

Mentoring for Success in Academic Radiology

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Mentoring is an increasingly popular and important part of professional development throughout a wide range of fields, including radiology.

Indeed, serving as a mentor is an opportunity to contribute to another person's professional development and to help them perform to the best of their ability. Being a mentee, meanwhile, presents one with an invaluable opportunity to be challenged and guided in setting and achieving professional goals. At its most basic level, mentorship is a partnership; a trusting relationship focused on sharing, and receiving, professional knowledge and experience.

Mentorship, however, is not intended solely for the benefit of the mentee. The ideal mentoring relationship has been described as a shared adventure¹ that can take one or more of several different forms. This article seeks to review some of these arrangements and describe the personal and behavioral characteristics necessary for the establishment of successful professional development relationships.

The term 'mentor' itself derives from the name of an elderly man in Homer's *Odyssey*. Mentor was charged with the important responsibility

of caring for and guiding Odysseus' infant son after Odysseus went off to fight in the Trojan War.²

Over time, mentoring has come to be recognized as an important component of a wide range of personal and professional relationships. Being a mentor offers opportunities to contribute to another's development. Being a mentee offers opportunities to be guided towards goals. For mentor and mentee, mentoring is a two-way partnership that can challenge both to learn and grow while forming a trusted relationship of shared knowledge and experience.

Types of Mentoring Programs

In radiology, the benefits of mentoring are myriad; numerous studies have demonstrated significant benefits of a robust mentoring program tailored to the development of junior faculty.³⁻⁸ Indeed, many radiology departments have developed their own programs.

Some, for example, take the traditional route of establishing "one-on-one" relationships, either through mentees requesting the guidance of a specific faculty mentor, or of departments themselves assigning each new faculty member a career mentor. This model may also sometimes occur in concert with annual group meetings between mentors and mentees, their section/division

chiefs, and their department chair to ensure the mentee's academic career is moving toward promotion.

Networking Mentoring

Other mentoring programs, including that of our institution, take the form of mentoring "networks" for junior faculty (Figure).⁸ This group model recognizes that there is no such thing as "one size fits all" for good mentoring; that different mentors possess different strengths that can be shared. This model also aims beyond promotion alone as a measure of success to look at overall faculty development, well-being, and integration into the academic community.

In some of these network models, career mentors and mentees are assigned to each other; their relationship is expected to be confidential, and it is understood that their private discussions will be shared with others only under the agreement of both parties. Establishing this confidentiality at the beginning of a mentorship is paramount.

Several other faculty mentor relationships are created and formalized to ensure that faculty are afforded the opportunity for multiple types of mentoring. The mentee remains at the center of this network; they are encouraged to identify and form additional mentor connections that

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Figure. The mentoring model used at our institution under which a network of mentors is assigned to advise and support junior faculty for academic success and career satisfaction.



might help to serve their needs.

Such arrangements further recognize the strength of a community of radiologists in a department, or even across the country, to help build the careers of junior faculty. Indeed, it does “take a village” to nurture the next generation of radiologists.

Types of Mentors

Career Mentor

In this type of mentorship, the mentee is assigned a “career mentor” to foster their professional development. Career mentors are tasked with helping to smooth their mentee’s path through academics, to ensure that they become part of the

institutional and broader medical community, and to help the mentee learn how to combine career and life goals into their long-term strategy. In this way the career mentor is often the most versatile mentor, serving as coach, guide, motivator, counselor, and confidante.

Obviously, “chemistry” is an important part of mentorship; mentor-mentee matches should be proposed only after consulting with the mentee regarding their needs. Mentors also should be recruited from outside the mentee’s intended subspecialty; this is to help prevent the perception of a “power dynamic” in the relationship. It is worth noting that some programs also match for

gender and/or race, although some studies suggest that this may not be essential for mentoring success.^{9,10}

It is important to ensure mentoring equity. As we work to diversify the junior faculty workforce, the matching expectation can create an unequal burden of mentoring on senior women and other faculty from under-represented groups. Mentoring networks help to reduce this load and also can allow for junior faculty to be mentored by those with different experiences and backgrounds. In our case, we take care to limit the number of mentees assigned to career mentors in order to maintain reasonable time and workload expectations.

Research and Peer Mentors

Two other types of mentors, research and peer, can be important to junior faculty growth. The former collaborate with and guide mentees through idea generation and research supervision and facilitation. Ideally, they push the faculty towards asking and answering original questions that further the radiological knowledge base. They guide, teach, and direct ideas and energies towards academic productivity. They help the mentee learn how to propose, prepare, complete, and publish research projects.

