

Mentoring the Mentors: Aligning Mentor and Mentee Expectations¹

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The Radiology Alliance for Health Services Research sponsored a symposium at the 2005 Annual Meeting of the Association of University Radiologists, which focused on the issue of aligning mentor and mentee expectations to foster successful mentoring relationships. This article presents a summary of the informal discussion of the panelists' individual experiences, common themes, and insights gained from the panel participants.

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The trajectory of a successful academic career encompasses the long-term maturation, growth, and development of an individual at the trainee level into an innovative and productive investigator who is able to accept expanding leadership roles in his or her chosen field. In radiology and many other fields, strong mentorship relationships significantly contribute to academic success. Mentorship can aid in understanding and advancing organizational culture, provide access to formal and informal networks of communication, and offer professional stimulation to both junior and senior faculty members.

At the crux of mentoring is an interpersonal relationship between two people, which, like many other elective interpersonal relationships, will not last unless both parties derive some benefit. This characteristic makes mentoring relationships difficult to produce artificially. Successful mentoring relationships cannot be manufactured or

legislated, but rather develop fully only when both parties work at creating this relationship.

CREATING A MENTORSHIP RELATIONSHIP

For both mentors and mentees, being proactive and searching for particular characteristics in the other person at the beginning of a mentorship relationship is important.

The Mentee Perspective

Janie Lee, MD, MS, is a Staff Radiologist at Massachusetts General Hospital and an Instructor of Radiology at Harvard Medical School (Boston, MA). Dr Lee's research, teaching, and clinical work are focused on breast imaging and improving the early diagnosis of breast cancer, ranging from policy-level evaluations of emerging modalities for breast cancer screening to supporting health care delivery at the point of care. Her current research, supported by a GE-Association of University Radiologists (AUR) Radiology Research Academic Fellowship, evaluates on the cost-effectiveness of mammography and breast magnetic resonance imaging in screening BRCA gene mutation carriers.

When searching for a mentor, I suggest looking for two critical characteristics. First, identify someone you

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respect as both a person and a professional. He or she should be someone you trust to have your best interests at heart and someone who will be frank in discussions with you. There is some element of chemistry involved here. Both people in a mentoring relationship have to be comfortable with each other. This usually develops over time, but is crucial to a successful ongoing relationship.

Second, look for generosity. He or she should be someone who is willing to invest their time in you and meet with you regularly or as needed. Before I gave my first abstract presentation at a national meeting, my mentor met with me the night before to listen to me go over it again for the umpteenth time. It was not really necessary; I was prepared. But it was very kind of him, and it made me less nervous about the next day. Access to a mentor is very important. When I took a year off of medical school to work on a research project with my mentor, his office was down the hall from mine. I was able to get a quick response to questions either in person or through email. As I progressed through residency and fellowship training, we continued to keep in touch. These days, we keep in contact on an as-needed basis, usually by email, and occasionally by phone.

A mentor also should be willing to provide you with opportunities that will help your professional development. While working with my mentor as a medical student, I learned to critically assess the medical literature by helping him review journal manuscripts. Two years ago, when the Radiology Alliance for Health Services Research (RAHSR) Critical Thinking Skills Panel at the AUR meeting had a late speaker cancellation, my mentor suggested to the panel moderator that I could fill the speaker's slot. It was a great experience for me to attend the AUR meeting, give the talk, and meet other members of the panel.

One last item to keep in mind when choosing a mentor is multiplicity. No one person can be the ideal mentor. It helps to have mentors at different career stages, mentors who are clinically focused and research oriented, and perhaps mentors of both genders. Each mentor offers his or her individual perspective and can provide guidance about various aspects of your personal and professional development.

For reference, an overview of various approaches to foster the institutionalization of mentoring programs is described by Mark et al (1). Several articles have also specifically addressed the issue of mentoring in radiology (2–4).

The Mentee Perspective

Yoshimi Anzai, MD, MPH, is an Associate Professor of Radiology at the University of Washington (Seattle, WA). Dr Anzai specializes in head and neck neuroradiology and also serves as Director of the Neuroradiology Fellowship Program. Her research interests include technology development, technology assessment, and the impact of imaging studies on health care delivery. Her current research, supported by a Career Development Award from the Agency for Healthcare Research and Quality, focuses on a randomized controlled trial of sinus computed tomography for acute sinusitis.

