

Factors Important in Facial Plastic and Reconstructive Surgery Fellowship Program Selection

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Abstract

Facial plastic and reconstructive surgery (FPRS) training programs offer exceptional exposure to the most current techniques in the field. However, applicants have many factors to weigh when ranking programs. Therefore, it is important to examine the factors that applicants believe to be the most critical when choosing an FPRS fellowship. This is an anonymous online survey of FPRS fellows between the years 2018 and 2020 (total 147). Respondents were asked to rate importance of program factors on a Likert scale (1–5). Of 147 applicants, 63 (43%) responded. Applicants found the type of practice, academic or private, equally important, with score averages of 3.02 and 3.25, respectively. The two most important program factors to applicants were exposure to the business of medicine/practice management (3.94) and location (3.4). The two most important areas of surgical exposure include rhinoplasty (4.54) and aging face (4.44). Of 63 applicants, 41 (65%) were interested in private practice, with 51% seeking a facial plastics/plastic reconstructive surgery group setting versus solo practice, general otolaryngology group, or dermatology group practice. Of 61 applicants, 48 (76%) wanted a mix of cosmetic/reconstructive surgery in their first 5 years of practice. Finally, applicants were not interested (average: 1.94) in keeping general otolaryngology as part of their practice. Applicants want strong exposure to the business of medicine, rhinoplasty, aging face, all while in their preferred location. Additionally, the majority of applicants seek employment in a plastic surgery focused group practice, with the sole focus being the breadth of FPRS.

Keywords

- ▶ facial plastic surgery
- ▶ fellowship
- ▶ program selection
- ▶ applicants

Facial plastic and reconstructive surgery (FPRS) is the subspecialty of otolaryngology – head and neck surgery that strives to improve the appearance, form, and function in the head and neck regions. Fellowship training in FPRS began in 1969, and the number of fellowship programs has steadily increased since its inception.¹ The current landscape of training programs offers exceptional exposure to the most current techniques in the field. The extreme variety of facial plastic surgery practices around the country reflects the wide-ranging strengths each program offers to applicants. No two fellowship programs are alike. Applicants have many factors to weigh, both clinical and nonclinical, when deciding

which program to pursue. Therefore, it is important to examine the factors that applicants believe to be most critical when choosing an FPRS fellowship. Understanding these factors may aid in improving the design of FPRS fellowships in the future.

Materials and Methods

After approval from the American Academy of Facial Plastic and Reconstructive Surgery (AAFPRS), an anonymous survey was sent to 147 subjects including otolaryngology residents who recently matched into an FPRS fellowship (2020 class),

Table 1 Practice setting specifics

Answer option	1	2	3	4	5	Average
Private practice setting	11	4	19	16	13	3.25
Academic setting	14	7	16	16	10	3.02
Business of medicine/practice management	2	4	11	25	21	3.94
Program location	3	11	18	20	11	3.40
Family concerns	14	9	14	16	9	2.95

Note: On a scale of 1 to 5, with 1 being “least important” and 5 being “most important.”

current fellows (2019 class), and recently graduated fellows (2018 class). Respondents were asked to rate the importance of specific program factors on a Likert scale (1–5). Questions included specifics about practice setting, areas of clinical interest, and, finally, postfellowship career plans.

Results

Of 147 applicants, 63 (43%) responded to the survey. Using a 5-point Likert scale, with 1 being least important and 5 being most important, applicants were asked to answer 19 questions related to fellowship program characteristics. Factors related to program setting are given in ▶Table 1. Applicants found the type of practice, academic or private, equally important, with score averages of 3.02 and 3.25, respectively. This was similar to family concerns, which averaged a score of 2.95. The two most important program factors to applicants were exposure to the business of medicine/practice management (3.94) and location (3.4). We also surveyed the importance of exposure to specific surgical techniques (▶Table 2). The two most important areas include rhinoplasty (4.54) and aging face (4.44). Mohs reconstruction (3.67) was the next most important area, with the remaining areas all receiving average scores below 3. Of the surveyed applicants, only 52% applied to programs offering microvascular reconstruction.

