# Evaluation of Micrographic Surgery and Dermatologic Oncology Fellowship Program Websites

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## PRACTICE POINTS

- With the COVID-19 pandemic and the movement to a virtual fellowship application process, fellowship program websites that are comprehensive and accessible may help programs attract compatible candidates, improve transparency, and guide applicants through the application process.
- There is variation in the content of current micrographic surgery and dermatologic oncology fellowship program websites and areas upon which programs may seek to augment their website content to better reflect program strengths while attracting competitive candidates best suited for their program.

# To the Editor:

Micrographic surgery and dermatologic oncology (MSDO) is a highly competitive subspecialty fellowship in dermatology. Prospective applicants often depend on the Internet to obtain pertinent information about fellowship programs to navigate the application process. An up-to-date and comprehensive fellowship website has the potential to be advantageous for both applicants and programs—applicants can more readily identify programs that align with their goals and values, and programs can effectively attract compatible applicants. These advantages are increasingly relevant with the virtual application process that has become essential considering the COVID-19

pandemic. At the height of the COVID-19 pandemic in 2020, we sought to evaluate the comprehensiveness of the content of Accreditation Council for Graduate Medical Education (ACGME) MSDO fellowship program websites to identify possible areas for improvement.

We obtained a list of all ACGME MSDO fellowships from the ACGME website (https://www.acgme.org/) and verified it against the list of MSDO programs in FREIDA, the American Medical Association residency and fellowship database (https://freida.ama-assn.org/). All programs without a website were excluded from further analysis. All data collection from currently accessible fellowship websites and evaluation occurred in April 2020.

The remaining MSDO fellowship program websites were evaluated using 25 criteria distributed among 5 domains: education/research, clinical training, program information, application process, and incentives. These criteria were determined based on earlier studies that similarly evaluated the website content of fellowship programs with inclusion of information that was considered valuable in the appraisal of fellowship programs.<sup>1,2</sup> Criteria were further refined by direct consideration of relevance and importance to MSDO fellowship applicants (eg, inclusion of case volume, exclusion of call schedule).

Each criterion was independently assessed by 2 investigators (J.Y.C. and S.J.E.S.). A third investigator (J.R.P.) then independently evaluated those 2 assessments for agreement. Where disagreement was discovered, the third evaluator (J.R.P.) provided a final appraisal. Cohen's kappa (κ) was conducted to evaluate for concordance

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between the 2 primary website evaluators. We found there to be substantial agreement between the reviewers within the education/research ( $\kappa$  [SD]=0.772 [0.077]), clinical training ( $\kappa$  [SD]=0.740 [0.051]), application process ( $\kappa$  [SD]=0.726 [0.103]), and incentives domains ( $\kappa$  [SD]=0.730 [0.110]). There was moderate agreement ( $\kappa$  [SD]=0.603 [0.128]) between the reviewers within the program information domain.

We identified 77 active MSDO fellowship programs. Sixty of those 77 programs (77.9%) had a dedicated fellowship website that was readily accessible. Most programs that had a dedicated fellowship website had a core or affiliated residency program (49/60 [81.7%]).

Websites that we evaluated fulfilled a mean (SD) of 9.37 (4.17) of the 25 identified criteria. Only 13 of 60 (21.7%) websites fulfilled more than 50% of evaluated criteria.

There was no statistical difference in the number of criteria fulfilled based on whether the fellowship program had a core or affiliated residency program.

Upon reviewing website accessibility directly from FREIDA, only 5 of 60 programs (8.3%) provided applicants with a link directly to their fellowship page (Table). Most programs (41 [68.3%]) provided a link to the dermatology department website, not to the specific fellowship program page, thus requiring a multistep process to find the fellowship-specific page. The remaining programs had an inaccessible (4 [6.7%]) or absent (10 [16.7%]) link on FREIDA, though a fellowship website could be identified by an Internet search of the program name.

The domain most fulfilled was program information with an average of 51.1% of programs satisfying the criteria, whereas the incentives domain was least fulfilled with an average of only 20.8% of programs satisfying the criteria. Across the various criteria, websites more often included a description of the program (58 [96.6%]), mentioned accreditation (53 [88.3%]), and provided case descriptions (48 [80.0%]). They less often reported information regarding a fellow's call responsibility (3 [5%]); evaluation criteria (5 [8.3%]); and rotation schedule or options (6 [10.0%]).

The highest number of criteria fulfilled by a single program was 19 (76%). The lowest number of criteria met was 2 (8%). These findings suggest a large variation in comprehensiveness across fellowship websites.

Our research suggests that many current MSDO fellowship programs have room to maximize the information provided to applicants through their websites, which is particularly relevant following the COVID-19 pandemic, as the value of providing comprehensive and transparent information through an online platform is greater than ever. Given the ongoing desire to limit travel, virtual methods for navigating the application process have been readily used, including online videoconferencing for interviews and virtual program visits. This scenario has placed applicants in a challenging situation—their

# Website Accessibility and Content Across 5 Domains of MSDO Fellowship Program Websites (N=60)

Criteria evaluated	No. of MSDO programs (%)
Website accessibility from FREIDA <sup>a</sup>	
Direct link	5 (8.3)
Multiple-step link	41 (68.3)
Absent link	10 (16.7)
Inaccessible link	4 (6.7)
Education/research domain	
Didactics	25 (41.7)
Journal club	23 (38.3)
Research requirement/description	32 (53.3)
Conferences	26 (43.3)
Clinical training domain	
Rotation schedule or options	6 (10.0)
Case descriptions	48 (80.0)
Evaluation criteria	5 (8.3)
Case volume	25 (41.7)
Call responsibility	3 (5.0)
Office/clinic time	12 (20.0)
Program information domain	
Program description	58 (96.6)
Accreditation	50 (83.3)
Facility description	13 (21.7)
Names of current/past fellows	24 (40.0)
Photo of current/past fellows	20 (33.3)
Description of current/past fellows	16 (26.7)
Application process domain	
Link to application	35 (58.3)
Applicant selection process	7 (11.7)
Program director contact information	20 (33.3)
Program coordinator contact information	43 (71.7)
Interview information	18 (30.0)
Incentives domain	
Salary	11 (18.3)
Benefits	12 (20.0)
Vacation/sick leave	14 (23.3)
Information about surrounding area	13 (21.7)

Abbreviation: MSDO, micrographic surgery and dermatologic oncology.

<sup>a</sup>FREIDA, the American Medical Association residency and fellowship database (https://freida.ama-assn.org/).

ability to directly evaluate their compatibility with a given program has been limited.<sup>3</sup>

Earlier studies that analyzed rheumatology fellow-ship recruitment during the COVID-19 pandemic found that programs may have more difficulty highlighting the strengths of their institution (eg, clinical facilities, professional opportunities, educational environment).<sup>4</sup> An updated and comprehensive fellowship website was recommended<sup>4</sup> as a key part in facing these new challenges. On the other hand, given the large number of applicants each year for fellowship positions in any given program, we acknowledge the potential benefit programs may obtain from limiting electronic information that is readily accessible to all applicants, as doing so may encourage applicants to communicate directly with a program and allow programs to identify candidates who are more interested.

In light of the movement to a more virtual-friendly and technology-driven fellowship application process, we identified 25 content areas that fellowships may want to include on their websites so that potential applicants can be well informed about the program before submitting an application and scheduling an interview. Efforts to improve accessibility and maximize the content of these websites may help programs attract compatible candidates, improve transparency, and guide applicants throughout the application process.

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