Finding the right mentor is incredibly important. A mentor is someone who helps you advance your professional career, genuinely assisting in your academic and personal success. The mentor and mentee relationship applies to many different stages of academic development. Senior investigators can still have mentors, someone who might be a lifetime advisor for them. In addition, you may have more than one mentor for different aspects of your academic development. It works better if a mentor is at a higher academic level than you and does not compete with you.

In looking for a mentor, one should identify someone who:

1. Serves as a role model for you. If you want to be a recognized researcher with independent federal funding, look for funded researchers with scientific integrity. If you want to be an educator and have a passion for teaching, look for someone who gives excellent lectures. Whatever your goal, look for someone who is a role model for you.
2. Has hands-on experience as a mentor. Have previous mentees succeeded in their academic careers? This will tell you if the person knows how to guide trainees and junior faculty.
3. Is willing to invest their time in you. This often is difficult to find because good qualified mentors are often overcommitted. You need to do your best not to consume a large amount of your mentor's time by being proactive and independent and using your own judgment as much as possible. At the same time, you need to keep your mentor updated.
4. Is someone with whom you are personally comfortable. This is not strictly necessary; however, it makes your mentor–mentee relationship easier. One of my former mentors intimidated me tremendously. I always felt that I knew nothing compared to him.

Even now, 5 years later, when I see him, my blood pressure and heart rate increase. However, he has been a wonderful mentor for me. His suggestions are always concise and accurate.

5. Most importantly, look for someone who honestly provides constructive criticism of you and your work. This often is difficult for a mentor to do because no one wants to offend junior people or trainees. However, if the criticism is necessary, it is best for a mentee to know sooner, rather than later. Of course, there should be mutual trust and respect for a mentor to provide constructive criticism and for a mentee to be able to accept the mentor's critiques. Fortunately, I have had several wonderful mentors in my career. The experiences that I remember and appreciate the most are honest sincere criticisms, not praise or compliments.

If you are looking for a mentor, but do not know anyone in your institution, ie, as when starting a fellowship in a new institution, then networking is very important, talking to people around you, introducing yourself, and exchanging ideas. I also recommend performing a MEDLINE or Google search. One can see what research potential mentors have been doing, what recent publications they have, and so on. If you would like to pursue your career in education and teaching, look for Continuing Medical Education course faculty. Pay attention to the people in your institution who are giving lectures regularly and how the audience has evaluated their courses. Mentoring and networking opportunities also exist at society meetings. For example, RAHSR sponsors a mentoring program in which mentor and mentee pairs meet at annual AUR meetings. Although this is not a substitute for a local mentor, it is another good place to start.

The Mentor Perspective

Curtis Langlotz, MD, PhD, is an Associate Professor of Radiology and Associate Chair for Informatics in the Department of Radiology at the University of Pennsylvania (Philadelphia, PA). Dr Langlotz has published extensively in the fields of medical informatics, computer-based decision support, structured data capture, and technology assessment. His current research, supported in part by the National Cancer Institute's Cancer Biomedical Informatics Grid project, focuses on the development and evaluation of structured data capture systems, creation and maintenance of con-

trolled medical vocabularies, and design and deployment of real-time decision support systems for diagnostic imaging.

Dr Langlotz serves as President-Elect of the Society for Computer Applications in Radiology. As chair of the Radiology Lexicon Steering Committee of the Radiological Society of North America, he leads a collaborative effort to create a unified radiology lexicon. Dr Langlotz is a founder and past president of the Radiology Alliance for Health Services Research.

A mentor typically is an older or more senior person who is willing to give time, interest, and emotional support over an extended period to further the career of a junior person, or mentee. From the mentor perspective, knowledge of one's own strengths, weaknesses, and tendencies can help create a relationship that satisfies one's own mentorship needs. Setting expectations early and often can help ensure that both parties remain content with the relationship.

