What, When, and Who: Optimizing Recruitment to Pediatric Pulmonology

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Some people enter medical school with a goal of pursuing a specific subspecialty and remain committed to that course. However, the majority of pediatric residents who pursue subspecialty careers select their subspecialty focus during residency (1). Understanding the variables and influences that drive subspecialty career decision-making has far-reaching implications. Drivers of trainee decision-making on fellowship choice, and associated potential interventions to increase recruitment, have been minimally studied.

In this issue of *ATS Scholar*, Nelson and colleagues (2) explore the reasons why trainees pursue a career in pediatric pulmonology, highlighting the urgency of this question, given unfilled fellowship positions and the increasing average age of members of the field. This study is bolstered by its robust sample size of trainees from across the United States, and by its rigorous focus-group methodology, which yields rich results. The authors identify themes that influence the decision to become a pediatric pulmonologist, including limited exposure to pulmonology, the vital role of mentorship in career decision-making, and elements of practice that appeal to or are undesirable to trainees. In addition, the authors confirm that residents tend to make subspecialty decisions early in their second year and find that trainees desire flexibility in fellowship length and structure. The authors then provide thoughtful recommendations on how to increase recruitment to the field, including maximizing resident interaction with pulmonary faculty, early identification and support of interested trainees, and consideration of flexible training models.

Nelson and coauthors' study has some limitations, most notably that the study cohort consisted of trainees who were inspired and able to attend a national subspecialty conference and that the majority of participants had already committed to a career in pediatric pulmonology or expressed interest in it. Therefore, the participants may have been less able to comment on reasons trainees opt not to pursue a career in pediatric pulmonology or on barriers to achieving this career goal.

The novel understanding of individual drivers of subspeciality choice illuminated by Nelson and colleagues is critical to improving recruitment and is coupled with concrete suggestions to enhance trainee interest in the field. Given competing demands on faculty time, changes in resident education in the setting of the coronavirus disease (COVID-19)

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pandemic, and regulations posed by accrediting bodies and hospital clinical needs, programs may face challenges when beginning to incorporate these suggestions into practice. However, these challenges may also pose opportunities to thoughtfully consider the "what," "when," and "who" of recruitment to pediatric pulmonology and to other subspecialties facing similar issues.

First, Nelson and colleagues emphasize the importance of fostering connection between pulmonary faculty and residents, highlighting two specific spheres: role-modeling and faculty engagement. The COVID-19 pandemic has resulted in a marked increase in virtual communication and a decrease in in-person interactions; therefore, conventional methods of faculty engagement with residents must be reconsidered. Although virtual resident teaching conferences pose some technological challenges, the virtual format may lower barriers to faculty attendance. Faculty who practice at remote sites, or those who have not previously attended resident conferences, should be encouraged to take advantage of this opportunity. Novel methods for virtual education are being introduced (3, 4), and pulmonary faculty should consider contributing to the rapid innovation in resident education. In addition, faculty may consider creative methods to include remote learners in patient care opportunities (5).

Nelson and colleagues note the importance of facilitating early exposure to pulmonary medicine, including during intern year. Pulmonary fellowship program directors should consider working with their hospitals' residency programs to create pulmonary electives, selectives, or rotations during internship. Programs can in addition consider the feasibility of introducing pediatric pulmonary learning experiences during medical school, as medical school rotations have been shown to potentially influence career choice (6).

When thinking about timing of exposure of trainees to pulmonary medicine, it is also important to consider the repercussions of the future time investment required of training. In some cases, financial barriers may limit a trainee from pursuing certain pediatric subspecialties because of differences in anticipated salaries and delay of full earning potential as a result of additional training. Strategies to minimize losses to potential applicants should be considered to aid in improving fellowship accessibility. Potentially because of limitations in their cohort, Nelson and colleagues did not find significant concerns regarding finances, yet their suggestions regarding program flexibility, including 2-year clinical fellowships and sleep fellowships embedded into 3-year programs, could have the secondary benefit of assisting with this barrier.

Although not explicitly discussed in Nelson and coauthors' work, pediatric subspeciality program leaders must consider *who* they recruit and the inclusivity of their training environments. The participants in Nelson and coauthors' study attended training programs in geographically diverse locations across the United States, and 64% were women. What about other crucial types of diversity? With increased insight into the pervasiveness of structural racism and systemic bias in medicine, urgent action must be taken to understand and dismantle barriers that trainees who are underrepresented in medicine face in pursuing pediatric subspecialty careers. Research in this journal on the race and ethnicity of trainees in adult pulmonary and critical care medicine fellowship

programs raises cause for concern, as the percentage of trainees who are underrepresented in medicine decreased from 12.1% to 10.3% over the past 10 years (7). To elucidate concrete steps for improvement, Nelson and colleagues' methodology should be extended to gain insight into trainees' perspectives on the role of the field's perceived diversity and inclusivity as it relates to career decision-making. In parallel, programs should scrutinize the ways in which antiracism can be infused into recruitment practices, division policies, and the training environment more broadly (8).

Nelson and colleagues identified key factors that contribute to a trainee's decision to go into pediatric pulmonology and provide thoughtful recruitment strategies on the basis of their results. As the field contends with the urgent need to attract new members, now more than ever, it is time to think about when and how to employ these strategies, and with whom, to ensure a deep, committed, and diverse future workforce.

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