

JRMC | Journal of Regional Medical Campuses

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DOI: <https://doi.org/10.24926/jrnc.v1i1.999>

Journal of Regional Medical Campuses, Vol. 1, Issue 1 (2018)

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Promoting Scholarship at Regional Medical Campuses Students

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Abstract

Multiple regional medical campuses (RMCs) have been established in North America as part of the effort to train physicians in locations geographically removed from the main medical school campus. RMCs may vary in size, geographic location and mission from the main campus, but scholarly activity by faculty and students is expected and should be promoted on all campuses. If the definition of scholarship is limited to research demonstrated by publication, and academic recognition and advancement is largely based on this criterion, faculty at the RMC who fail to participate may be at a disadvantage. Thus, in addition to expanding research opportunities at the RMC, it is argued that the definition of scholarship needs to be expanded to recognize the accomplishments of RMC faculty. RMC students must also be introduced to biomedical research principles and provided opportunities to engage in scholarly pursuits. Documented participation in scholarly activity may be necessary to make the student more competitive for residency positions. The authors review an expanded definition of scholarship, present an approach to promote faculty and student scholarship, and describe achievable options for scholarly activity on the RMC.

North American regional medical campuses (RMCs), also called branch campuses, satellite campuses, or geographically separate campuses, educate an ever-increasing number of medical students. Proposed characteristics of a RMC include: (1) location more than fifty miles away from the main academic health center or school of medicine campus; (2) delivery of a significant component of medical student education at the site, whether in the basic sciences or clinical years; and (3) a formal administrative and educational relationship with the main campus.¹ Although separate from the main campus, a RMC does not receive independent accreditation from the Liaison Committee on Medical Education (LCME).

In 2014 the Group on Regional Medical Campuses (GRMC) of the Association of American Medical Colleges (AAMC) listed fifty-seven medical schools with RMCs and a total of 114 RMCs in the U.S. and Canada.² A survey conducted by the AAMC in 2016 noted a total of 115 RMCs, seventy (61%) of these RMCs established since 2010, and over one in ten allopathic medical students (over 9000 matriculants) trained at a RMC.³ Cheifetz et al proposed a

classification system for RMCs consisting of four models: (1) basic science (years 1 and 2); (2) clinical (clerkships in year 3 or years 3 and 4); (3) longitudinal basic science and/or clinical experiences spanning greater than twelve weeks in one or more courses of study or case areas; and (4) combined (basic science and clinical years are offered in some combination).⁴ The number of faculty members (tenured or on a tenure track, non-tenured, adjunct-paid and adjunct-not paid) engaged in teaching at RMCs is staggering, exceeding 34,000 in the recent AAMC survey.³ The LCME requires that all faculty members have academic appointments, and that each medical school has policies and procedures in place for faculty appointment and promotion (Standard 4.3).⁵

Motivations for establishing a RMC vary and include: attempts to address physician shortage in a particular area, a focus on primary care, broadened patient base, and political considerations.¹ Hopefully, all RMCs strive to create an outstanding academic environment, provide an excellent education for medical students, and reflect positively on the main campus with their dedication to teaching, clinical care

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and scholarship. Scholarship may be the one domain that RMC faculty members and students struggle with the most, mainly due to faculty not prioritizing this aspect of medicine.

Defining Scholarship

Although an RMC may differ in size, geographic location, and mission from the main campus, what constitutes scholarship, and is recognized and rewarded as scholarship, may be identical for both campuses. Fincher et al⁶ observed that the definition of scholarship generally applied by medical schools is unnecessarily narrow—demonstrated only by research, peer review of results, and dissemination of new knowledge. Although just as dedicated to teaching medical students as faculty members on the main campus, RMC faculty members may not be inclined to participate in research activities, as their time is consumed by clinical practice and teaching responsibilities. Additionally, they may not feel competent and/or may not have the interest to engage in research. Unfortunately, if research and publication is of primary importance for recognition and promotion, the clinical faculty at RMCs may be at a disadvantage for academic advancement compared to faculty members on the main campus. Likewise, in contrast to the main academic medical campus, basic science research, translational research, and large clinical trials are often not being conducted on RMCs, and students on a RMC may not be aware of or be presented with opportunities to engage in research activities. Should or can the academic integrity or prestige of RMCs be judged on research being conducted, publications generated, and grant funding? Should or can RMCs be held to the same academic standard as the main campus? Although a seemingly difficult task, faculty, as well as students, at RMCs must be encouraged to engage in and be given the opportunity to pursue scholarly activities. How can this be accomplished?

