Mentoring, Education, and Training Corner

John Del Valle, Section Editor

Mentorship in Academic Medicine

ANIL K. RUSTGI* and GAIL A. HECHT\$

*Division of Gastroenterology, Departments of Medicine and Genetics, Abramson Cancer Center, University of Pennsylvania, Philadelphia, Pennsylvania; and ‡Section of Digestive Diseases and Nutrition, University of Illinois at Chicago, Chicago, Illinois



Medicine and science have become increasingly complex, involving individual pursuits, collaborative efforts, and institutional and national objectives, all in the context of a dynamic society and government. To that end, mentorship requires even more attention

for trainees, new faculty members, and even established faculty members in an academic medical setting. In fact, Feldman et al¹ recently observed that having a mentor was associated with greater satisfaction with time allocation at work and with higher academic self-efficacy compared with those without a mentor. This commentary covers definitions of mentorship in academic medicine, identifies the constituencies, clarifies the specific issues between mentor and mentee, underscores milestones and targets, proposes how to measure outcomes, and suggests approaches to mentorship that might be applicable nationally. The importance of mentorship in community practice is highly relevant and will be covered in a future article in this section.

How to Define Mentorship?

Mentorship comes from Greek mythology; Mentor was a loyal advisor of Odysseus, and teacher of his son, Telemachus. Throughout history, a mentor has come to be equated with a prudent advisor who serves as a teacher or coach. At times, the mentor-mentee relationship is viewed as vertical or hierarchical and self-limited in time. Rather, we advocate mentorship as a horizontal interaction between mentor and mentee. In fact, the words "trainee" and "junior" faculty serve to reinforce historic divides and misperceptions. We recommend using the terms "mentee" instead of "trainee," "new" faculty instead of "junior" faculty (it is difficult to contemplate how some in their 30s or even early 40s are "junior"), and "established" faculty instead of "senior" faculty. It might seem rather trivial to dwell on semantics, but these terms are so engrained in academic medicine, and in some ways

have served to perpetuate stereotypic behavior. Hence, the mentor-mentee relationship has to be one of mutual trust and that is invigorating for both parties. Moreover, the mentee should play an active role in facilitating and assisting the mentor in developing a true collaborative and productive relationship.² The relationship needs to be, and should be, lifelong and not restricted by geography or divergent interests. The parties should continue to embrace each other well beyond completion of fellowship or when a new faculty member leaves a particular institution.

Who Are the Constituencies?

The mentor is typically an established faculty member, preferably in the same discipline of gastroenterology, hepatology, and pancreatology, but this is not mandatory. Depending on the focus, mentors from other disciplines-other divisions in the department of medicine, pathology, radiology, surgery, basic science departments, epidemiology and health services centers, just to name some-can serve in this role. In either scenario, a co-mentor, who complements the primary mentor, is useful. The nature of the co-mentor may be "content" related or provide yet another perspective on professional and career development issues. It is not wise for the mentor to be "off site" because of the limitations imposed on direct face-to-face meetings; however, it is conceivable that the co-mentor could be at another institution, which would require a structured format to ensure regular meetings and communication (eg, via e-mail, Skype, phone, or face to face).

We define the mentee for purposes of this commentary as fellows and new faculty, recognizing that a number of approaches are different for undergraduate students, medical students, graduate students, combined degree students, and interns/residents, although, of course, they are critical and constitute the "pipeline" of talent and future leadership. Approximately 550–600 new fellows enter GI fellowship training each year, resulting in a total of 1650–1800 GI fellows at any given time. "New" faculty, defined arbitrarily as those within 5 years of fellowship, add another "several" hundred individuals to the

© 2011 by the AGA Institute 0016-5085/\$36.00 doi:10.1053/j.gastro.2011.07.024

Mentoring, Education, and Training Corner, continued

pool of mentees in need of qualified and interested mentors. New faculty encompass divergent fields such as basic science research, translational research, clinical investigation, epidemiology/health services research, physicians engaged in clinical practice, teachers, and administrators. Certain features are common to all fellows and new faculty at their respective stages; however, others are more unique. Thus, the need for a broad array of established faculty to serve as mentors to this large pool of trainees and new faculty in gastroenterology is apparent.

