

Mentoring in Academic Radiology

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Academic radiologists fulfill a tripartite mission—patient care, research, and teaching. In carrying out these activities, academic radiologists also have a wonderful opportunity and, we think, a responsibility, to mentor trainees and junior faculty. These newer members of our profession are a vital component of the department's workforce. Furthermore, most already understand the power of mentoring as a contribution to professional success and satisfaction. For those who choose to mentor the next generation, the rewards are long lasting and satisfying. Mentorship can keep more senior academicians up to date and help avoid burnout. Below, we briefly discuss several key issues that are essential to the mentor, as well as several characteristics of the successful mentee.

How to Find the Time to Mentor

Faculty that are well-established and actively engaged in their careers are those most often approached to mentor. They are also the individuals who are most strapped for time. Even before the onset of the pandemic, the unrelenting pressure to focus on clinical productivity coupled with the increasing demands of consultations, multidisciplinary conferences, administration, and teaching were impacting the radiology workforce with high rates of burnout (1,2). In patient care, for example, the annual output per radiologist in relative value units has increased by 70% over the last 25 years (3). Now with COVID-19

still very much a factor in our daily lives, finding time and bandwidth to tend to the responsibilities of mentoring sometimes seems like a pipe dream.

At an institutional level, mentoring requires investment of resources. The provision of protected time is essential for creating and sustaining an effective mentoring program (4). In turn, organizations with a vibrant culture of mentoring demonstrate greater clinical and academic productivity and enjoy higher rates of faculty retention and promotion (5,6). Recognizing the important role that mentoring has on institutional viability, some academic departments have incorporated a successful track record of mentorship as a criterion for promotion and offer faculty time, funding, or continuing medical education credit to encourage mentoring activity.

At the individual level, mentoring is an opportunity to train future colleagues and leaders in the immediate workplace and within the profession at large. It represents the most concrete and reliable method for creating a sense of workplace loyalty and fostering career development, both essential for recruiting and retaining talent. Thus, for an academic department to continue to thrive and grow, mentoring is critical. Looked at this way, the question becomes one of "How can I afford to not find the time?"

How to Be a Good Mentor

Mentor-mentee relationships are highly varied and individualized. Most workplace relationships (eg, employer-employee, teacher-student, principal investigator-research team scientist) are familiar and accompanied by fairly universal goals and role expectations. In contrast, mentees may seek guidance on any number of different career issues including research, clinical practice, a job search, navigating work politics, or work-life balance. Overall, the successful mentoring relationship is geared toward career development over the long-term with intermediate short-term more task-oriented goals.

Clarity of communication at the outset is essential so that both parties understand the shared purpose and expectations for the relationship. Some have suggested that the agreement be formalized in written form (4,5). A mentor's skillsets may be in line with only a subset of needs articulated by the mentee. If so, the mentor should encourage and suggest involvement of other advisors or mentors, including those outside the institution and outside the field of radiology. A young radiologist's career will usually require advice on a range of topics. In that respect, no single mentor may be able to address all aspects of an individual's career.

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Conflicts of interest are listed at the end of this article.

See also the article by Kikano and Ramaiya in this issue.

Radiology 2022; 303:E20–E22 • https://doi.org/10.1148/radiol.213108 • Content code: **ED** • © RSNA, 2022

Effective mentors are honest, open-minded, and collaborative. While most mentees appreciate some structure and bite-size tasks, the relationship should be such that they feel comfortable asking for help or expressing a need to focus on other demands should they intervene. Conversely, the mentor should be proactive in managing the mentee's expectations. If the mentoring role must be put on hold for other pressing professional or personal priorities, the mentor should say so and offer a timeline on when he or she might be back on track. Check-ins should be regular and scheduled, and the agenda centered on concrete interim goals; however, the discussion should be informal enough so that the mentee can raise concerns or questions. As for feedback, good mentors know how to give positive ones regularly and offer negative ones constructively.

Advice on Becoming a Successful Mentee

Most mentees inherently understand the potential impact of a mentor on their career. The positive influence of a successful mentoring relationship seems more ingrained in the newest generation of radiologists than for senior academicians who completed their training 20 or more years ago. In this issue of *Radiology*, Kikano and Ramaiya (7) offer a trainees' perspective on how to find a successful mentoring relationship and its professional benefits.

The mentee must realize that the burden of mentorship is not only on the mentor. Mentees can make several mistakes that diminish the potential of a mentoring relationship. First and foremost: The mentee has chosen a mentor—but is the converse also true? Is the mentor so busy as to have insufficient time for the mentee? Mentees must be careful in assessing the two-way nature of the relationship. That relationship is typically one on one, an in-person relationship. Clearly the pandemic has decreased the opportunities for such relationships.

