

Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.



THE IMPORTANCE OF MENTORSHIP AND SPONSORSHIP FOR THORACIC SURGERY RESIDENCY APPLICANTS DURING THE CORONAVIRUS DISEASE 2019 (COVID-19) PANDEMIC



To the Editor:

Boskovski and colleagues¹ discuss challenges encountered by thoracic surgery (TS) trainees during the coronavirus disease 2019 (COVID-19) pandemic due to reductions in surgical case volume. Senior trainees graduating from low-volume institutions or institutions severely impacted by COVID-19 will most likely be affected by the pandemic,² adding increased importance for strong mentorship.

The pandemic has also disproportionately affected TS residency applicants at institutions without a TS program, as in accordance with the Association of American Medical Colleges recommendations, elective away sub-internships have been canceled to limit exposure and travel.³ Applicants with a TS program are also affected with changes in length or availability of rotations and decreased volume. In past years, these rotations provided students with a deeper understanding of the field with foundational knowledge and skill acquisition to prepare for internship. Most importantly, the exposure allowed applicants to identify advisors, mentors, and advocates outside of their institution to help them navigate their future professional endeavors, and to provide letters of recommendation for residency applications. These opportunities are unfortunately decreased or lost in the midst of the pandemic.

Interprofessional networks and mentor-mentee relationships are an extraordinary resource for program directors and applicants alike.⁴ We offer a call-to-action for faculty and TS trainees to make every attempt to engage with and involve medical students and be generous with one's time and resources. Arguably, the lack of meaningful exposure to applicant skill sets, decision-making, work ethic, discipline, emotional intelligence, and fund of knowledge in-person may limit comprehensive assessment of an applicant. However, in this unprecedented situation, now is the time to be innovative in the education and evaluation of applicants to expand beyond institutional silos to ensure our specialty's recruitment of the best and brightest is not hindered by the current or future pandemics. In anticipation of the application cycle ahead, may we offer TS program directors recommendations from the trainee and applicant perspective to address the challenges experienced by applicants.

For students without home programs, engagement can take many forms in our digital world, whether it be via communication on social media, showcasing a day-in-thelife of a TS surgeon/trainee through public webinars, or hosting virtual meet-ups, program visits, and information sessions to fill the unmet needs of applicants.⁵ Virtual program visits and information sessions led by faculty can be done in a group setting, with the opportunity to accommodate smaller group break-out sessions with residents to get a more personalized experience of the program, with the possibility to extend discussions offline if necessary through one-to-one e-mails/messaging. This allows TS residency applicants to gain insight into not only the day-to-day clinical lives, scope of practice of our specialty, and what each training program has to offer but also allows programs to get to know them as individuals and future colleagues in the era of a physically distanced world. Furthermore, non-TS faculty/trainees can help facilitate contacts between applicants and TS members of their interprofessional network. For applicants without home programs or decreased operating room experience, involving applicants in virtual didactics and rounds or virtual small group surgical skills simulation sessions and telementoring may help fill the educational and assessment gap. A heightened sense of equity must be used when evaluating applicants to interview and to rank. In the evaluation of candidates, the personal (eg, illness or familial impact) and professional impact (eg, delays in research, inability to obtain a TS letter of recommendation with changes in rotation/away sub-internships, delayed or cancellation of board examinations) of the pandemic on applicants needs to be taken into consideration.

Many unforeseeable situations, such as a pandemic, hurricane, or other natural disasters, can affect both the residency application process and training. Therefore, mentorship and sponsorship should become the norm, not the exception, in cardiothoracic surgery. These uncertain times offer an unparalleled opportunity to support our future colleagues and ultimately strengthen the mentor–mentee connection to ensure that we continue to recruit the best and brightest into cardiothoracic surgery.

> Chi Chi Do-Nguyen, BS^a Jonathan C. Hong, MD, MHS^b Jessica G. Y. Luc, MD^c ^aPhiladelphia College of Osteopathic Medicine Philadelphia, Pa ^bDivision of Cardiac Surgery

The Editor welcomes submissions for possible publication in the Letters to the Editor section that consist of commentary on an article published in the Journal or other relevant issues. Authors should: • Include no more than 500 words of text, three authors, and five references. • Type with double-spacing. • See http://jtcs.ctsnetjournals.org/ misc/ifora.shtml for detailed submission instructions. • Submit the letter electronically via jtcvs.editorialmanager.com. Letters commenting on an article published in the JTCVS will be considered if they are received within 6 weeks of the time the article was published. Authors of the article being commented on will be given an opportunity of offer a timely response (2 weeks) to the letter. Authors of letters will be notified that the letter has been received. Unpublished letters cannot be returned.

The authors reported no conflicts of interest.

