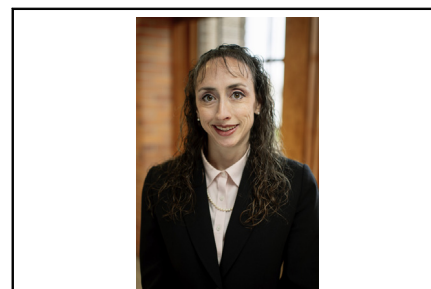


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Commentary: Two roads diverged: Integrated training programs in cardiothoracic surgery

Elizabeth H. Stephens, MD, PhD



Elizabeth H. Stephens, MD, PhD

CENTRAL MESSAGE

Tips regarding applying to and a successful match in integrated programs can be helpful, but perhaps more important for applicants is perspective regarding the field and training paradigms.

In the classic poem by Robert Frost, “The road not taken,” the traveler looks down 2 roads in a yellow wood, “and be one traveler, long I stood, and looked down one as far as I could to where it bent in the undergrowth.” As an applicant to integrated programs in an earlier era, when the success of the integrated paradigm was very much unknown, these words resonate. Applicants today similarly look as far as possible down a given road, attempting to see the future if they chose that path. Back then, the application process was extremely competitive (~180 applicants for ~12 spots), and enthusiasm among current medical students continues to make the integrated match competitive, leaving prospective applicants seeking tips and tricks for a successful match. In recent years, experience has been gained with the integrated approach and the number of slots has dramatically increased. However, the outcome of this approach will not be known for years. As a graduate of an excellent integrated program, I certainly am a supporter of this approach for certain students and in certain programs.

Smood and colleagues¹ detail many aspects of the application and interview process for a “successful” match into an integrated program. However, perspective is warranted, which is the goal of this commentary. It is easy as a medical student to become fixated on getting into an integrated program, determining which is the “best,” figuring out the program that is the “right” one for you, and getting stuck in the weeds of how to make that happen. However, sight of the forest is lost for the trees.

Some important questions should be asked by each student. The first question is honest introspection as to

whether you are ready, at this point, to commit to a cardiothoracic surgery career for the rest of your life. Spending a few months on cardiothoracic surgery rotations is often exciting, invigorating, and (hopefully) inspiring. But in our high-reward specialty, there are inherently high risks, and those should not be taken lightly. As a student, you are relatively shielded from the results of adverse outcomes. Furthermore, as a young student it can be hard to imagine what you want your life to be like in 20 years and the effects of such an intense, at times all-consuming, career on that vision. Lastly, even students who have had the opportunity to do multiple subspecialty surgical rotations have only seen a limited array of the various specialties available. As a student, you must consider whether you are willing to make this life decision based on the experiences you have had to date. It certainly is telling that a number of people who do not match into an integrated program end up not pursuing cardiac surgery.² It takes maturity to accept that you are not ready to make that commitment at this time, and it does not mean that you won’t ultimately become a cardiothoracic surgeon—it just would be via a different path.

The second point of emphasis is that the ultimate goal is to become a well-trained cardiothoracic surgeon. This can occur via multiple pathways. Matching into an integrated program should not take priority over quality training. There is a large breadth of quality among integrated programs and careful consideration should be made regarding which quality general

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surgery programs would prepare you well for a cardiac surgery career.

For those who have carefully considered the specialty and wish to pursue integrated training, the aforementioned article provides helpful tips. When the match is said and done, and your fate has been decided, the most important next step is to make the most out of whichever program you enter. Getting into a program is simply the first step,

the final product at the end of that road through a yellow wood largely depends on you.

References

1. Smood B, Nguyen SN, Benkert AR, Han JJ. Young Surgeon's Note: integrated cardiothoracic surgery: navigating interviews and the match. *J Thorac Cardiovasc Surg.* 2021;161:1889-95.
2. Davis TA, Yang SC. Unmatched integrated cardiothoracic surgery program applicants: where do they end up? *Ann Thorac Surg.* 2018;106:1556-60.

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Commentary: Two roads diverged after medical school and some take the road less traveled

Jordan D. Miller, DO, and Shari L. Meyerson, MD

Smood and colleagues¹ provide applicants with strategies to navigate the integrated thoracic surgery match, offering valuable insight into this challenging time in the life of a future cardiothoracic surgeon. Although the integrated program pathway is no longer new, there are a limited number of graduates nationally and even less information available to applicants about programs and application strategies. It is imperative that applicants understand all of the training paradigms to find the best fit. The key message the authors deliver, which can be summarized as know yourself, is applicable not only to the residency search but also to job searches after training. Although all programs must produce a graduate who meets the minimum standards for board certification, the way each has designed its program varies wildly. This is mainly due to the complexity of designing an integrated program and how it interacts with other specialties such as general surgery, critical care, and cardiology. Local factors often control the feel of the general surgery rotations both in location and operative experience as well as which other, related rotations are included (ie, catheter lab, echocardiography, and interventional pulmonary).

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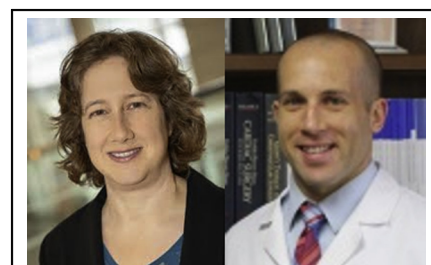
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Shari L. Meyerson, MD (left), and Jordan D. Miller, DO (right).

CENTRAL MESSAGE

Applicants to integrated thoracic programs need a realistic assessment of their priorities in both work and life when choosing a program because every program has its own culture and strategy for training.

The authors highlight a thorough list of program qualities that should be considered. To successfully address these items, applicants must be honest with themselves about their interests and priorities. Key areas of variability are degree of emphasis on research, balance between cardiac and thoracic experience, and career choices of prior graduates. Some programs mandate (or highly encourage) research time. As the authors note, this is a critical factor. If an applicant honestly does not enjoy research and does not envision a future career in research, these programs are not the best fit. Although all programs teach both cardiac and thoracic surgery, rotations schedules and flexibility can provide insight into the balance between these aspects. Because applicants interested in general thoracic are the minority, it is imperative to determine whether a program can support this