In the internet age, potential mentees can identify and collaborate with senior academicians from all over the world, seeking a mentored relationship. Remote, de novo working relationships may develop in this fashion, for example, with the mutual goal of writing a research paper. However, these do not necessarily constitute mentorship. Project-related professional relationships are based on mutual goals, but the ideal mentorship relationship is more personal, more well-rounded, and long-lasting. The best mentored relationships should be directed toward career development, rather than isolated research or educational accomplishments.

Finally, another caution for mentees is "averaging mentors." In this setting, the mentee simultaneously seeks the opinions of several staff members regarding the same topic. Getting focused advice from several senior staff members can be helpful. However, it is not usually possible to have multiple in-depth mentor-mentee relationships simultaneously, all seeking the same goal. The multiple opinions can be confusing to all involved, including the primary mentor, and the mentored relationship is likely to fail. Instead, the mentee and mentor are usually strongly committed to each other's ideas. Any misunderstandings of the mentoring goals should be discussed and addressed when and if they arise.

Features of the "Right Match"

A good match between the mentor and mentee is essential to achieve each goal; but what constitutes a good match? The most successful trainees will seek out and work with various mentors during different phases of their training and career. The mentor should have real concern and empathy for the mentee as an individual. The mentee should feel that the mentor has a focused interest and is highly invested in achieving their mutual goals. If these elements are not present, the mentor-mentee relationship is likely to fail.

Both the mentor and mentee should feel secure that any closely held reflections, opinions, or aspirations that are shared will be kept confidential. A mentor should be able to reasonably expect that any advice given will be carefully considered but be sufficiently confident to not insist that it always be followed. Mentees should be willing to explore and sometimes fail, but they also must recognize that what they lack in experience must be made up by effort. Defining long-term goals for mutual benefit and then offering the guidance and resources while mentees work out on their own how best to get there is the mentor's ideal.

For many women and minorities who are under-represented in radiology, mentoring takes on a larger mission of advocacy. We are acutely aware that trainees and junior faculty from these groups work in an environment where most of the senior faculty, while well-intentioned and professionally generous, may lack insight into their specific life experiences because of differences in demographics (8,9). Trainees and junior faculty from these under-represented groups may have to search more broadly to other institutions or specialty areas to find a mentor with whom they feel comfortable discussing issues that are particularly sensitive (eg, workplace discrimination or harassment) or personal (eg, negotiating terms for family leave, work visa applications). In turn, mentors in these under-represented groups should be cognizant that they will likely be asked to work with a larger number of mentees, some remotely, outside of their own immediate faculty.

It is worth noting that a demographic match between mentor and mentee is not required for most successful mentoring relationships. Rather, a deep concern and interest in helping a mentee achieve career goals regardless of sex and ethnicity is necessary.

What Is a Successful Mentoring Program?

To our knowledge, no common benchmarks or metrics for what constitutes a successful mentor or mentoring program have been established. Given this, promoting investments in mentoring at an institutional level is challenging. Although professional productivity and workforce retention has been shown to be associated with an active culture of mentoring, drawing a clear causative line from the latter to the former is still not possible.

A sustainable mentoring program is customized and flexible enough to meet the diversity of needs so that the experience is rewarding for both mentors and mentees. For both parties, participation should be encouraged and incentivized, but voluntary. Approaches to a more structured process of mentor preparation have been described, including distributing reading and offering

seminars centered around communication and coaching (4). A mechanism, either formal or informal, to monitor for and correct unsuccessful or strained mentor-mentee relationships should be available.

For any individual mentoring relationship, completion of a study (eg, research presentation or publication) or attainment of a career goal (eg, graduation, faculty promotion) are examples of success. While these short-term wins are always satisfying, most experienced mentors come to appreciate that the investments of time and resources devoted to mentoring cannot be valued simply only on such concrete metrics. Unfortunately, some mentoring relationships will prove unproductive or professionally unrewarding despite significant investments in time and mutual effort.

In conclusion, mentoring requires time, effort, and desire to help others. Mentees often bring innovative approaches, fresh enthusiasm, and a single-minded purpose to the endeavors that many experienced and over-burdened senior staff would consider mundane or laborious. And in this vicarious experience of discovery and accomplishment, the mentor can achieve meaningful career satisfaction and avoid burnout. As in other fields, successful academic radiologists readily point to mentors who helped them along the way. And, in this context, mentoring is a personal expression of thanks for the past and hope for the future.

Disclosures of conflicts of interest: S.I.L. Royalties from Wolters Kluwer and Springer; honoraria for journal editing from RSNA; senior consultant to the editor of *Radiology*; editor of *Radiology* In Training, **D.A.B.** Editor of *Radiology*.

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