The *Journal* policy requires editors and reviewers to disclose conflicts of interest and to decline handling or reviewing manuscripts for which they may have a conflict of interest. The editors and reviewers of this article have no conflicts of interest.

Bluhm Cardiovascular Institute Northwestern University Feinberg School of Medicine and Northwestern Memorial Hospital Chicago, Ill ^cDivision of Cardiovascular Surgery Department of Surgery University of British Columbia Vancouver, British Columbia, Canada

References

- Boskovski MT, Hirji SA, Brescia AA, Chang AC, Kaneko T. Enhancing thoracic surgical trainee competence in the COVID-19 era: challenges and opportunities for mentorship. *J Thorac Cardiovasc Surg.* 2020;160:1126-9.
- Caruana EJ, Patel A, Kendall S, Rathinam S. Impact of coronavirus 2019 (COVID-19) on training and well-being in subspecialty surgery: a national survey of cardiothoracic trainees in the United Kingdom. *J Thorac Cardiovasc Surg*. June 1, 2020 [Epub ahead of print].
- Olive JK, Luc JGY, Cerqueira RJ, Eulert-Grehn J-J, Han JJ, Phan K, et al. The cardiothoracic surgery trainee experience during the COVID-19 pandemic: global insights and opportunities for ongoing engagement. *J Thorac Cardiovasc Surg.* June 25, 2020 [Epub ahead of print].
- Rodoni BM, Eyrich NW, Fessell DP. COVID-19 & the residency match: the added importance of mentoring. *Ann Surg.* 2020;272:e151-2.
- Luc JGY, Antonoff MB, Vaporciyan AA, Yanagawa B. Surgeon teachers and millennial learners: bridging the generation gap. *J Thorac Cardiovasc Surg.* June 23, 2020 [Epub ahead of print].

https://doi.org/10.1016/j.jtcvs.2020.08.064



REPLY: DIVERSITY OF OUR FUTURE WORKFORCE IS CONTINGENT UPON OUR VIRTUAL PANDEMIC PRESENCE Reply to the Editor:

In their thoughtful article, Boskovski and colleagues¹ highlighted strategies

to facilitate the mentorship of cardiothoracic (CT) trainees through the pandemic, particularly in terms of clinical and educational needs. In their letter to the Editor, Do-Nguyen and colleagues² address the impact of the pandemic and consequent mentoring needs of students and residents interested in CT surgery who haven't yet begun their CT training. The pandemic substantially impacted prospective CT applicants, especially those without access to thoracic surgical programs. The current era has resulted in cancellations of sub-internship rotations and decreased case volumes for many institutions, with resulting downstream effects on ability of applicants to gain early exposure, identify advisors, and receive mentorship.

Do-Nguyen and colleagues² bring forth a call to action for faculty and CT trainees to engage and involve medical students. While we, as CT surgeons, may no longer have the same opportunities to work firsthand with students to assess their technical skills, medical decision making, and the like, we must find ways to support students interested in our specialty and to provide both mentorship and sponsorship. Do-Nguyen and colleagues provide excellent suggestions for the innovative education and evaluation of applicants, including offering virtual program visits, engaging in digital communications, sharing remote didactics, and expanding the reach of educational programs.

In terms of issues of mentorship in CT surgery, critical dialogue centers around the importance of exposure, networking, and sponsorship of women and other underrepresented minorities.³ "You can't be what you can't see" is a phrase that has become common in social media streams, highlighting the importance of helping students and prospective CT trainees envision themselves as part of our specialty, with role models to whom they can relate. In this new pandemic-altered world, the need for virtual interaction makes these issues of diversity more relevant than ever, in that we must ensure that the outward-facing digital identity of our specialty reflects the great diversity of the talent and expertise in CT surgery. When planning webinars and virtual meetings, it's critical that organizers avoid homogeneous groups of surgeons on panels and speaker lists, with efforts deliberately directed toward including women, African Americans, Latinos, and other underrepresented groups. In addition, we can use our collective voices on social media to promote and bring attention to the content created by underrepresented minorities, as well as to promote their accomplishments and achievements in our field. We, as a specialty, can control the perceived face of CT surgery through the educational material, webinars, blogs, and social media content put forth during this time.

Do-Nguyen and colleagues also highlight that a sense of equity must be used to recognize the impact of the pandemic on individual students and applicants. This is particularly important given that the pandemic seems to exacerbate issues of inequity. This is true not only in terms of disproportionate rates of infection and job loss among certain populations but it also impacts one's access to high-speed Internet, computers, and dedicated spaces for virtual interactions. We must be extremely careful not to judge or penalize potential applicants to our field based on these types of challenges.

Finally, while Drs Boskovski and Do-Nguyen and their colleagues have emphasized the need for mentorship to