Peer mentors, meanwhile, are faculty at similar stages in their academic career who may be in a different radiologic subspecialty, at another university, or even outside of radiology altogether. Peer mentoring can be informal or formal one-on-one relationships between junior faculty members, or group relationships in which one senior faculty is assigned to a group of junior faculty.¹¹ Peer mentors are intended to serve more along the lines of coaches, friends, and companions, providing support, advice, and potentially inspiration along the academic journey.

Our institution encourages such cross-specialty and -department relationships by sponsoring workshops and junior faculty breakfasts, albeit significantly hindered during the pandemic. Every mentoring relationship is different but they all serve to support mentee needs. They all also require the mentor and mentee to enter into the relationship in good faith, with a commitment to making the time to connect. Respect is a key ingredient of each relationship.

Co-Mentors

Subspecialty section/division chiefs can serve as “co-career mentors” to help to facilitate the mentoring program, as well as to select and support all types of mentors both within and outside the department.

The co-career mentor is also expected to facilitate connections with academic societies to help junior faculty reach national prominence; therefore, serving as a sponsor, manager, guide, and a counselor, along with the other mentors.

Characteristics of Good Mentors

A good mentor brings their experience and knowledge of their specific field and/or the overall workplace environment to their relationship with their mentee. For academic radiologists, this is ideally an associate or full professor with career success, who is highly regarded, and who understands the path ahead for the mentee.

Good mentors are generous with their time and advice, and they provide encouragement, support, and motivation. They provide honest and fair feedback; they are altruistic, understanding, patient, responsive, trustworthy, nonjudgmental, and reliable. A good mentor is also an active listener and a motivator.⁹ The best mentors commit to being accessible and come to the relationship sincerely wanting to offer help in the mentee’s best interest.¹²

One good practice is to provide mentors with a checklist of questions to ask their mentees. These questions should not just cover academic achievement expectations, but also solicit information on how the mentee feels about their professional work and their overall well-being. This can create a framework for meetings, starting conversations, and allowing exploration of concerns beyond the mentee’s career goals.⁶

Characteristics of Good Mentees

Conversely, good mentees also demonstrate certain desirable characteristics. First, they demonstrate the willingness to fully participate in self-evaluation and developing

an awareness of their own strengths and weaknesses. For example, our mentoring program requires all junior faculty (assistant professors) to complete an individual development program (IDP), which is a modified version of one we created for PhD research scientists.¹³

An IDP articulates faculty long- and short-term goals. It ensures that prior to meeting with their mentors, faculty have considered their trajectory, defined their perceived strengths and weaknesses, and begun to consider additional tools they might need to move toward their academic goals. An IDP doesn’t have to be perfect from the outset, but it can set the stage for conversations about the mentee’s career direction. We ask junior faculty to revisit their IDP annually to assess their progress and perhaps consider changing their goals and developing new strengths.

A good mentee should also be willing to initiate mentor conversations and connections. Sometimes described as “managing up,” proactively working to guide these relationships by asking questions and requesting and listening to feedback are additional marks of good mentees.¹⁴ They will also follow up with mentor recommendations and be thoughtful and appreciative of the mentor’s time.

Features of Successful Mentorships

Beyond the characteristics that make for “good” mentors and mentees, there are features of the relationship itself that can portend mentoring success. Indeed, several key themes emerge from our conversations with mentees who enjoy strong mentorships. These include:

- **Alignment of values and goals with the mentee’s best interests in mind.** This is an important component to ensure there is no sense of competition or mentor power over the mentee’s career direction.

- **Shared understanding of goals.** From the outset the goals of mentoring should be set and agreed upon by the mentor and mentee in writing. While somewhat symbolic, such a “contract” outlines the confidential relationship, formalizes each party’s commitment to the task, and clearly defines expectations. This offers a framework around which both mentor and mentee can establish a mutually beneficial partnership. It also helps to establish a timeline for formal “sit down” discussions and to connect on an as-needed basis. It is important to review together an updated CV several times a year.
- **Respectful separation.** The ability of either party to decline a pairing because of a mismatch as a “no-fault separation” is critical. This should be managed by a department mentoring director. While separations are uncommon in our experience, this option minimizes the creation of unsuccessful or detrimental partnerships. We strive to limit any consequences of mentoring changes through confidential discussions with both parties.

Mentoring Benefits Everyone

Good mentorships do not just happen. Experienced mentors will have learned from prior relationships,

but inexperienced faculty will benefit from guidance around how to do this important job—mentoring the mentees, if you will. Indeed, offering workshops on mentoring is an important aspect of a successful program.

Personal connection is a key feature of the most successful mentoring relationships and is sometime best forged outside the reading room and office. Some of the strongest relationships can develop through out-of-hours shared meals and activities. But ultimately, it is commitment and the generous sharing of ideas and time that determine a mentorship’s success. When both mentor and mentee see—and realize—the benefits, a department’s investment in mentorship benefits everyone.

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