A shout-out to research staff professionals (because completing a strong research project is much harder than it looks, and it looks hard)

Un appel aux professionnels de la recherche (parce que mener à terme un projet de recherche solide semble difficile et est en réalité plus difficile encore)

Marcel F D'Eon¹ Tyrese M Hinkins-Jones²

¹Augusta University, Augusta, Georgia, USA; ²Emory University School of Medicine, Georgia, USA

Correspondence to: Marcel D'Eon; email: marcel.deon@usask.ca

Published: Apr 8, 2023; CMEJ 2023, 14(2) Available at https://doi.org/10.36834/cmej.77270

© 2023 D'Eon, Hinkins-Jones; 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.

Staff professionals are the mortar and bricks for the important work we do in research and medical education. Their innovation and impact are clear in our research partnerships and collaborations. Staff are professionals with expertise in specific areas of the organization and can enhance the learning and research environment through their service. Medical school professional staff outnumber faculty and are key institutional resources essential to an institution's operations. MFD came to this opinion as a faculty researcher while TMH is an accomplished medical education staff professional.

When developing the idea for a research project, there are many factors to consider including administration and support. Not only do you need a great idea and solid methodological training, but you also need a strong team of staff professionals: administrators, finance professionals, research associates, and more. This necessity became clear to MFD as he and his team made their way through a recent project.

MFD and his team landed on a correlational study idea, found, and used instruments validated for that purpose, created the online survey using our available survey software, and of course requested and received ethics approval from their institutional research board. Data collection returned a respectable response rate of 35% and they set out to analyze their raw data to uncover the

valuable nuggets hidden within. That's when MFD started to notice how important the professional staff were and how little he knew about the backstage area of these complex research projects. His team discovered that one question had been dropped when entering them into the survey software and, in fact, an older version of one of the instruments had been used in error.

They decided to analyze the data they had and to call this round of data collection a pilot study. When the analysis of the available data finally arrived all the relationships made great sense based on previous research and their presumptive hypothesis. He was excited because this provided the team some findings yet to be seen in medical education. However, the directions of the relationships were all wrong. Where they expected the direction of the relationship to be positive, it was negative. And where they expected the relationship to be negative, it was positive. For example, the relationship between burnout and the quantitative demands of the job were relatively large but negative. This did not make sense: how could greater quantitative demands be associated with reduced burnout? There were similar incongruencies with all the other workplace factors and stress and burnout.2 After much checking and even some analysis "by hand," they discovered that the scoring of one of the instruments had been reversed. Crisis averted, but these situations made

MFD realize that there's a lot more to research than ivory tower academics and rigorous designs. Our professional staff are boots on the ground and essential to the work we all do.

TMH recalls a similar data collection challenge. During the implementation of a new process for collecting student data on required clinical experiences, faculty leadership opted to use a tool with which students were familiar, assuming there would be no steep learning curve related to the use of an existing application system. While the tool was the same, this was a new process. When faculty leaders presented the new process to the students, staff were not included in this information session as leaders assumed students were very familiar with the tool and there would be no need to provide additional training for this process. However, soon after that session, the system administrator was bombarded with service tickets from students seeking assistance for this new process. While not intentional, faculty were not aware of the specific system setup needs to streamline the new process. The tool was the same, but the system setup for this form of data collection was different. The system administrator was ultimately able to help students in a subsequent training session. In hindsight, a collaboration between faculty and the system administrator/trainer prior to a student session would have been of great benefit to preventing challenges with this new process. The knowledge and expertise our staff professionals are essential to our day-to-day processes and therefore the accomplishment of our missions.

For this editorial, MFD wanted to know what scholarship might be out there about the value of professional research staff. After only a quick search, he found The Journal of Research Administration,³ BMC Health Services Research,⁴ and the Australian Health Review. 5 Especially interesting was a short blog from the Society of Research Administrators International titled "Improving Professionalism in Research management and administration support services using reflective practice"6. The blog emphasized how staff personnel can strengthen faculty work and increase productivity. Then this master's thesis supported the general thrust of this editorial: "Research Administration: The Most Important Job No One Knows About."7

It was no surprise then to learn recently that the Group on Educational Affairs of the American Association of Medical Colleges will soon be endorsing and supporting a new section called Staff Professionals Across the Continuum of Education (SPACE). The purpose of this new section is to

have a respected "space" for staff professionals to be recognized, share best practices, research, resources, and expertise. Thus far this group has hosted virtual conferences, professional development sessions and more for the continued success and development of staff professionals. As a national section, it will bring more awareness to the array of professionals within medical education and the work they do behind the scenes to drive forward the missions and visions of medical colleges in the United States.