Lastly, we asked applicants about future career interests. Of 63 applicants, 41 (65%) were interested in pursuing private practice after fellowship, with 51% of those seeking a facial plastics/plastic reconstructive surgery group setting

versus solo practice, general otolaryngology group, or dermatology group practice (▶Fig. 1). Of 61 applicants, 48 (76%) wanted a mix of cosmetic and reconstructive surgery in their first 5 years of practice, with lower numbers for purely cosmetic, purely reconstructive, and general otolaryngology with facial plastic surgery mix (▶Fig. 2). Of 61 applicants, 50 (79%) indicated they would not take a job that included microvascular reconstruction after fellowship (▶Fig. 3). Finally, applicants were not very interested (average: 1.94) in keeping general otolaryngology as part of their practice.

Discussion

Understanding the factors important to FPRS fellowship applicants is important to both the applicants and program directors (PDs). FPRS programs encompass a wide variety of clinical settings, clinical autonomy, and exposure to surgical procedures. Thus, understanding the importance applicants place on specific criteria can hopefully aid in developing and improving fellowship programs.

To our knowledge, this is the first study in the field of FPRS looking at factors influencing fellowship applicants' program choice. Two previous studies looked at fellowship selection criteria in the fields of pediatric otolaryngology and laryngology. Chun et al surveyed 1 year of pediatric otolaryngology fellowship applicants using a 5-point Likert scale rating 14 program-specific characteristics. They found the most important factors to be strong experience in otology, airway management, location, and faculty reputation.² Yung and Courey surveyed PDs and applicants to laryngology

Table 2 Surgical specific experiences

Answer option	1	2	3	4	5	Average
Rhinoplasty	0	1	5	16	41	4.54
Microvascular Reconstruction	42	10	2	6	3	1.70
Aging face	0	2	6	17	38	4.44
Mohs reconstruction	1	8	16	24	14	3.67
Facial trauma	10	18	26	8	1	2.56
Facial nerve	10	20	13	12	8	2.81
Microtia	13	19	22	6	1	2.39
Hair transplantation	12	12	20	15	4	2.79

Note: On a scale of 1 to 5, with 1 being “least important” and 5 being “most important.”

