

See Article page 289.



## Commentary: The important contributions that first-generation medical students offer to the field of cardiothoracic surgery

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First-generation medical students—those whose parents have not earned a postsecondary undergraduate degree<sup>1</sup>—have much to offer to the field of cardiothoracic surgery. To continue attracting a diverse population of competitive candidates and help reduce the health care disparities in the United States, we should make cardiothoracic surgery more accessible to first-generation medical students.

Robinson and Do-Nguyen<sup>2</sup> describe the noteworthy contributions that first-generation medical students can bring to the field of cardiothoracic surgery. By overcoming the obstacles to entering postsecondary school, first-generation medical students have developed resilience and a growth mindset that can make them capable of enduring the rigorous and challenging training associated with cardiothoracic surgery.<sup>3</sup> In addition, first-generation medical students often have shown cultural competence, empathy, and shared lived experiences with their patients that can lead to excellent patient care.<sup>1,4</sup> The authors highlight how first-generation medical students' unique backgrounds give them insight and can help them earn patient trust leading to a positive care environment. In a country where we are constantly reminded of our social and racial inequities, having a diverse health care workforce that understands its patients is vital.

The authors also describe several key challenges that first-generation medical students face when deciding whether to enter the field of cardiothoracic surgery. These



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### CENTRAL MESSAGE

Robinson and Do-Nguyen describe the important contributions that first-generation medical students bring to the field of cardiothoracic surgery and the barriers these students face.

challenges include the increasing costs of medical school and dual applications to general surgery and integrated cardiothoracic residency programs; lack of family financial support; biases, stereotype threats, and discrimination; lack of exposure to cardiothoracic surgery; and lack of mentorship. Many of these factors can prevent first-generation medical students from even considering the field of cardiothoracic surgery.<sup>3,5-9</sup>

Robinson and Do-Nguyen<sup>2</sup> are to be congratulated for advocating for first-generation medical students. The recommendations made in their editorial are important first steps toward a series of changes that need to be implemented to increase diversity in cardiothoracic surgery. As the authors mention, the field of cardiothoracic surgery needs to expand scholarships and diversity, equity, and inclusion opportunities to include not only underrepresented minorities but also the other first-generation students who are not considered underrepresented minorities but face similar struggles. There needs to be more effort to improve the public's understanding about the field of cardiothoracic surgery, increased early exposure, and expanded recruitment efforts to preclinical medical students. The residency application process needs to be more holistic and accessible to eliminate stereotype threat and discrimination. Ultimately, the field benefits from a multilevel approach spanning from the individual and institutional level to the surgical community and global environment that prioritizes and promotes diversity and excellence.<sup>10</sup>

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