Repaving the Road to Academic Success: The IMeRGE Approach to Peer Mentoring

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Abstract

In recent years, academic health centers have made a considerable effort to encourage medical students and physicians-in-training to consider academic medicine as a career choice. For physicians, selecting a career in academic medicine may be the first hurdle, but the challenge of successfully maintaining an academic career is perhaps a more formidable task. Mentoring is a much-needed response to this challenge. But the success of traditional mentoring programs at academic institutions is often limited by, among other things, the availability of senior faculty who can serve as mentors. The authors describe the formation and organization of the ***I***nternal ***Me***dicine ***R***esearch ***G***roup at ***E***mory (IMeRGE), an innovative peer mentoring group within the Division of General Medicine at Emory University. This group, born partially out of the mentoring needs of our women and minority faculty, shared the primary goal of fostering a collaborative atmosphere among junior faculty, while simultaneously acquiring experience through advanced faculty development. The authors present our methods of garnering division support for designated time and financial resources, defining member responsibilities, developing a curriculum, providing peer support, and seeking advisors with expertise in the areas on which we wished to focus. In addition to the development of IMeRGE, the authors provide an overview of the pros and cons of traditional mentoring versus peer mentoring; discuss the challenges faced by IMeRGE and strategies for addressing these issues; and present the paradigm of IMeRGE as a template for alternative forms of academic mentorship.

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As the focal point for the education of health professionals, the standard for excellence in patient care, and the interdisciplinary hub for biomedical, basic science, and clinical research, the academic health center (AHC) is the nucleus of physician training in the United States. In recent years, these centers have made a considerable effort to encourage medical students and physicians-in-training to consider academic medicine as a career choice. Moreover, the need to have future physicians who reflect the racial, gender, and ethnic demographics of the United States[1] has mandated AHCs to strive for a more diverse workforce. For physicians-in-training, selecting a career in academic medicine may be the first hurdle, but the challenge of successfully maintaining an academic career is perhaps a more formidable task. Specifically, women and minorities may face an even more daunting academic career path because of a lack of available role models who reflect their personal experiences.[2–4]

Mentoring is a much-needed response to these challenges. But the success of traditional mentoring programs at academic institutions is dependent on myriad factors, the most important of which is the availability of senior faculty who can serve as mentors. Traditional mentoring relationships may produce mixed results, sometimes facilitating a mutually beneficial interaction, and other times not getting past the initial introduction. The purpose of this paper is to provide an overview of the pros and cons of traditional mentoring versus peer mentoring; describe the formation of the ***I***nternal ***Me***dicine ***R***esearch ***G***roup at ***E***mory (IMeRGE), an innovative peer mentoring group within the Division of General Medicine at Emory University; discuss the challenges faced by IMeRGE and strategies for addressing these issues; and present the paradigm of IMeRGE as a template for alternative forms of academic mentorship.

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Traditional Mentoring—An Overview

In order to fully understand our peer mentoring process and its development, a brief discussion of the history of mentoring is warranted. Several disciplines, including medicine, science, law, business, and education, have historically relied on traditional mentoring. Mentoring relationships are reflected in several exemplary prototypical pairs: Athena and Telemachus (in Homer's *The Odyssey*), Socrates and Plato, Sigmund Freud and Carl Jung, Anne Sullivan and Helen Keller, Ruth Benedict and Margaret Mead.[5] The *Merriam-Webster Dictionary* defines a mentor as "a trusted counselor or guide."[6] David Levinson, however, defines the mentoring relationship more in terms of its character and function. He considers five functions vital to the mentoring relationship: teaching, sponsoring, guidance, socialization into a profession, and provision of counsel and moral support that allows the mentor to aid the mentee in the realization of dreams.[7]

Having a traditional mentor has been considered "critical for launching an academic career,"[8] and this opinion is supported in the literature. *Harvard Business Review* reported that mentored executives earn more money, are more likely to follow early career aspirations,

and have higher levels of satisfaction than their peers who were not mentored.[5,9] Other research in business, law, and nursing has shown that mentoring leads to higher levels of career satisfaction, as well as higher rates of promotion.[10]

The research on mentoring in academic medicine describes similarly encouraging results. Authors studying mentoring of junior faculty at medical schools found that, compared to their peers without mentors, mentored faculty perceived that they had better research skills, were awarded more research grants, spent more time on research, published more, and had higher career satisfaction.[11–14] Among other roles, mentors can assist in manuscript and grant proposal preparation, provide feedback, facilitate important networking opportunities, write letters of support for promotion, and nominate protégés for awards and recognition of achievements.