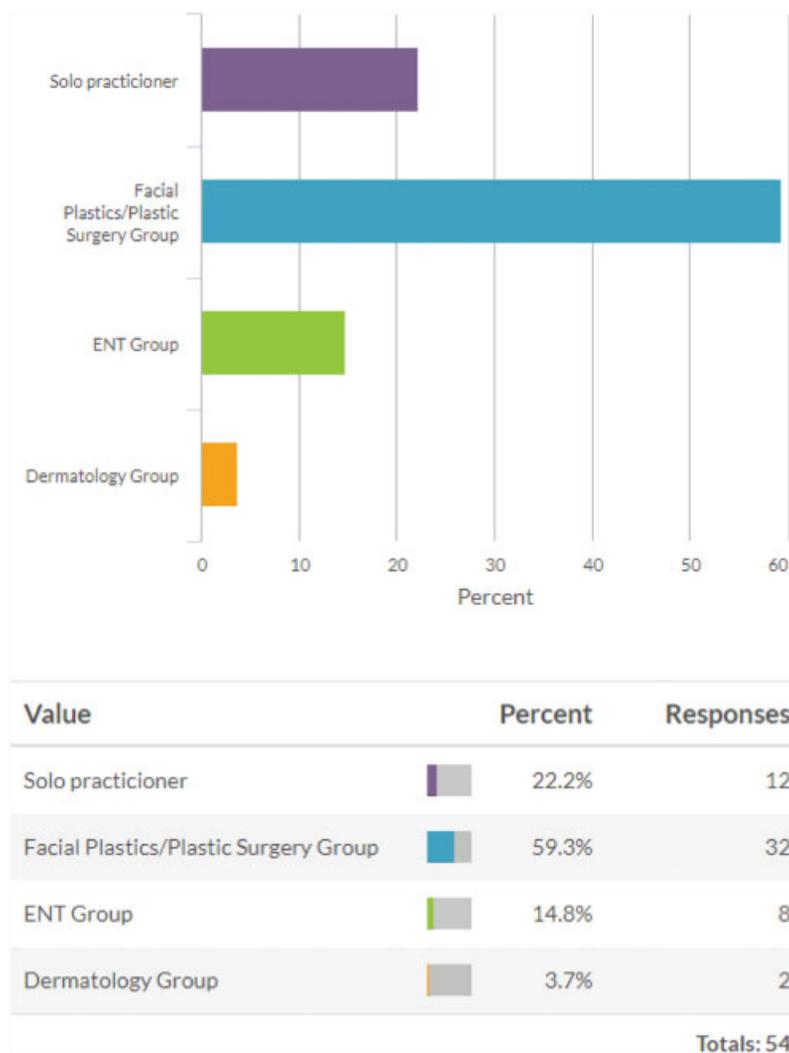


Fig. 1 If interested in private practice, what is your ideal practice setting?

fellowship programs and looked at factors influencing both applicants' choice of program and PD's choice of applicants.³ They surveyed two fellowship classes using a 5-point Likert scale ranking 21 program characteristics. They found that the most important selection criterion for the applicant was rapport with the fellowship mentor followed by a large experience in endoscopic surgeries and, finally, the reputation of the PD. Our survey did not investigate motivating factors related to rapport with PD, their reputation, or their influence for a future possible job. The fellowship PD is a critical factor that is weighed heavily by the applicants. However, the quality and perceived influence of PDs is highly variable between applicants and subject to bias. Therefore, in this study, we attempt to isolate the program-specific factors that are common among all FPRS fellowship programs and assess their importance independent of the PD's influence. Beyond this important difference, we see similar emphasis placed on types of surgical procedures and location as per the study by Chun et al.

Of the questions presented in the survey, the most important program-specific criterion to applicants is exposure to the business of medicine/practice management during fel-

lowship. FPRS is a unique specialty within otolaryngology that places a large emphasis on understanding the business of medicine, even if one does not have a solo private practice. The desire to understand these fundamentals and learn them during the fellowship year is clearly highlighted. Of the remaining criteria, only program location ranked above an average score of 3 for program-specific criteria. Interestingly, fellowships in a private practice versus academic setting had almost no difference in importance for fellowship applicants. The two types of practices can make for very different fellowship experiences. However, these possible differences did not lead to a preference for one type of practice over the other.

Applicants were asked how important exposure to specific types of operations was to their choice of program. The results clearly show that fellows are looking for a strong rhinoplasty and aging face experience during their training. Many otolaryngology residents are exposed to rhinoplasty; however, limited comfort with the procedure is expected after completion of residency. Rhinoplasty is a standard procedure for many facial plastic surgeons, and therefore it is not surprising that an emphasis is placed on this procedure