Like any relationship-building activity, it is always worth meeting any interested person at least once. Even if a compatible mentoring relationship seems unlikely and does not result, these networking meetings can help each person learn about the variety of people and related activities at your institution. Such meetings may result in referrals to others who may be better candidates for a mentor-mentee relationship. One of the mentor's goals in an initial meeting is to determine the basic skill level and knowledge base of the mentee. If a mentee candidate does not yet have the basic requisite skills to participate in a mentor's ongoing research projects, the mentor may suggest an education-focused initial relationship. For example, the relationship might begin with directed reading in key textbooks and journal articles that provide the basic knowledge and skills of a research discipline.

When a prospective mentee already has the basic skills necessary to contribute to ongoing or new research projects, a search for a research topic of mutual interest should ensue (5). A useful "courtship" ritual is to create small tasks with deadlines for both the mentor and mentee. For example, a mentor who does not follow through on a promise to email a citation for the mentee to review or to email the contact information for a key resource is giving an indication of the (lack of) importance and priority placed on the mentorship relationship. Likewise, the mentee should be expected to complete the tasks assigned before the next meeting.

After some discussion and initial investigation, the mentor and mentee should select a research project that is feasible to accomplish given the time frame, their mutual interests, and resources at their institution. One common misconception among mentees is that the first research idea of mutual interest will result in a successful project. However, often three or four ideas must be explored before settling on a project that can be accomplished in the time allotted with the resources available.

It is not surprising that mentors are looking for mentees who are bright, goal-directed, and independent workers. Many mentors prefer to work with mentees who are self-motivated and are the primary drivers of the relationship. Conversely, some mentors enjoy working with mentees who need encouragement on a regular basis. Ultimately, the decision to form a mentoring relationship must be made individually, based on all these factors, including some intangible personal "chemistry" between individuals.

Ideally, a mentor should be approximately one career stage above a mentee. This career distance creates a situation in which the opportunities that may no longer be appealing to the mentor still represent attractive opportunities for the more junior mentee. At the same time, both mentor and mentee should keep in mind that individuals from different generations may have divergent perspectives on their careers (6).

Most people need at least one mentor other than their boss because the boss has inherent conflicts of interest with respect to certain mentoring issues. Salary negotiations are an obvious example. Also, not all division chiefs are comfortable discussing the best career path to advancement with a potential replacement.

Mentors outside the mentee's primary field can be particularly helpful when unbiased and confidential advice is needed. Outside mentors are less likely to have an "axe to grind" and will have fewer opportunities to inadvertently share any information that you may wish to keep confidential.

Do not restrict yourself to a single mentor (7). For example, early in my career, I had a mentor for my academic career, a mentor for my clinical career, and two additional mentors, one for each of my specific research interests. Many senior investigators retain a small group of mentors who still have a strong role in their career. Other senior investigators transition from a mentoring model to more of a networking model, in which they use their numerous established relationships

to call on trusted individuals with specific expertise in specific situations.

ADVICE COMMONLY SOUGHT FROM MENTORS

Mentors can help a mentee deal with the inevitable ups and downs of a research career. For example, mentors often can help with issues of work-family balance. (See [8,9] for excellent advice on this topic.) Another frequent occurrence is the need to respond to unfavorable reviews of manuscripts or grants. The first reaction to a critical review usually is not the one that, if conveyed directly in the resubmission, would be likely to result in subsequent favorable reviews. Placing the unfavorable review in a drawer for a week or 2 after the first reading often is a good practice.

One of the most important functions of a mentor is to teach the rules of career advancement (10,11). These rules seldom are written down and sometimes are inscrutable. (For an interesting discussion of why these rules are never written down, see [12].) For example, a mentor can help a mentee: (1) know what is expected of him or her; (2) focus, focus, and focus; (3) show productivity as soon as possible; (4) communicate regularly with a chairman or other leader; and (5) discuss his or her ideas with others frequently.

Mentors can be a good source of assistance with career negotiations. There are a number of excellent books on negotiation that are valuable reading (13,14). For example, these references teach that: (1) zero-sum games should be avoided, if possible; (2) the person with the most information has the advantage; and (3) negotiations succeed when you have alternatives.

Mentors can help supplement these resources with issues specific to academics. For example: (1) negotiate with the chair, dean, or other final decision maker; (2) do not assume the chair has a reason for his or her decisions: ask!; (3) look at other jobs; (4) practice proposing salary requests, then sitting quietly to await a response; and (5) get it in writing.