Special aspects of the mentor-mentee relationship include, but are not restricted to, gender,^{3,4} underrepresented minority (URM) status,^{5,6} disadvantaged background (whether financial, family, or physical infirmity), work-family balance, financial debt, and personal health. Both the mentee and mentor need to be willing to address each of these issues in an open, trusting, and transparent fashion. In addition, institutional leadership should recognize the essential nature of the mentoring process and provide support and resources to faculty and trainees to ensure that productive and durable mentormentee relationships are promoted.⁷

Relevant Issues to the Mentor-Mentee Relationship

In view of the tremendous importance of the mentor-mentee relationship, it is key that both parties consider carefully several important issues before committing to such a long-term endeavor. First, it is vital that there be good "chemistry" between the 2 individuals. It is essential that both parties feel comfortable in discussing a number of issues, professional and personal, lighthearted and sensitive. It is easy to identify and highlight one's strengths, but it is equally, if not more, important to be willing to discuss weaknesses and how they can be overcome. Such frank conversation requires tremendous trust and security. Although issues of gender and ethnic background may be topics of discussion, it is not imperative that the backgrounds of the mentor and mentee be the same. For example, from an URM perspective, there simply are not enough mentors available.⁵ Many of the current established academic faculty have enjoyed very successful and long-term relationships with mentors of different gender and ethnic backgrounds. Rather, availability and interest on the part of both parties are crucial. Typically, these characteristics pertain to the mentor owing to institutional, national, and travel demands. A particular potential mentor may be identified by the mentee based on broad national/international reputation. Such a potential mentor may well possess outstanding mentoring skills, but because of excessive time and travel demands, he/she simply may not be available to communicate regularly to the mentee and such a relationship will likely atrophy in a short time. Although

established academic faculty have many demands on their time, it is not unheard of for a mentee to declare that they have conflicts that require cancellation or postponement of the mentor meeting. Although overlapping demands on time certainly arise, requests for delaying or canceling mentor meetings can convey lack of interest. Equally important as scheduled meetings is the understanding that the mentee is welcomed to drop by if emergent or urgent matters arise.

Critical issues of relevance in the mentor-mentee relationship^{7,8} include professional and career goals, research interests, development as physician, teacher and/or investigator, and work-home balance. Most likely, a mentee seeks to identify mentors who have achieved much of what they themselves envision for their careers. For example, a new faculty member interested in pursuing endoscopic research and becoming a clinical professor of medicine would benefit more from the advice of a mentor who had achieved that goal than from a research professor of medicine whose focus was on a basic science topic. Such selections, however, may not be available at every institution; therefore, it is important to be open minded and formulate which mentor characteristics are most important to the mentee and broaden the search field across disciplines to enhance the opportunity of finding someone who best fits the mentee's needs. In this case, consideration of identifying an offsite co-mentor to complement the qualities of the institutional mentor would be beneficial. It certainly is not critical that the areas of research or scholarly focus are identical, but typically it is helpful if they are related at some level so that discussions regarding the status of the field and obstacles faced can be discussed and advice given. Overall, however, it is essential that the relationship "feel" right; the hope and expectation is that this connection will endure and become not only beneficial professionally, but respected and enjoyed on a personal level for many years.

Despite great strides being made toward gender equality in the workplace, there remain situations where the pressures and demands of childcare and their influences on career development must be considered. Often, but certainly not always, such issues fall on the shoulders of women. This responsibility may be real or perceived, but the result is the same. We live in an era where in the majority (58%) of families with children under 18 years of age both parents work outside of the home (US Department of Labor, Bureau of Labor Statistics, 2010). Having no home-based individual to handle domestic responsibilities and child rearing puts extra strain on career progression for both women and men. In some circumstances, more of this responsibility falls to the woman or she may prefer to take the lead in this role. Either way, the consequence is that one's attention is split between academic pur-

Mentoring, Education, and Training Corner, continued

suits and motherhood. Being the mother of young children is a special and finite time. The competing demands for time and attention can create internal conflict and guilt that need to be reconciled by the mentee and, at a minimum, understood by the mentor. Many institutions have adjusted the tenure clock (e.g., to a 10-year tenure clock) to better allow for success both at work and at home. It is important for a mentor to understand the importance of such balance and to be accepting and supportive of these options should the mentee opt for one of them. It may be easy as an established faculty mentor who survived those trying times to forget how difficult the work-life balance can be for a trainee or new faculty member, but in working with and advising these young, bright, and driven individuals, it is critical to recall those times and advise accordingly. Parenthood should of course never be an excuse for failing to progress in one's career; rather, the topic to be grappled with is how to best economize one's time and succeed at both. In maintaining and nurturing the mentee-mentor relationship, it is imperative to be comfortable in discussing this sensitive topic despite the gender of either party.

Another key issue relates to URMs in the field of gastroenterology. Recent surveys and commentaries indicate improvement of recruitment and retention of URM to medicine, but key barriers still exist in terms of promotion and obtaining leadership positions.^{5,6} Although issues of academic medicine are common to all types of mentees, specific issues to URM should be addressed and institutional efforts should be linked.

Establishment of Milestones and Measurement of Outcomes

It is important to establish milestones, both short term and long term, and ensure that such milestones are achieved. If the milestones are not achieved, then it is equally important to understand the underlying responsible reasons and adopt alternative strategies. This might involve modification of milestones and/or pursuing different approaches.

