

Energizing scholarly activity in a regional medical campus Stimulation des activités d'érudition dans un campus médical régional

Amanda Bell,¹ Ekta Khemani,¹ Seddiq Weera,¹ Chris Henderson,¹ Larry W Chambers¹

¹Niagara Regional Campus, Michael G. DeGroot School of Medicine, Faculty of Health Sciences, McMaster University, Ontario, Canada

Correspondence to: Larry W. Chambers, 5576 Regional Road #25, Milton, Ontario L9E 0L2

Published ahead of issue: November 1; published: March 2, 2022; CMEJ 2022, 13(1). <https://doi.org/10.36834/cmej.72593>.

© 2022 Bell, Khemani, Weera, Henderson, Chambers; 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 education is increasingly delivered at distributed sites away from Academic Health Sciences Centres. The Council of Ontario Faculties of Medicine recommends schools develop resources and metrics to foster regional campus scholarly activity. Opportunities for distributed program trainees must support learning core skills in research and critical appraisal to comply with medical school accreditation standards and to develop their interests and skills in scholarly work for their future medical careers. We describe a scholarly activity program that is a template for distributed campuses or regional teaching sites seeking to increase learner and faculty engagement and research productivity.

Énoncé des implications de la recherche

La formation médicale décentralisée se déroule de plus en plus souvent loin des centres universitaires de sciences de la santé. Le Conseil des facultés de médecine de l'Ontario recommande aux facultés de se doter de ressources et de indicateurs pour encourager les activités d'érudition sur les campus régionaux. Les possibilités offertes aux stagiaires des programmes décentralisés doivent favoriser l'apprentissage des habiletés de base en recherche et en lecture critique pour se conformer aux normes d'agrément des facultés de médecine et développer des intérêts et des habiletés en érudition qui leur seront utiles dans leur carrière médicale. Nous décrivons un programme d'activités d'érudition qui peut servir de modèle pour les milieux de formation décentralisés ou les sites d'enseignement régionaux souhaitant stimuler la productivité scientifique et l'implication des apprenants et du corps professoral dans la recherche.

Introduction

Outside academic centres, there are fewer academic faculty and substantial barriers to research participation.¹ Academic faculty and research programs outside tertiary centres address population health needs and increases training opportunities.² Distributed medical learners should not be disadvantaged relative to Academic Health Sciences Centre (AHSC) learners.³ Community-based research addresses social accountability, giving meaning to students and communities.⁴

The Niagara Regional Campus (NRC) has over 420 faculty with 7% having formal research training, and 84 medical students seeking to increase their skills and improve their residency applications⁵ by participating in projects at their home campus. Students believed research opportunities were only available at the AHSC campus and they could not be successful locally in research. Clinical faculty did not see

themselves as researchers and struggled to include scholarly activity in their work. Consequently, research supervision was disproportionately carried out by few faculty.

The Hamilton Integrated Research Ethics Board exempted this work from ethics review.

Description of innovation

Through discussion with other regional medical campuses, a local strategic planning process, and problem solving, NRC developed a successful scholarly activity program over a three-year period with minimal external funding. Our initiative was guided by five pillars: engagement, investment, education, tracking and celebration.

Engagement of students and faculty enabled project development in areas of interest. Engagement included membership on committees and communities of practice,

connecting with research programs in postsecondary institutions and healthcare organizations and connecting mentors and mentees.

Investment included a small leadership team who assisted in project design, implementation, and output. Research awards from local funders assist students and faculty with research costs. Collaboration with data analysts in the hospital system's Decision Support Unit, epidemiologists at the Local Health Integration Network, statisticians, and qualitative methodologists from partner universities increased access to datasets and expertise.