There are similar groups in other countries. For example, the Canadian Association of Research Administrators, whose website describes them as "the national voice for research administrators in Canada and ... committed to supporting the profession by offering members a safe, inclusive, and equitable professional space to learn and grow through networking with peers, sharing best practices, professional development, mentorship, and leadership opportunities."

In the UK, the Association of Research Managers and Administrators in the UK is (from their website): "... the professional association for research management in the UK. We represent research leaders, managers, and administrators, offering professional development and opportunities to build networks, knowledge, and skills."

Add to this list the Australian Research Management Society, the Danish Association or Research Managers and Administrators, the European Association of Research Managers and Administrators, the International Network of Research Management Societies, and the West African Research and Innovation Management Association. There's a lot going on in this world!

The productivity and success of the faculty researchers reflects the work of the entire team. Everyone on the team should be recognized for their unique and important contributions. This editorial is a huge "thank you" to all the research and education staff professionals out there, especially those who have worked with us and our colleagues. We hope this this editorial inspires all our faculty colleagues and medical education leaders to recognize and reward the work of every one of their team members. The next to last word goes to Nature from the article by Teperek et al.⁸ "Time to re-think the divide between academic and support staff." It takes a good team to conduct quality research because it is much more difficult than it looks.

At the CMEJ, I rarely give the production and administrative aspects of our work a second thought. They seem to happen effortlessly. The magic happens without me due to the expert work of our Production Manage, Deputy-Editor and the financial and support personnel from AFMC. I'm so thankful I don't have to worry about that work and can concentrate on the editor role.

The last part of this editorial, as always, contains thumbnail sketches of all the articles published in this edition of the CMEJ. This is the final destination for a research study or idea that required a team of dedicated scholars - faculty and staff alike - to make it look easy.

Original Research

Leblanc et al. wrote <u>Development of ownership of patient care during clerkship</u>⁹ regarding the development of personal commitment and responsibility through the concept of *ownership of patient care*. They found that ownership of patient care developed through factors such as role modelling and student self-assessment. The authors maintained that fostering ownership of patient care leads to increased engagement with patients in their care, and greater accountability for the patients' outcomes.

Mathews and co-authors' research article, <u>Perceptions of bias in the selection of international medical graduate residency applicants in Canada</u>, ¹⁰ explored potential sources of bias in the residency program selection process for Canadian citizens who attended medical school abroad (CSA) compared to immigrant international medical students. They identified several factors, such as the ability to complete the undergrad placement in Canada, that may give Canadian students an advantage.

Overshadowed by shadowing: exploring how Canadian medical students experience shadowing by Li and team¹¹ studied the experiences of Canadian medical students and the impact of medical student shadowing on their personal and professional lives. While the perception of shadowing is largely positive, their findings also highlighted the uncertainty and anxiety associated with the unintended social comparisons and competition that come with shadowing.

A qualitative study of Canadian resident experiences with Competency-Based Medical Education by Branfield Day and co-authors¹² explored residents' experiences in Canadian training programs that implemented competency-based medical education (CBME). While the residents valued the goals of CBME for improving the quality of education, they found the work of assessment sometimes overshadowed learning.

Changing the channel: a qualitative analysis of an innovative video intervention to explore resident attitudes towards interprofessional collaboration on a Geriatric Medicine Unit by Whitney et al.¹³ developed an innovative video simulating an Interprofessional collaboration (IPC) scenario. They found their tool useful in helping medical learners have a more positive attitude toward IPC.