While it is difficult to argue with the successes of traditional mentoring, there are some inherent problems with this model. First, traditional mentoring lends itself to homogeneity: the senior mentor maintains power and influence usually until the mentee develops the skills to be an independent, powerful mentor, and the process repeats itself. This process promotes "sameness" within the institution[15] and may limit innovative approaches. Second, these hierarchical mentoring relationships have an exploitative potential. Senior mentors may use junior faculty to further their own research and other career endeavors, or there may be overwhelming demands, personality clashes, and unrealistic expectations from both sides.[15,16] Third, traditional mentoring dyads may lack consistency—one mentor may be skilled at providing support and instruction, while another mentor is better suited for providing career networking connections and provoking independent thought. Finally, and perhaps most important, there may be a lack of suitable mentors for junior faculty at a particular institution, especially for minorities and women, who may have fewer race and gender-specific role models in academic institutions where the senior faculty is predominantly white and male.[5,14,15,17–19] Because of these limitations, alternative approaches to traditional mentoring are crucial for the career advancement of junior faculty, and peer mentoring models have considerable promise.

Peer Mentoring

In a peer mentoring model a group of individuals who are essentially equal in age, experience, and rank mentor each other. Because of the inherent equality among group members, relationships are more mutual, and ideally, each participant has something of value to contribute and gain. These relationships are likely to offer more personal feedback and friendship than traditional mentoring relationships.[19] Peers may feel more comfortable sharing information with each other and may be less inhibited when discussing topics beyond a professional nature. Peers are also likely to be at similar points in their personal lives and can therefore share insight about personal relationships and the balance between work and family. While the average length of a traditional mentoring relationship is six years, peer relationships often lead to friendships, and may last longer.[16] Because peers are of similar professional rank and stature, peer relationships are often more flexible in everything from determining meeting times to defining expectations for the relationship. Given this absence of power inequality, the reciprocity of the relationship allows for mutual feedback on issues such as career planning and even the mentoring relationship itself.

Like traditional mentoring, peer mentoring is thought to enhance professional support, sense of well-being, and career development.[15,20] However, it is important to consider some limitations of peer mentoring. First, competition amongst peers may occur, as those within the peer group may differ in professional status despite being equal in rank. Varying success in securing funding, publishing research, or developing relationships with department or institutional leaders may foster a competitive environment among junior faculty. This differential can be a source of friction, especially in environments where resources are seemingly scarce or promotions have been limited. Second, members of peer mentor groups may have fewer cumulative professional experiences, and thus a more limited advisory role than would senior mentors. For example, a junior faculty member cannot introduce one of his or her peers to a more senior faculty member, while a more traditional mentor, by virtue of his or her seniority, may be better poised to facilitate that important connection. Finally, while examples of peer mentoring are reported in the literature, evaluations of the effectiveness of these groups have not been conducted.

IMeRGE Program

Background

A shortage of available traditional mentors at our institution combined with a desire to enhance existing academic skills were the primary driving forces behind the formation of our peer mentoring group, the ***I***nternal ***Me***dicine ***R***esearch ***G***roup at ***E***mory (IMeRGE). IMeRGE includes five women and two men who come from diverse cultural backgrounds, and who had been on faculty between one and five years at the time the group was started. In the fall of 2003, the seven of us united based on a desire to assist each other in the development of research and other academic skills that would ensure our career advancements in academic medicine. We also had other interests in common, including teaching, research, and addressing racial/ethnic health disparities. Our group formation worked well because of its small size to foster a constructive work atmosphere, the members' location on the same public hospital campus, prior successful collaborations between group members on other projects, and finally, varying but complementary skills among group members in the areas of research and teaching.

Setting goals and gaining support

The primary goal of IMeRGE was to foster a collaborative atmosphere among junior General Medicine faculty at Emory University, while simultaneously acquiring experience through an advanced faculty development program in three focal areas: research, advanced teaching skills, and professional development. A graphic demonstration of our program is depicted in Figure 1.