Redefining or expanding what constitutes scholarship may be an initial step in promoting scholarship on all campuses. Boyer expanded the definition of scholarship to include four elements: (1) the scholarship of discovery—typically meaning research; (2) the scholarship of integration—giving meaning to isolated facts, putting knowledge in perspective; (3)

the scholarship of application—using knowledge to solve consequential problems—the scholarship of service; and (4) the scholarship of teaching.⁷ The meanings of these four forms of scholarship are separate, but overlapping. Faculty and students at medical schools may engage in one or more forms of scholarship. The truly talented scholar could engage in all four. The scholarship of research may remain paramount, but recognizing and rewarding faculty members who participate in other forms of scholarship, as defined by Boyer, may be a constructive advance for both main campus and RMC. Glassick's six criteria (clear goals, adequate preparation, appropriate methods, significant results, effective presentation, and reflective critique) used to evaluate the scholarship of discovery can also be employed to assess the scholarship of teaching.⁸ Faculty members who are excellent teachers and consistently practice compassionate and evidence-based medicine are invaluable assets to the RMC and should be acknowledged. They can be role models, as well as educators. As noted by Glick, the best teachers inspire and transform the medical student, and he suggested that faculty portfolios, what he termed "impact maps," documenting teaching or educational performance be created.⁹ The impact map charts an educator's contribution to the education of learners from the development of an innovative teaching method to the actual impact on outcomes. These portfolios can then be used as objective evidence for recognition and reward, including promotion.

Promoting scholarly activities by faculty at a RMC

Research is being conducted on RMC campuses, but this is not a universal occurrence. The recent RMC survey found that 78 of 115 (68%) RMC campuses conducted research distinct from the main campus.³ Basic science research was conducted on 37 (32%) RMC campuses surveyed, while health service research was conducted on 41 (36%) campuses, education research on 47 (41%), and clinical research on 65 (57%). There was no data detailing percentage of RMC faculty engaging in research.

RMC faculty may not find academic advancement reason enough to engage in scholarly activities. In fact, these faculty may have chosen community

practice to get away from the perceived hassles of the academic medical center. While the “publish or perish” paradigm may be distasteful, they may value the opportunity to participate in the education of medical students. Nevertheless, RMC faculty must be informed that the scholarship of discovery is valued by both the main campus and the RMC and is an important characteristic of being an academic physician, complementing both patient care (service) and the education of the next generation of physicians. Also, improvement in both medical practice and medical education are rooted in the scholarship of discovery. RMC faculty need to be reassured that the scholarship of discovery is not an impossible task for the busy practicing physician and that there are resources available to assist with completion of scholarly work, such as posters, oral presentations, and papers worthy of sharing with others.

There are at least six additional steps that can be taken to encourage RMC faculty to engage in scholarly activity:

- (1) RMC faculty, who are often quite enthusiastic about participating in teaching medical students and desire to promote their RMC, must understand the importance of scholarship for the integrity and recognition of their local campus.
- (2) The RMC administration must provide faculty development to assist faculty members who are interested in scholarly activity, but unsure how to start or what project to undertake. Faculty education might prompt the disinterested to take up the mantle of scholarly pursuits. Providing mentorship may prompt the reluctant scholar to initiate and complete a project. The administration can also provide assistance with statistical analysis and preparation of posters, oral presentations and manuscripts.
- (3) Faculty need to realize that scholarship is not limited to research and, hopefully, the main campus recognizes and values other

forms of scholarship, such as service and teaching. The main campus and the RMC should agree on what constitutes scholarship, hopefully embracing a more expanded definition, and set standards for achievement.

- (4) Community members should be informed of the scholarship of the RMC physician faculty. The value of public recognition of the local RMC faculty's academic achievement should not be underestimated.
- (5) Any financial disincentives for engaging in scholarly activities should be removed, and financial incentives should be considered for faculty engaged in scholarly activities, especially those that include medical students in scholarly projects. The RMC administration should help defray the costs incurred by the design, implementation and analysis of scholarly activities, manuscript preparation and submission, and attendance at local, regional, national or international meetings to present a poster or oral presentation.
- (6) Explore ways to reward and recognize those RMC faculty engaged in various scholarly activities in addition to teaching awards.