Reviews, Theoretical Papers, and Meta-Analyses

<u>Characteristics of Canadian physicians and their associations with practice patterns: a scoping review</u> by Kendall and team¹⁴ presented the results of a scoping review of the educational elements and sociodemographic attributes of physicians in Canada. Their findings showed that many studies found positive associations between physicians' origin and practice in that location (for example, a rural background and rural practice setting). They noted that more research is needed on the association between socioeconomic status and the populations served.

Outcomes of inquiry-based learning in health professions education: a scoping review by Verma et al.¹⁵ examined published literature on inquiry-based learning (IBL) curricula in health professions education. They identified gaps in the health professions literature, such as relying too heavily on subjective outcomes, for future studies on IBL.

Brief Reports

Charlotte Axelrod and team wrote <u>The Companion Curriculum: medical students' perceptions of the integration of humanities within medical education.</u> ¹⁶ They evaluated the usage and perceptions of Companion Curriculum (CC) integration and explored its broader implications for the humanities in medical education. Their results showed that their CC remained underused despite the interest in medical humanities. They proposed further study to explore the reasons for gaps between interest and participation.

Enhanced point of care ultrasound skills after additional instruction from simulated patients by Olszynski and coauthors¹⁷ reported on Simulated Patient Teachers and Point of Care Ultrasound skill development amongst medical students. They found that it positively affected students, as those who received simulated patient teaching performed better than those who did not.

Keren and team wrote <u>"Figuring it out on our own":</u> exploring family medicine residents' sexual assault and domestic violence training. ¹⁸ They studied family medicine residents' sexual assault and domestic violence experiences (SADV) and how those experiences shape their learning

behaviours. They found that participants felt unprepared to care for patients experiencing SADV. They noted that targeted SADV teaching would improve the quality of care for affected patients.

Black Ice

Five ways to get a grip on designing medical student clerkship clinical rotations during a pandemic by Chen et al., 19 described ways to handle clerkship rotation revisions necessitated by COVID-19. They emphasized that curriculum design must suit the learners while recognizing the challenges and distress posed by the pandemic.

You Should Try This!

In the article, Research and Residency Match: a near-peer online webinar, ²⁰ Lorange and team described a webinar approach to help inform medical and pre-medical students about the importance of the research experience in the Canadian residency match process. Their webinar allowed students to hear from recently matched medical students about how or if research was necessary for their match success.

Implementing experiential learning logs addressing social accountability into undergraduate medical clerkship education by Fung et al.²¹ described the implementation of learning logs as a tool for helping students reflect on clinical encounters to ensure they are meeting and advocating for the needs of the community. Fung et al. maintained that providing learners with this platform was important for emphasizing social accountability in patient care.

Engaging community organizations for undergraduate medical education curriculum renewal by Muldoon and team²² sought to strengthen their university's social accountability through a workshop with invited community organizations to provide insights on the community's needs. Their incentive intended to engage the community while helping with future directions of curriculum development.

Lauren Hanes and co-authors wrote <u>Implementation of a resident-led patient safety curriculum</u>²³ to outline and evaluate their pediatric residency patient safety curriculum. Their curriculum used real-life safety incidents to help improve residents' patient-safety knowledge, skills, and behaviours.

Canadiana

Christine Miller's article, <u>Hometown medicine: a northern experience</u>²⁴ detailed her journey in family medicine residency, which took place in northern Canada. She described the rotation and life experiences unique to medicine in northern Canada.

In <u>Reflections on addressing antisemitism in a Canadian faculty of medicine</u>,²⁵ Ayelet Kuper wrote about her experiences with discrimination and antisemitism at a Canadian Institution. Kuper encouraged readers to stand with Jewish learners, staff, and faculty in fighting antisemitism as it resurfaces in Canadian health professions education institutions.

Commentary and Opinions

CanMEDS, quality improvement, and residency: mind the gap by Dhanoa and Hall²⁶ commented on Quality Improvement and Patient Safety (QIPS) in postgraduate education according to CanMEDS 2015. They remarked that while QIPS is a competency in medical training, it lacks clarity in curriculum delivery standards and evaluation. They commented on the role of CanMEDS as a vision and framework for QIPS rather than an accreditation standard.

Lee and team wrote <u>The promises and perils of remote proctoring using artificial intelligence</u>²⁷ to comment on their experiences with remote proctoring for medical assessment sessions. They noted the need to adapt to the global crisis and encouraged continued study regarding online assessment and AI proctoring.