To ensure our success, we garnered division support for designated time and financial resources, clearly determined member responsibilities, developed a solid curriculum, and sought out advisors with expertise in the areas on which we

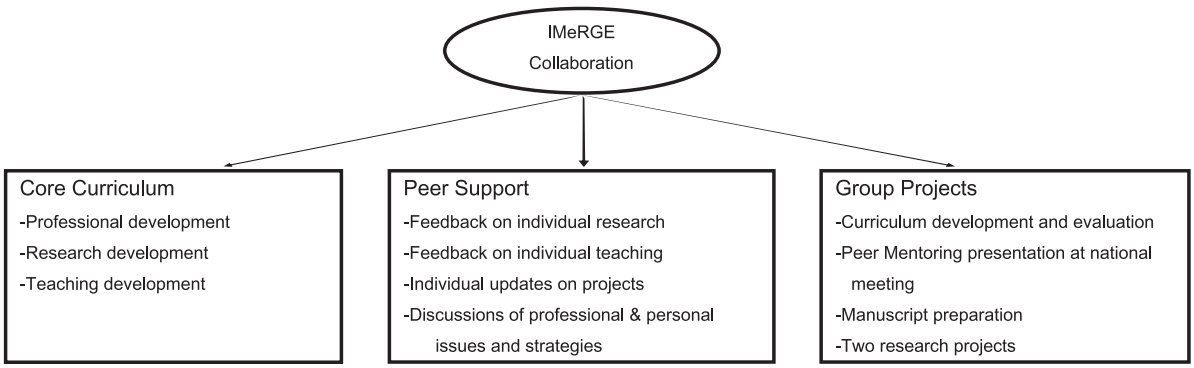

Figure 1 The IMeRGE peer mentoring model.

wished to focus. We approached our division chief with a proposal demonstrating that the success of IMeRGE not only would facilitate junior faculty career development through the attainment of academic skills necessary for promotion, but would also be a positive reflection of the division's commitment to clinical, public health, and academic excellence. After gaining the support of our division chief, we chose senior faculty advisors. In an instance of fortuitous timing, a grant supporting faculty instruction and development was awarded to the division. We convinced our chief to allow our group to be the beneficiaries of this faculty development program, which we helped design. This allowed us to compensate the time our senior faculty advisors spent with IMeRGE. Finally, we coordinated our schedules to ensure that we all would have the same half-day each week dedicated to IMeRGE meetings and activities.

Roles and responsibilities

We designated two IMeRGE members to be responsible for the overall structure of the curriculum, which rotated between didactic sessions and work on research projects, and individual updates and work-in-progress sessions. All members were expected to attend meetings, contribute to group projects, and provide feedback to each other on individual teaching, clinical, and research endeavors. For each meeting, we designated a member to record minutes and distribute this information to all members via e-mail. These minutes specified action items for each group member to complete before the next session.

Didactic curriculum. The program was rooted in a self-directed didactic curriculum (List 1), involving workshops, speakers, and sharing of information on such topics as writing for grants and peer review, research methods, public speaking, time management, negotiation, and navigating the promotion process. These didactic sessions were 90 minutes to two hours in length, and were led by IMeRGE members, senior faculty from within the division, or faculty from other disciplines in Emory University. The range of topics and speakers was the major strength of these sessions, as they transcended the traditional lecture format by allowing for an exchange between the speakers and the audience. Our final curriculum differed substantially from our initial plans, which had placed additional emphasis on teaching and professional development. Our flexible curriculum allowed us to explore specific areas of interest required for our work, and emphasized the individual strengths and areas of expertise of IMeRGE members. This fluid schedule allowed us to add research sessions designed to answer specific questions essential to completing our research project. Although we had limited resources, we capitalized on assets

List 1

Didactic Curriculum Topics from the IMeRGE Peer Mentoring Program, Emory University School of Medicine, Atlanta, Georgia

Refining a research protocol
Getting a National Institutes of Health K award
Literature searching
Developing a research question
Literature searching II
Using endnotes
Time management and organizational skills
Writing for grants and peer review
Faculty development for junior faculty (visiting faculty Dr. David Irby, UCSF)
Research and leadership at a public hospital (meeting with our hospital CEO)
Understanding promotion/enhancing CV
Institute of Medicine process: what's in it for you?
Research funding agencies
Talking to the media
The art of negotiation
Preparing a workshop
Mid-year review
Mentoring relationships
A look inside the promotion process
Building a network
Meeting with the department chair

within our university and found that our collective voice and title attracted speakers to our group.