How does one measure success? This cannot be so rigid that creativity or innovation are suppressed, but at the same time, some aspects seem to be immutable. In relationship to research, presentations at local institutions, regional societies, and national meetings are important. Publication(s) should emerge from such presentation(s) in appropriate journals, requiring an outline, manuscript preparation, and submission for review, all with timelines. Depending on the type of research, application(s) for grant funding to national societies, private foundations and federal sources (NIH and non-NIH) is appropriate toward the end of fellowship and early during a new faculty position. The

rationale for grant funding relates to protected time for research, but perhaps even more so as a vehicle to build a research team or infrastructure as well as open new avenues of collaboration. Professional advancement at each stage, whether at the local institutional level and/or at the national level, is key and involves "networking" directly and through the mentor's network. This involves working on committees, task forces, and implementing strategies for the particular organization. Striving to acquire and nurture skills in management and leadership are essential.

Proposed Pathway

We suggest the following "concrete" measures to facilitate mentorship:

- 1. Monthly meetings with a mentor/co-mentor if at same institution (additionally, regular contact with the mentor through informal conversation and e-mail). If not at the same institution, regular contact by telephone and e-mail and direct meetings at regional/national conferences.
- 2. Instruction in manuscript writing, grant writing,
 - PowerPoint presentation, public speaking involving mentor, institutional resources, national resources (eg, NIH/NIDDK for K grant recipients, Academic Skills Workshops).
- 3. Instruction in regulatory affairs (IRB/HIPPA, IACUC), bioethics, responsible conduct of research, and professionalism. Such instruction is typically required by training grant trainees, but may need to be sought out if not readily accessible.
- Building pathways to promote efficiency at work as a means to augment balance with personal and family needs.
- 5. Awareness of special issues related to women, URMs, and disadvantaged individuals.
- 6. Convening an advisory committee of 3-4 experts in mentee's field(s) of interest once or twice a year as a platform for further advice and input. The chair of the advisory committee need not be the mentor. Ideally, the chair should prepare a report for the benefit of the mentor and mentee.
- 7. Design and implementation of a form between mentor and mentee (this might be already available at the local institutional level) to establish goals and methods to achieve objectives, which would be co-signed at the beginning of the academic year (or calendar year) and reviewed every 6–12 months. Such committees might be very helpful as they are for career development grants.

We also have some suggestions to the mentee: Be mindful of the mentor's time (eg, by being prepared), but

Mentoring, Education, and Training Corner, continued

never be reticent in approaching your mentor; if needed, you might need to change mentors; and, remember you will be soon a mentor yourself!

In summary, mentorship is a vibrant and fulfilling experience that affords limitless opportunities, not only for the mentee but also for the mentor. We hope that our commentary might serve as a "guide" or "primer" as well as a forum to stimulate discussion and customization about the issues outlined and beyond.

References

- Feldman MD, Arean PA, Marshall SJ, et al. Does mentoring matter: results from a survey of faculty mentees at a large health sciences university. Med Educ Online 2010;15:5063.
- 2. Zerzan JT, Hess R, Schur E, et al. Making the most of mentors: a guide for mentees. Acad Med 2009;84:140–144.
- Stamm M, Buddeberg-Fischer B. The impact of mentoring during postgraduate training on doctors' career success. Med Educ 2011;45:488–496.
- Levine RB, Lin F, Kern DE, et al. Stories from early-career women physicians who have left academic medicine: a qualitative study at a single institution. Acad Med. 2011;86:752–758.

- Merchant JL, Omary MB. Underrepresentation of underrepresented minorities in academic medicine: the need to enhance the pipeline and the pipe. Gastroenterology 2010;138:19–26.
- Kreuter M, Griffith D, Thompson V, et al. Lessons learned from a decade of focused recruitment and training to develop minority public health professionals. Am J Public Health 2011 May 6 [Epub ahead of print].
- Sambunjak D, Straus SE, Marusic A. A systematic review of qualitative research on the meaning and characteristics of mentoring in academic medicine. J Gen Intern Med 2009;25:72–78.
- Cho CS, Ramanan RA, Feldman MD. Defining the ideal qualities of mentorship: a qualitative analysis of the characteristics of outstanding mentors. Am J Med 2011;124:453–458.

Reprint requests

Address requests for reprints to: Anil K. Rustgi, MD, Division of Gastroenterology, Departments of Medicine and Genetics, Abramson Cancer Center, University of Pennsylvania, 600 CRB, 415 Curie Blvd., Philadelphia, Pennsylvania 19104. e-mail: anil2@mail.med.uenn.edu.

Conflicts of interest

The authors disclose no conflicts.