Chuang's commentary, <u>Anesthesiologists in the modern medical school curriculum: importance and opportunity</u>, ²⁸ encouraged the continued integration and involvement of anesthesiologists in medical education. He noted that anesthesiologists are both content experts and highly skilled practitioners. As such, they are well-suited for an increased role in medical education in Canada.

Lilian Robinson wrote, "Small groups, big possibilities: radical pedagogical approaches to critical small-group learning in medical education.²⁹ Robinson explored small-group learning based on her experience as both a learner and early educator to suggest how the current pedagogical approach to small-group learning could be revised to deconstruct systemic racism within medical education.

Letter to the Editor

Villanueva's letter, <u>How to further improve the credentialling process of International Medical Graduates in Canada</u>, ³⁰ responded to <u>When a Canadian is not a Canadian: marginalization of IMGs in the CaRMS match</u> by MacFarlane. ³¹ Villanueva wrote as a family physician practicing in Portugal who considered moving to Canada but found the process too onerous. He made several suggestions for how Canada might attract physicians from abroad.

Image

Smith's digital art image, <u>Falling Apart</u>,³² is a close-up of a face with cracked and peeling skin. He used this striking image to represent the mental health struggles of medical students. This artwork is the cover image for this issue.

Enjoy!

Marcel F D'Eon Editor-in-Chief CMEJ

Marcel D'En

References

- D'Eon M, Waller J, Drescher C, Vess K. Medical student stress, burnout, and workplace factors. Oral presentation, Southern Group on Educational Affairs, March 25, 2023, Nashville, TN.
- Dandar VA, Sacks H. Medical school professional staff: findings from three pilot studies. Association of American Medical Colleges 2015;15(10), 1-2.
 - https://www.aamc.org/media/8226/download?attachment
- Goff-Albritton RA, Cola PA, Pierre J, Yerra SD, Garcia I. Faculty views on the barriers and facilitators to grant activities in the USA: a systematic literature review. J Res Admin. 2022;53(2):14-39.
- Wenke R, Mickan S. The role and impact of research positions within health care settings in allied health: a systematic review. BMC Health Serv Res. 2016 Dec;16(1):1-0.
- Williams C, Miyazaki K, Borkowski D, McKinstry C, Cotchet M, Haines T. Research capacity and culture of the Victorian public health allied health workforce is influenced by key research support staff and location. Australian Health Review. 2015 May 18;39(3):303-11.
- Odeyemi, O. Society for research administrators international blog. Feb 2022 https://www.srainternational.org/blogs/srai-news/2023/02/09/improving-professionalism-in-research-management-a; [Accessed Feb 28, 2023].
- 7. Smith S. Research administration: the most important job no one knows about. 2019 Masters Thesis. Johns Hopkins University
- Teperek M, Cruz M, Kingsley D. Time to re-think the divide between academic and support staff. Nature. 2022 Apr 14.
- Leblanc A, Snell L, Sun N-Z. Development of ownership of patient care during clerkship. Can. Med. Ed. J. 2023;14(2). https://doi.org/10.36834/cmej.71362
- Mathews M, Bourgeault I, Ryan D. Perceptions of bias in the selection of international medical graduate residency applicants in Canada. Can. Med. Ed. J. 2023;14(2). https://doi.org/10.36834/cmej.73320
- Li MK, Xu G, Veinot P, Mylopoulos M, Law M. Overshadowed by shadowing: exploring how Canadian medical students experience shadowing. Can. Med. Ed. J. 2023;14(2). https://doi.org/10.36834/cmej.74348
- Branfield Day L, Colbourne T, Ng A, Rizzuti F, Zhou L, Mungroo R, McDougall A. A qualitative study of Canadian resident experiences with Competency-Based Medical Education. Can. Med. Ed. J. 2023;14(2). https://doi.org/10.36834/cmej.72765
- Whitney K, Peck V, Huang AR, et al. Changing the channel: the effect of an innovative video intervention on resident attitudes towards interprofessional collaboration on a Geriatric Medicine Unit. Can. Med. Ed. J. 2023;14(2). https://doi.org/10.36834/cmej.71529