Peer support. Throughout the mentoring process, the group provided support for each member's ongoing individual successes. We dedicated sessions to works-in-progress to give IMeRGE members the opportunity to focus on individual research or teaching projects, as well as to review and critique members' manuscript drafts and oral presentations. We also provided academic guidance to one another, using our individual experiences to provide insight into negotiations with senior faculty or other common experiences. We kept each other on task by requiring periodic updates on our individual projects outside IMeRGE. Perhaps the most enjoyable aspects of the group were our social interaction during meetings, discussions on personal issues such as balancing work and family life, and even gatherings with our families outside the work setting. In this aspect, IMeRGE was instrumental in developing a collegial atmosphere and bolstering group morale in our division.

IMeRGE group projects

An integral goal in the formation of IMeRGE was to further our research skills through hands-on projects that would lead to tangible end products, such as grant funding, conference abstracts, and publications. Several of our members had research backgrounds, but we determined that we would benefit from the expertise of outside senior faculty project advisors as well. These advisors had expertise in research, grant writing, and publishing, as well as a solid understanding of epidemiology and biostatistics. They also were available, displayed enthusiasm, identified opportunities for networking and collaboration, and provided constructive feedback on manuscripts, proposals, and research initiatives.

Our first project was an already-funded clinical service project that sought to improve breast health knowledge and behaviors among Latina women. Since one of the IMeRGE members was the principal investigator on the project, we were able to add a research component. Though this topic did not necessarily fall under the areas of interest of all of our members, it allowed us to test group dynamics, learn the skills to develop a good survey instrument, manage research assistants, and determine how to use our advisors effectively.

We also strove to develop at least one research project from inception to publication. With the help of a faculty advisor, we determined the criteria for choosing a topic on which we could focus our efforts. This project had to address a topic that was timely and would pique the interest of the majority of group members, be feasible for completion within our limited time schedule and budget, and have the potential for conference presentations and manuscripts. The hands-on experience in choosing a topic, effectively working as a group, and building research skills has been invaluable, and our project is currently underway.

Challenges

While participating in IMeRGE has been a rewarding experience with many positive aspects, we encountered several challenges in forming and maintaining the group. We were able to anticipate some issues, such as competing responsibilities and the absence of funding, but others, such as remaining accountable to the group, selecting a senior advisor, and melding diverse interests, were addressed as they occurred.

Competing responsibilities. As midlevel faculty, IMeRGE members had multiple responsibilities, both professional and personal, that competed with their commitment to the group. Professionally, members compete for grant support and have ongoing research projects, clinical and teaching responsibilities, and administrative duties for the School of Medicine and the hospital. Personally, over the course of three years, five of the seven group members have had babies born into their respective families. Additionally, regular travel for professional and personal reasons often competed with consistent attendance at group meetings. Overall, these unavoidable dynamics have created challenges in maintaining continuity within the peer mentoring process itself.

To address this issue, we developed guidelines at the group's inception to facilitate consistent participation among all the members of IMeRGE. First, meetings for the entire year were set at the same time every week for 90 minutes, when we were not scheduled for clinical or teaching responsibilities. We also decided that any IMeRGE member missing more than four group sessions would have reduced participation in group projects. Finally, we recorded minutes from meetings and used e-mail to allow members on business, vacation, or maternity leave to stay updated on the group's activities.

Accountability. One challenge that emerged unexpectedly within the group was individual accountability to the peer mentoring process as a whole. In a formal mentoring relationship, because the mentor often holds a senior position to the mentee, there is an established power dynamic in place. This dynamic, whether good or bad, places pressure on the mentee to complete agreed-upon projects for fear of disappointing the mentor. In a peer-mentoring situation, this power dynamic is nonexistent by definition, with no fear-based motivations or "punishment" for unmet expectations. To counter this, members of IMeRGE agreed to adhere to work rules. The consequence of not adhering to these rules would be potential expulsion from the group. While not a perfect solution, it allowed for both self-discipline and group scrutiny, and has worked well to maintain consistency and accountability among all the members of IMeRGE. Overall, because group members came together because of their individual motivation and ambition, this issue has not become a major problem.