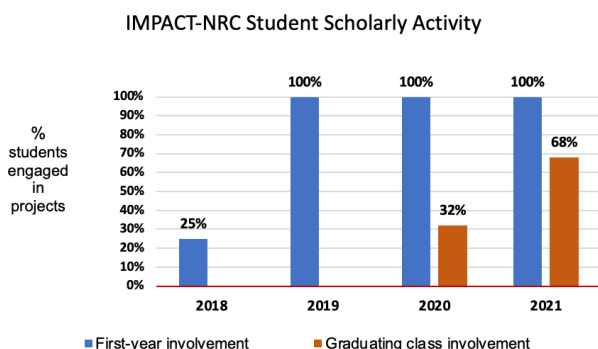
Education increased student and faculty skills through multiple channels, including an evidence-based medicine primer, research-in-progress rounds, and journal clubs. Training opportunities are tailored to participant-identified needs.

Tracking of projects, progress, and opportunities happened through a Scholarly Activity Database maintained by a research coordinator who monitored progress to identify and address barriers and ensured project completion.

Celebration of achievements happened through newsletters, social and mainstream media. Communities of practice supported new faculty as community-based researchers. Student participation in projects empowered them to enter practice equipped to continue their scholarly pursuits.

Outcomes

Since 2019, 24 peer-reviewed manuscripts co-authored by students were published. First-year MD-student participation was 25% in 2018 and 100% from 2019 to 2021 with increasing number of projects and faculty supervisors (Figure 1). The 2021 graduating class created an NRC Research Compendium⁶ to encourage future students to pursue scholarly activities.



	2018	2019	2020	2021
Active projects	33	60	53	60
Faculty supervisors	9	18	24	23

Figure 1. Impact – Niagara Regional Campus MD student scholarly activity 2018-2021

Next steps

The NRC will grow scholarly activity with a focus on community-based research through an endowed professorship in family medicine and increased research opportunities for community-based clinicians. We aim to expand engagement with partner organizations targeting improved access to healthcare for marginalized populations.

Other regional campuses and community training sites can similarly build their scholarly activity impact and output through using these five pillars. Leveraging existing funds and expertise and dedicating modest leadership to structure a program while tracking and supporting ongoing work should lead to growth and success for students and faculty.

Conflicts of Interest: The authors have no conflicts of interest to report due to financial and personal relationships that could potentially bias their work.

Funding: This project was conducted with no external funding.

Authorship: All the authors were involved in drafting the work or revising it critically for important intellectual content and all authors approved the version of the manuscript to be published. All authors are accountable for all aspects of the work and ensured that questions related to the accuracy or integrity of any part of the work were appropriately investigated and resolved.

References

1. Council of Ontario Faculties of Medicine. *Scholarly activity within distributed medical education programs: reflections and recommendations council of Ontario universities*. Nov 2019. Available at <https://cou.ca/reports/scholarly-activity-within-distributed-medical-education-programs-reflections-and-recommendations/> [Accessed on July 21, 2021].
2. Burrows AM, Laupland KB. Comprehensiveness of distributed medical education systems: a regional population-based perspective. *BMC Med Ed*. 2021; 21.1:1-7. <https://doi.org/10.1186/s12909-020-02466-x>
3. Ellaway R, Bates J. Distributed medical education in Canada. *Can Med Ed J*. Mar 27, 2018; 9:1 e1-e5. <https://doi.org/10.36834/cmej.43348>

4. Maar M, Boesch L, Tobe S. Enhancing Indigenous health research capacity in northern Ontario through distributed community engaged medical education at NOSM: a qualitative evaluation of the community engagement through research pilot program. *Can Med Ed J*. Mar 27, 2018; 9.1 e21-e32. <https://doi.org/10.36834/cmej.42187>
5. Lukings J, Bell A, Stobbe K. et al. Scholarly activity as a selection criterion in the Canadian Residency Matching Service (CaRMS): a review of published criteria by internal medicine, family medicine, and pediatrics programs. *Can Med Ed J*. Jul 15, 2020; 11.3 e116-e121. <https://doi.org/10.36834/cmej.69094>
6. Dai D, Bhatena Y, Burcul I, Hu G, Kearney H. Niagara Regional Campus Research compendium class of 21. Michael G. DeGroote School of Medicine, McMaster Univeristy. 2021. Available at <https://macdrive.mcmaster.ca/f/8b33bd2f009a40ff8ab0/> [Accessed on August 30, 2021].