- Mihan A, Kester N, Fitzgerald M, Fournier K, Kendall CE. Characteristics of Canadian physicians and their associations with practice patterns: a scoping review. *Can. Med. Ed. J.* 2023;14(2). https://doi.org/10.36834/cmej.74205
- Verma S, Yacob MS, Kirpalani A. Outcomes of inquiry-based learning in health professions education: a scoping review. *Can. Med. Ed. J.* 2023;14(2). https://doi.org/10.36834/cmej.75144
- Axelrod C, Brenna CT, Gershon A, Peterkin A, Nyhof-Young J. The Companion Curriculum: medical students' perceptions of the integration of humanities within medical education. *Can. Med. Ed. J.* 2023;14(2). https://doi.org/10.36834/cmej.72907
- Olszynski P, Johnston B, McIntyre D, Trinder K. Enhanced point of care ultrasound skills after additional instruction from simulated patients. Can. Med. Ed. J. 2023;14(2). https://doi.org/10.36834/cmej.74246
- Keren D, Kelly M, Wakabayashi A, McNair S. "Figuring it out on our own": exploring family medicine residents' sexual assault and domestic violence training. Can. Med. Ed. J. 2023;14(2). https://doi.org/10.36834/cmej.74964
- Chen KJ, Wilson S, Cheung W. Five ways to get a grip on designing medical student clerkship clinical rotations during a pandemic. Can. Med. Ed. J. 2023;14(2). https://doi.org/10.36834/cmej.74000
- Justin-Pierre Lorange, Anne Xuan-Lan Nguyen, Jobanpreet Dhillon, Caroline Najjar. Research and residency match: a near-peer online webinar. Can. Med. Ed. J. 2023;14(2). https://doi.org/10.36834/cmej.74367
- Fung OW, Mulholland A, Bondy M, Driedger M, Kendall CE.
 Implementing experiential learning logs addressing social accountability into undergraduate medical clerkship education. Can. Med. Ed. J. 2023;14(2). https://doi.org/10.36834/cmej.73907
- Muldoon L, Chenier A, Campbell C, Kendall CE. Engaging community organizations for undergraduate medical education curriculum renewal. Can. Med. Ed. J. 2023;14(2). https://doi.org/10.36834/cmej.74013
- Hanes L, Afifi J, Lynk A, Manos S. Implementation of a resident-led patient safety curriculum. Can. Med. Ed. J. 2023;14(2). https://doi.org/10.36834/cmej.74871
- Miller C. Hometown medicine: a northern experience. Can. Med. Ed. J. 2023;14(2). https://doi.org/10.36834/cmej.75863
- Kuper A. Reflections on addressing antisemitism in a Canadian faculty of medicine. Can. Med. Ed. J. 2023;14(2). https://doi.org/10.36834/cmej.76086
- Dhanoa M, Hall JN. CanMEDS, quality improvement, and residency: mind the gap. Can. Med. Ed. J. 2023;14(2). https://doi.org/10.36834/cmei.75483
- Lee AS, Babenko O, George M, Daniels V. The promises and perils of remote proctoring using artificial intelligence. *Can. Med. Ed. J.* 2023;14(2). https://doi.org/10.36834/cmej.74299
- Chuang Z. Anesthesiologists in the modern medical school curriculum: importance and opportunity. *Can. Med. Ed. J.* 2023;14(2). https://doi.org/10.36834/cmej.76188
- Robinson L. Small groups, big possibilities: radical pedagogical approaches to critical small-group learning in medical education. Can. Med. Ed. J. 2023;14(2). https://doi.org/10.36834/cmej.76464
- Villanueva T. How to further improve the credentialling process of international medical graduates in Canada. Can. Med. Ed. J. 2023;14(2). https://doi.org/10.36834/cmei.75805
- MacFarlane MM. When a Canadian is not a Canadian: marginalization of IMGs in the CaRMS match. Can. Med. Ed. J. 2021 Sep. 15;12(4). https://doi.org/10.36834/cmej.71790
- Smith BR. Falling apart. Can. Med. Ed. J. 2023;14(2). https://doi.org/10.36834/cmej.76083