Promoting scholarly activities by students at a RMC

Providing scholarship opportunities for students attending RMCs is also imperative. Longitudinal, in-depth curricular programs have been implemented in a number of medical schools to promote scholarship.^{10, 11} RMCs may not be able to institute such dedicated programs, but all medical students must be introduced to the scientific method as it relates to medicine and be encouraged to explore the rewards and challenges of discovery. The LCME's

Standard 3.2, published in *Functions and Structure of a Medical School*, states that “A medical education program [be] conducted in an environment that fosters the intellectual challenge and spirit of inquiry appropriate to a community of scholars and provides sufficient opportunities, encouragement, and support for medical student participation in research and other scholarly activities of its faculty.”⁵ The CanMEDS 2005 Physician Competency Framework also emphasizes that scholarly research programs, as a component of undergraduate medical education, allows students the opportunity to develop critical thinking and communication skills and to contribute to medical knowledge.¹²

Students need to realize that inquisitiveness and the scholarship of discovery are integral parts of being a physician and should be informed of scholarship opportunities at the RMC and encouraged to seek out a faculty member who could mentor them through the scholarly activity. Murdoch-Eaton et al argue that research skills and projects need to be integrated into the medical curriculum early in the undergraduate program.¹³ Chang and Ramnanan reviewed the literature on scholarly research by medical students and found that these students perceived their research experiences as positive in terms of stimulating research interest and developing research abilities.¹⁴ In order to optimize student research programs, the authors recommended that medical schools increase recognition of student research efforts, promote student-mentor interaction, and allow students to increase the duration of research experiences. Finally, in an era of increased competition for residency positions, students must be informed that research or other scholarly activities during medical school may be a prerequisite for securing certain residency positions.¹⁵⁻¹⁷

Research topics for a RMC

Research—the scholarship of discovery—is not impossible at the RMC. Although RMCs may not have the resources or faculty to engage in basic science research, they may provide ideal environments for clinical, quality improvement, and education research. Scholarly activities start with a question. The scholarly pursuit is the search for the answer. All faculty members should be encouraged to develop a list of

questions related to their practice, the patients they have seen, or teaching medical students. For example:

Why did a particular event occur in a particular patient?

How can I improve patient care or satisfaction?

What unusual results occurred after a particular intervention?

How does my care compare with national reports?

What can be done to improve the medical education curriculum or its delivery?

What have I discovered about teaching medical students or residents that can be shared with peers?

Answers to these questions can lead to case reports, quality improvement studies, and medical education innovation reports. RMC faculty members can be queried as to potential research ideas, and a list of potential scholarly activities can be compiled by the RMC administrative team. This list can be circulated among all faculty members, giving everyone the opportunity to comment on a project's feasibility and offer to collaborate on any particular project. The list also needs to be shared with students, giving learners the opportunity to participate in a project of interest. Administration needs to provide funds, if needed, to successfully complete and communicate the project. Faculty and students can be encouraged to present their findings at a variety of forums and reports may be worthy of peer-review publication.

In addition to traditional research projects, RMC faculty can participate in the design and implementation of curricular innovations, assessment methods, and development of course syllabi and assume leadership roles in course delivery—all scholarly activities that can be documented and included in his or her academic portfolio or curriculum vitae. Societies that promote research within the institution can also be useful. For example, the University of Kansas Academy of Medical Educators and its offshoot, the Medical Education Research Interest Group, were established to promote educational research at both the main and

regional campuses and also offer funding for suitable projects.

Summary

Promotion of scholarship at a RMC starts with an administration that values and rewards the clinical service and teaching of each faculty member, whether voluntary or paid. Faculty members need to be informed that scholarship is not limited to research—that documented excellence in clinical service and teaching are also worthy scholarly endeavors. Each RMC should explore alternatives to traditional scholarship (i.e., research) and reward faculty engaged in these activities. Development of new teaching methods, modification of curricula to fit the needs of a particular RMC, mentoring junior faculty members, and creating innovative clinical clerkship opportunities and community engagement projects are scholarly endeavors that RMC faculty can consider. However, RMC faculty also need to know that there are a variety of opportunities to engage in the scholarship of discovery, and that such activities can be completed outside the main campus and need not be onerous chores. Medical students also need to understand that engagement in scholarly activities is an important component of their medical education and that opportunities for participation in such activities are available. RMCs can be a recognized partner of the main campus in promoting scholarly activity, if the RMC has the will to support such activity and the main campus has the will to embrace the scholarly contributions of the RMC.

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