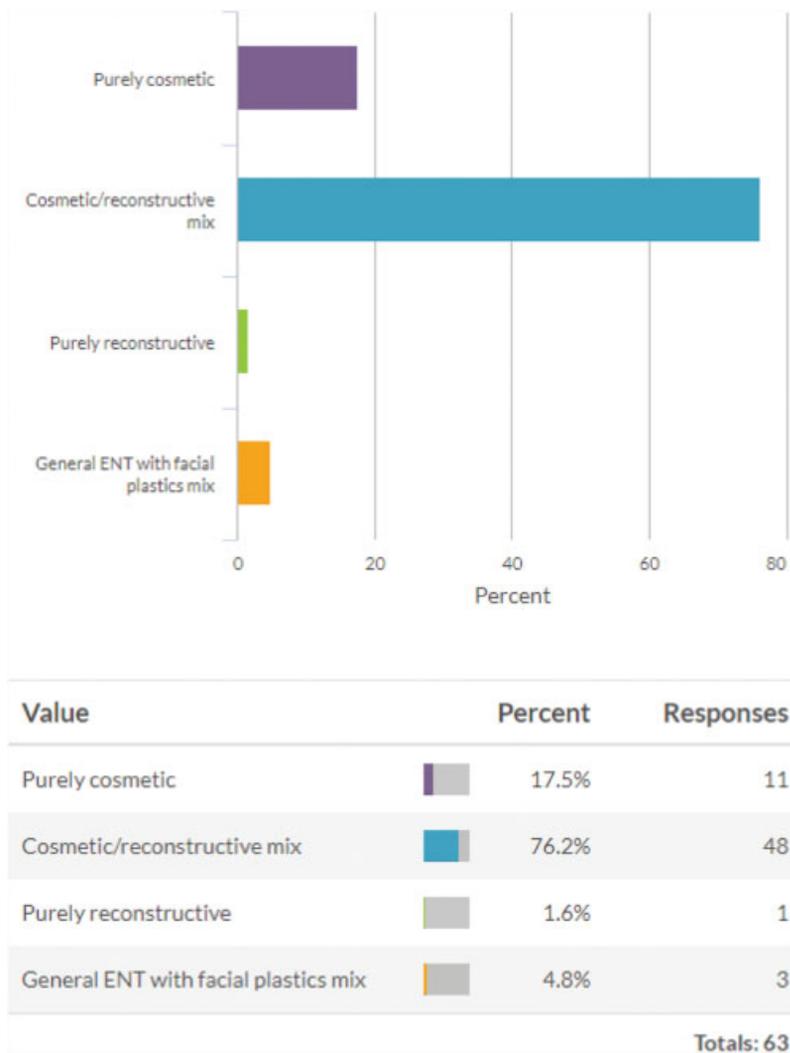


Fig. 2 How would you describe your *ideal* facial plastics practice within the first 5 years after training?

for applicants. Conversely, an aging face (rhytidectomy, blepharoplasty, injectables, etc.) is something most otolaryngology residents are not exposed to. Certain types of FPRS practices do not focus on these types of procedures, and this could lead applicants to not seeking out this skill set. However, our data show that fellows desire exposure to these types of operations regardless of their future practice plans.

The starkest difference in FPRS fellowships is the presence of microvascular reconstruction. Some programs focus heavily on these types of cases, whereas others do not offer them at all. We were interested in understanding the attitudes of applicants in regard to microvascular programs. Overall, only half of all applicants applied to fellowships that offer microvascular reconstruction. Its importance, when surveyed, averaged a score of 1.70, indicating that its presence was not a strong factor in choosing a fellowship program. We also asked applicants about their attitudes toward microvascular reconstruction in regard to their first employment opportunity. Interestingly, 79% responded that they would not take a job requiring microvascular surgery.

Explanations for these results may include a small number of programs offered through AAFPRS that focus exclusively on microvascular reconstruction as well as the presence of head-and-neck microvascular reconstruction programs offered through the head-and-neck fellowship match. Therefore, FPRS match may attract more applicants that are at the outset not seeking these experiences.

We were interested in applicants' attitudes toward their future practices after fellowship. Respondents favored a private practice over an academic setting for their future employment (65 vs. 35%). While the majority favors private practice, we were interested in the specific type the applicant is interested in as many different practice structures currently exist. When asked, 51% stated that they would like to work in a group practice focusing on plastic surgery. Some were interested in entering solo private practice (22%), with fewer interested in joining otolaryngology or dermatology group practices. When asked about their desired clinical focus, a large majority (76%) want to practice the breadth of FPRS performing both cosmetic and reconstructive surgeries, with very few indicating

