Research and residency match: a near-peer online webinar Recherche et jumelage de résidence : un webinaire par les presque pairs

Justin-Pierre Lorange, ¹ Anne Xuan-Lan Nguyen, ¹ Jobanpreet Dhillon, ¹ Caroline Najjar ¹

¹Faculty of Medicine and Health Sciences, McGill University, Quebec, Canada

Correspondence to: Justin-Pierre Lorange, 1650 Cedar Ave, Montreal, QC H3G 1A4; phone: (514) 934-1934; email: justin-pierre.lorange@mail.mcgill.ca Published ahead of issue: August 9, 2022; published: Apr 8, 2023. CMEJ 2023, 14(2) Available at https://doi.org/10.36834/cmej.74367

© 2023 Lorange, Nguyen, Dhillon, Najjar; licensee Synergies Partners. This is an Open Journal Systems article distributed under the terms of the Creative Commons Attribution License. (https://creativecommons.org/licenses/by-nc-nd/4.0) which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is cited.

Implication Statement

Medical students have a wide range of opinions and expectations about research and face many challenges when pursuing it. Online research webinars have the potential to teach medical students about the value of research for various competitive and non-competitive specialties, while also providing them with the opportunity to network with recent medical graduates. When hosted virtually, these events have the potential to reach medical student across multiple provinces and provide them with insight on the different facets of research.

Introduction

Scholarly research provides opportunities undergraduate medical students to discover different medical specialities and foster mentor-mentee relationships.^{1,2} Students often rely on anecdotal experience from upper-year colleagues, mentors, or previous national match reports;3 unfortunately, such advice may be outdated or only provide a general overview of the requirements without highlighting the intricacies and uniqueness of each program. While barriers to research experiences have been amplified for students by the COVID-19 pandemic, 4 they can be alleviated by creating opportunities such as the one we created. Herein, we describe a novel webinar approach that informs medical and pre-medical students across Canada about the importance of research experience in the Canadian residency match process.

Énoncé des implications de la recherche

Les étudiants en médecine ont des opinions et des attentes très diversifiées en ce qui concerne la recherche et ils sont confrontés à de nombreux défis lorsqu'ils s'y lancent. Les webinaires sur la recherche peuvent renseigner les étudiants sur l'intérêt de la recherche dans diverses spécialités à forte concurrence ou non, tout en leur donnant l'occasion de réseauter avec des diplômés récents. Ce type d'activités, lorsqu'elles sont tenues virtuellement, ont le potentiel de toucher les étudiants en médecine de plusieurs provinces et de leur donner un aperçu des différentes facettes de la recherche.

Description of the innovation

The McGill Medical Research Association (MMRA) is a research interest group at McGill University that aims to introduce medical students to various research experiences. The MMRA group hosted an online research webinar on Zoom in April 2021 where recently matched medical students discussed the amount and type of research they conducted during medical school, when and how they got involved, and if they believe research was necessary to their match success. This webinar was the first of its kind at McGill University and was promoted on MMRA's Facebook and Instagram accounts.

Twelve McGill medical students spoke at the event, representing different specialties including family medicine, internal medicine, anesthesia, general surgery, otolaryngology, plastic surgery, neurosurgery, orthopedic surgery, obstetrics and gynecology, ophthalmology, dermatology, and paediatrics. Each speaker prepared 3-4 PowerPoint slides to support their talk and presented for 5-7 minutes. Approximately 15-20 minutes were allotted

for audience questions at the end. Attendees were encouraged to keep their cameras on, submit questions in the monitored chat, and participate in verbal discussions. The total webinar duration was 1.5 hours. Presentation slides and speakers' contact information were shared on MMRA's Facebook page after the webinar with the speakers' consent.

Outcomes

McGill Ethic Research Board exempted this study from requiring approval. A total of 170 participants attended for a mean duration of 80.7±40.5 minutes. Participants' consent was obtained, and 78 attendees (46%) completed the optional post-event feedback survey. The breakdown of the participant demographics and their post-event perspective is shown in Figure 1. Speakers had a wide range of opinions on research. Most of them believed it was beneficial, but not necessary for the residency match.

Suggestions for next steps

This was a unique online research webinar open to both medical and pre-medical students across Canada. To address the low confidence in research experience highlighted in the current work, we will share MMRA's research guide⁵ outlining the steps required to partake in scholarly projects with all attendees. Events such as poster workshops and 3-minute thesis competitions will be organized by MMRA to further expose students to research-associated experiences.

Future research webinars will also address several limitations. First, we will include a pre-event survey to gauge attendee knowledge, enquire about potential questions and better assess the impact of our webinar. Second, we will include more specialty representation, with a minimum of two speakers per speciality and matched students from different medical schools for a broader student perspective. Third, we will concurrently have multiple virtual breakout rooms during the Q&A period to allow participants to ask questions tailored to their specialty of interest. Finally, we will invite program directors to highlight the impact of scholarly research among applicants for their respective residency programs.

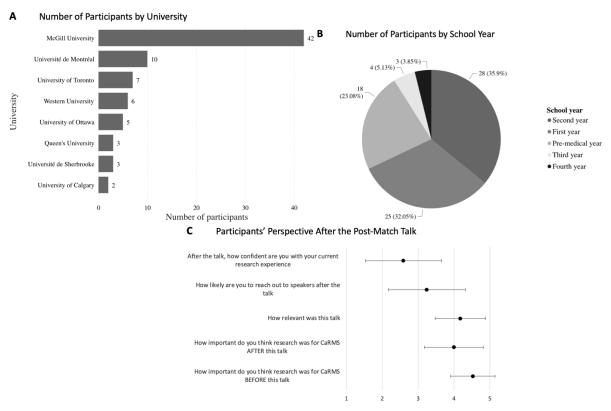


Figure 1. Participant demographics with respect to (A) Canadian medical institutions attended and (B) year of study. (C) Participants' perspectives following the 'Post-Match Talk'. (CaRMS: Canadian Residency Matching Service). Bars represent standard deviation.

Conflicts of Interest: The authors have no relevant financial or non-financial interests to disclose.

Funding: The authors declare that no funds, grants, or other support were received during the preparation of this manuscript.

References

- Boyle SE, Cotton SC, Myint PK, Hold GL. The influence of early research experience in medical school on the decision to intercalate and future career in clinical academia: a

- questionnaire study. *BMC Med Educ*. 2017;17(1):245. https://doi.org/10.1186/s12909-017-1066-1
- 3. Whalen A. R-1 data and reports. *CaRMS2021*. Available from: https://www.carms.ca/data-reports/r1-data-reports/
- Dhillon J, Salimi A, ElHawary H. Impact of COVID-19 on Canadian medical education: pre-clerkship and clerkship students affected differently. J Med Educ Curric Dev. 2020;7:2382120520965247. https://doi.org/10.1177/2382120520965247
- Fabi F, Nguyen AX-L. Research guide: how to navigate research during medical school 2020. Updated Jan 4th, 2021. Available from: https://issuu.com/mmra/docs/mmra-research-guide_v8 [Accessed on Apr 18th, 2022]