

LETTER TO THE EDITOR

Innovative strategies to increase resident scholarly activity and engage faculty support

To the editor

As the Accreditation Council for Graduate Medical Education (ACGME) moved to the Next Accreditation System, the emphasis on scholarship increased substantially for trainees as well as faculty. Citations reflecting this new emphasis have become more common. In this article, the authors provide a systematic approach to increase resident participation in scholarly activities.

The barriers associated with implementing requirements for scholarly activities have been identified as lack of time, lack of research facilities, lack of mentors, lack of funding and interest among the faculty.^{1 2}

Review of the literature evaluating interventions to increase resident scholarly activity in training programs, demonstrated that effective interventions included protected research time, research curricula, research directors, dedicated research days and research tracks.³

Combining or bundling interventions appeared to be most successful in attaining the desired outcomes—suggesting that programs may need to provide both increased structure and rigor through multiple pathways.³ While the findings from the literature demonstrate that increases in scholarly activities are attainable through a variety of interventions, there is little guidance provided on how to be successful.²⁻⁴

We propose short-term and long-term strategies that can be replicated by other programme directors.

What you can start today

1. Establish a requirement for scholarly activity: a specific policy should stipulate that all residents participate in both scholarly and quality improvement projects as a requirement for graduation. Completion of only a project without publication or presentation

at a regional/national meeting does not fulfill the requirement of scholarly activity. In addition, only the first author on the publication or abstract receives credit toward the program's requirement.

2. Provide a menu of options for defining scholarly activity: distribute a menu of options to residents defining what qualifies as scholarly activity. Only ACGME defined scholarly activities—publications (original research, quality improvement projects, case reports), presentations (oral or poster) at regional or national meetings, and book chapters—should be included on the menu of options.
3. Engage the residents and stimulate their interest: to stimulate residents' interest and provide a starting point, program directors should provide list of faculty projects and/or their interests. This list should be updated annually when new faculty join the department as well as distributed annually. In addition, residents actively pursuing projects should have the opportunity to present their work to their peers to stimulate interest, recruit participants and demonstrate their success until now.
4. Involve the department's research director and other faculty to guide and develop project ideas. It is important to provide residents with the necessary guidance for them to explore their interests and develop these interests into a well-conceived project. This can be accomplished by having the director consistently available to residents to seek guidance on their projects.
5. Identify 'Writing Mentors': it is helpful to identify senior faculty who have published successfully and willing to assist residents in preparing abstracts for submission to scientific meetings and/or in composing manuscripts for submission to peer review journals without any expectations for authorship.

What you can do long term

1. Redesign the training curriculum: to ensure that all residents have the fundamental skills to develop a scholarly project, one of the

first-year rotations should be restructured to focus on the principles and concepts of research methodologies and quality improvement project design. Further, other parts of the research curriculum can be presented as part of the standard didactics curriculum.

2. Protect time for scholarly activities and/or research: the program leadership should critically assess each rotation to determine if available time could be identified and protected for research in non-ACGME required rotations. For residents wanting or needing additional time for their projects, a research elective should be offered.
3. Ensure critical resources are available: for residents to successfully complete their scholarly activity, program directors need to collaborate with their chairs to ensure critical resources are available to support their projects. In particular, assistance should be provided for institutional review board preparation and statistical/data analysis.
4. Establish a reward system to create an environment to stimulate resident scholarly activity. There must be a commitment to the residents that if they have competitively accepted abstracts at a regional or national meeting, financial subsidy would be provided for them to present. Other reward systems include having an annual institutional resident/fellow research competition so that residents can take advantage of this experience.
5. Monitor and track success: the program director and coordinator must closely track the status of scholarly activity for each resident during their required semiannual meetings using a standardized template. This should be in addition to the annual ACGME update.

Outcome data for our program

In the first three academic years after policy implementation, there was >200% increase in resident publications and/or abstracts competitively accepted for presentations. Starting in the academic year 2014–2015 to academic year 2016–2017, we have about 30 resident abstracts and publications in each of the years. The majority

of both presentations and publications have been case reports or case series. These have been followed by research studies, quality improvement projects and book chapters.

A secondary measure has been the increase in resident 'satisfaction with opportunities for scholarly activities' on the ACGME Resident Survey from below to above national mean during this time period.

The first year of the scholarly activity emphasis, faculty enthusiastically embraced their new roles as mentors with 83% participation versus 51% prior to this initiative (ACGME Faculty Survey data). The participation has remained high in subsequent years with at least 70% of the faculty remaining involved in mentoring some component of resident scholarship. Faculty view their involvement as a way to influence the residents and increase their own scholarship.

To meet the expenses of residents traveling to present their accepted abstracts, the department chair has reallocated funds within the budget.

His prioritization of resource allocation toward dissemination of resident scholarly activity was instrumental in the success of the initiative.

The approach we have presented provides residency programs a much needed comprehensive approach to increase resident scholarly activity which can be easily replicated by program directors.

Samrat U Das,^{1,2} Miriam E Bar-on^{1,3}

¹Department of Pediatrics, University of Nevada, Reno School of Medicine, Las Vegas, Nevada, USA

²Pediatrics, Duke University School of Medicine, Durham, NC, USA

³Pediatrics, University of Nevada Las Vegas School of Medicine, Las Vegas, NV, USA

Correspondence to

Dr Samrat U Das, Department of Pediatrics, University of Nevada Reno, 2040 W. Charleston Blvd, Ste 402, Las Vegas 89102, Nevada, USA; samratdas@yahoo.com

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