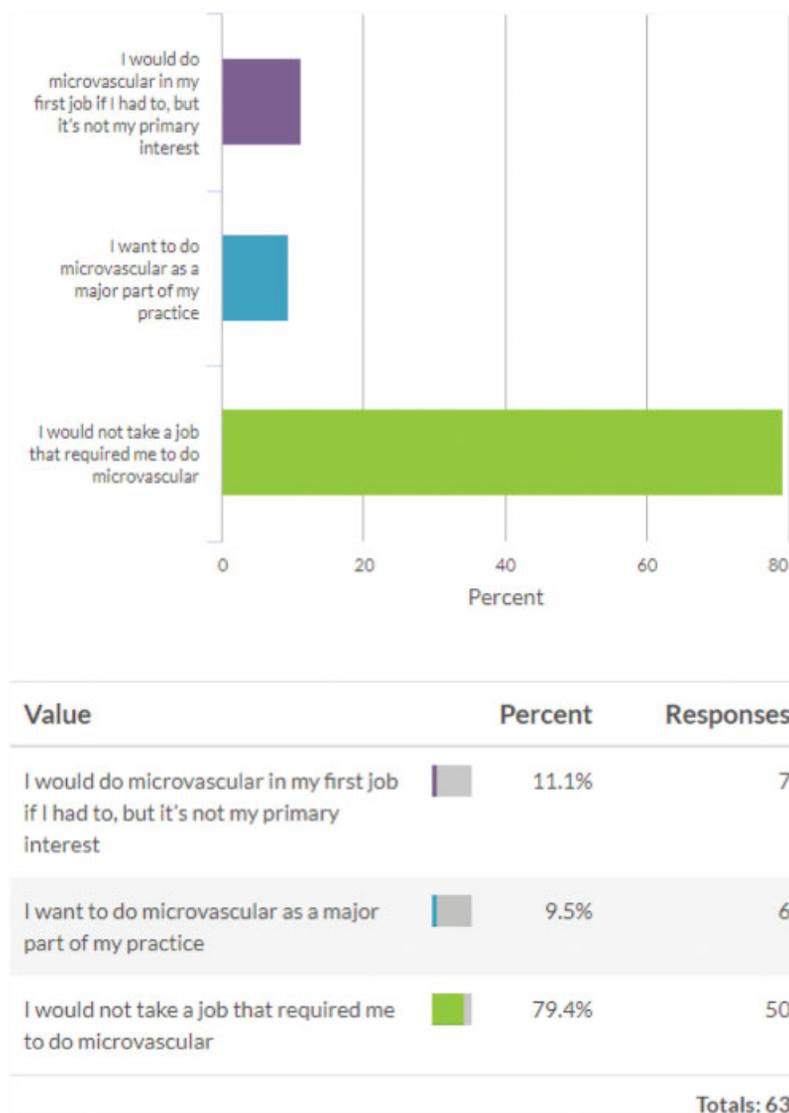


Fig. 3 Attitudes toward microvascular surgery in the applicant's first job.

purely cosmetic or purely reconstructive surgeries. Not surprisingly, when asked their desire to keep general otolaryngology as part of their practice, respondents averaged a score of 1.93 out of 5. Overall, our survey shows that the majority of applicants want to work in a group private practice with other plastic surgeons, focusing exclusively on FPRS.

Strengths of our study include the number of respondents as well as surveying multiple years of applicants. Weaknesses of our project include numerable other factors that fellowships applicants weigh when choosing programs that we did not account for, including those discussed by Chun et al and Yung and Courey including PD rapport, reputation, and aid in future job prospects. Our study did not include a discussion on the impact of PDs as a factor in the applicant's decision-making. While this is possibly one of the most important factors to applicants, this paper is important as it analyzes factors common among all FPRS fellowships and attempts to isolate these from factors that

are difficult to compare between programs. Additionally, our list of surgical cases may miss areas of interest that might be important to FPRS fellowship applicants, such as craniofacial, cleft lip and palate, and head-and-neck reconstruction outside of free flaps. Fellowships weighed toward experiences in these areas, including on pro bono mission trips, may play an important factor in an applicant's fellowship rank list. Future research should investigate these factors.

Conclusion

Fellowship training varies widely in FPRS, and thus specific factors are found to be important to the fellowship applicants when choosing their desired program. Fellows want strong exposure to the business of medicine, rhinoplasty, aging face, and in their preferred location. Additionally, the majority of applicants seek employment in a plastic surgery focused group practice with its sole focus being the breadth of FPRS.

Conflict of Interest

No potential conflicts of interest relevant to this article were reported.

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