' institutions
Brown University	1	1
Cleveland Clinic	3	2
Eastern Virginia Medical School	0	0
George Washington University	1	0
University of California Los Angeles	10	4
Loyola University	1	0
Mayo Clinic	3	1
Northwestern University	2	1
Thomas Jefferson University	4	2
Southern Illinois University	1	0
TexasTech University	4	1
University of Alabama	3	1
University of Colorado	3	2
University of Illinois	7	2
University of Iowa	4	4
University of Kansas	0	0
University of Michigan	5	1
University of Minnesota	4	2
University of Mississippi	2	0
University of Nebraska	3	0
University of North Carolina	3	1
University of Oklahoma	2	0
University of Pennsylvania	6	1
University of South Florida	2	0
University of Texas Houston	6	1
University of Texas Medical Branch	2	0
University of Texas Southwestern	9	4
University of Texas Austin Dell	0	0
University of Vermont	2	0
Vanderbilt University	5	1
Virginia Commonwealth University	5	0
Wake Forest University	4	2
Wayne State University	9	2*
Wright State University	2	1

*One applicant matched at mentor's institution which was not their home program. All other applicants who matched at mentors' institutions also matched at their home programs.

TABLE 2.

Dermatology Residency Applicant Match Outcomes 2020-21 and Mentor Locations

Match Outcomes	Proportion
Matched in same program as mentor	31.36% (37/118)
Matched in both home program and mentor program	30.51% (36/118)
Matched in same region as mentor	46.61% (55/118)

DISCLOSURES

The authors have no conflicts of interest to declare.

REFERENCES

1. Yeh C, Desai AD, Wilson BN, et al. Cross-sectional analysis of scholarly work and mentor relationships in matched dermatology residency applicants. *J Am Acad Dermatol.* 2022;86(6):1437-1439.
2. Doximity. Doximity residency navigator. 2020. <https://residency.doximity.com>. Accessed December 16, 2020).
3. Vasquez R, Jeong H, Florez-Pollack S, Rubinos LH, Lee SC, Pandya AG. What are the barriers faced by under-represented minorities applying to dermatology? A qualitative cross-sectional study of applicants applying to a large dermatology residency program. *J Am Acad Dermatol.* 2020;83(6):1770-3.
4. Abdelwahab R, Antezana LA, Xie KZ, Abdelwahab M, Tollefson M. Cross-sectional study of dermatology residency home match incidence during the COVID-19 pandemic. *J Am Acad Dermatol.* 2022;87(4):886-888.
5. DIGA. APD-DIGA Mentorship Program. 2021. <https://www.instagram.com/p/CSrq0exMchY/>. Accessed September 1, 2021.

AUTHOR CORRESPONDENCE

Shari R. Lipner MD PhD

E-mail:..... shl9032@med.cornell.edu