Selection of senior advisor. Although IMeRGE was established as a peer mentoring group, we recognized the advantage of having a senior advisor and selected our division chief for this role. We felt that his involvement from the inception of the group would afford personal investment in our success. His presence also helped with the dilemma of accountability—while we were responsible to ourselves, we ultimately needed to show our senior advisor, who was also our boss, tangible outcomes of our innovative mentorship approach. On the other hand, our desire for a democratic and peer-driven group could be jeopardized if our division leader steered the selection of the group projects. Thus, IMeRGE was proactive in writing a mission statement with a specific description of the role and

expectations of the senior advisor. This statement clearly detailed our desire for a peer-driven process with complementary input and guidance from more senior advisors.

"Melding interests." A final challenge for a peer mentoring group like IMeRGE is finding peers working in areas of common interest. In the traditional mentoring model, the mentor and mentee come together based on similar areas of research or expertise, or the mentee often chooses the project, while the mentor provides guidance and feedback. In a group of seven peers with equal voices, this level of consensus becomes much harder to achieve. While some of us had similar areas of expertise (namely, women's health and cultural competence), the group members generally expressed diverse research interests. To address the group goals of completing a research study from beginning to end, we needed to find a topic of interest to everyone in the group.

In order to meet this challenge, and in the spirit of working as a group, we made a compromise. Those with no grant support (about half the group) were allowed to choose several potential topics for the upcoming project. After discussing these options with all members, we selected a project that was both feasible and reflected the collective interest of the group. We mutually agreed that the group members without grant support would take leadership roles for this first project, and the remaining members would be actively involved as needed. Future projects, depending on the topic, will be led by other IMeRGE members so that everyone has the opportunity to serve as the group leader. Regardless of who takes the lead on a particular task, authorship on conference abstracts and published manuscripts will include all IMeRGE members, in the order of level of involvement and participation. Establishing these guidelines from the start not only made it easier to address our diverse interests, but also allowed for varying levels of individual involvement in projects based on a member's degree of interest in the topic at hand and his or her competing individual responsibilities.

Conclusion

The importance of a mentoring relationship in academic medicine cannot be underestimated, and has a long, proven record of value to both mentor and mentee. We have presented an innovative peer mentoring model (IMeRGE) as a viable alternative or supplement to the traditional mentoring paradigm. In this approach, faculty at the same academic level, with diverse strengths and interests, come together in a structured format to provide mentorship to each other. This group was an experiment that grew out of an identified need at our institution, and developed into an experience that will be invaluable to our continued academic advancement in the years to come. Future evaluation of IMeRGE's impact on members' individual academic advancement notwithstanding, Levinson's[7] functions of mentoring—teaching, sponsoring, guidance, professional socialization, and moral support—are fully realized within this peer mentoring model.

It is our hope that junior faculty across the country might learn from our experiences and create a peer mentoring group of their own. We acknowledge, however, that each academic institution is unique, and the approach that worked at Emory may not work elsewhere. Specifically, we had a supportive division, available funding to support our advisors' time, and regularly scheduled meeting times. While funding may not be readily available at all institutions, peer support requires no resources other than time and commitment; therefore, morning, lunch, or evening sessions might be viable alternatives for faculty committed to developing a peer mentoring group. In our experience, the impact of the group voice cannot be overstated and is likely to be similarly effective in soliciting support and expertise elsewhere. By identifying and addressing both predicted and unexpected obstacles as we have done here, we hope that future peer mentoring groups can avoid these pitfalls altogether.

To determine the usefulness of peer mentoring programs like IMeRGE, the academic medicine community must

- conduct thorough and rigorous evaluations of peer mentoring programs for process and end outcomes, and compare these results with evaluations of more traditional mentoring models,
- increase research that addresses the quantitative and qualitative impact of peer mentoring on junior faculty academic advancement, and
- increase federal funding and university support for peer mentoring and other creative faculty development programs for junior faculty.

Peer mentoring as a model for faculty development at academic medical institutions is an idea whose time has come. It requires the active participation of innovative thinkers and the dedication and commitment of both junior and senior faculty. Peer mentoring shows promise not only for the individual and collective academic advancement of its participants, but also for fostering stronger collegial and social relationships within the entire academic medicine community.

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