In summary, mentors can provide wisdom gained from previous experience. As Oscar Wilde once said, "Experience is a name we give to our past mistakes." The advice of a mentor, acquired through experience, represents an essential ingredient in the success of mentees.

MAINTAINING THE SUCCESSFUL MENTORSHIP RELATIONSHIP

Both mentors and mentees emphasized that mentoring was a relationship in which both people benefit from what each person, the mentor and the mentee, brings to the relationship.

Mentee Obligations

Successful mentoring is not just about what a mentor should be like or what a mentor should do for the mentee. It also is about what the mentee brings to the relationship. In choosing to form a relationship with you, a mentor has to respond to something about you. As a mentee, be prepared to show enthusiasm for your interests and motivation to achieve your goals. Be someone who is worth investing in.

To continue the investment analogy, as a mentee, you have an obligation to provide a return on investment to your mentor. Mentors generally are not paid for mentoring, and their time is valuable. They have their own personal and professional development agendas. Time spent mentoring you is time not spent on other projects. So when you ask for guidance, listen to what your mentor says. A mentor's job is not to agree with you. It is to offer their perspective on how to achieve your individual or combined goals.

In a mentoring relationship, the person being mentored generally is on the receiving end of most of the benefits. So, whenever possible, when your mentor asks you to do something, say "Yes." Then do it to the best of your ability. Your success is not only good for you, it reflects well upon your mentor. On occasion, a mentee cannot accommodate a mentor's request. In that situation, a mentee should decline, clearly and respectfully. Although it can be hard to say "No," it is important to be honest if you cannot do something your mentor requests.

Last, although strong mentorship relationships can help you develop professionally and personally, always remember that you are the one who will actually do the work, and you are the one who will open the door to your own academic success.

Mentor Obligations

Although mentoring efforts do not usually include financial rewards, tremendous satisfaction can be derived from successful mentoring. As described by Barr

et al (2), the rewards of mentoring tend to be internal. A mentee's success brings recognition to the mentor, and mentors can take personal pride in the accomplishments of the mentee. In addition, experiences with a talented mentee often can bring new ideas and renewed enthusiasm to the mentor's work. Some mentors also may be motivated to become mentors in part because of their own positive experiences as mentees. In the larger context of the field of radiology, successful mentors know that their efforts shape the future leaders of our field.

The first obligation of a mentor is to act in the mentee's best interest. At the same time, the mentor should serve as a mirror for the mentee, giving accurate and constructive feedback that the mentee can use for self-improvement and encouragement. Mentors should provide a nonthreatening learning environment for the mentee, in which missteps can be corrected before adversely affecting the mentee's career.

One of the most frequent complaints about mentors is their lack of availability. One of the best things the mentor can offer is his or her time on a predictable schedule. For example, it is reasonable to expect reliable turnaround on drafts of manuscripts or grant applications for which feedback is needed. In addition, it should be possible for a mentee to schedule a meeting with his or her mentor with no more than 1 week of lead time.

Mentors should create career opportunities for the mentee. This includes suggesting sources of research support, such as institutional grants, career development awards, and National Institutes of Health awards. When there is a difference in career stages, opportunities for travel and invited presentations that are no longer interesting to the mentor can be "handed down" to the mentee. Mentors often have opportunities to nominate mentees for committee assignments, boards, or other roles in professional organizations. Also, mentors can be used as a source of formal and informal references when career changes are planned.

SUMMARY

A career in academic radiology can be immensely rewarding. Strong mentorship relationships can help one obtain practical advice, face challenges, and foster continued growth and development throughout one's career. Recurring themes emphasized by panel mem-

bers include the following factors: (1) Both mentors and mentees should evaluate one another carefully before entering into a mentoring relationship. This includes considering such issues as accessibility, mutual interests, and chemistry between the two individuals. (2) Mentoring relationships often begin with small tasks. Meeting the initial expectations of the other person is a prerequisite for the relationship to progress. (3) Multiple mentors are valuable in providing helpful perspectives and guidance. (4) Ongoing effort from both sides of the mentoring pair is critical to sustaining the relationship.

REFERENCES

1. Mark S, Link H, Morahan PS, Pololi L, Reznik V, Tropez-Sims S. Innovative mentoring programs to promote gender equity in academic medicine. *Acad Med* 2001; 76:39-42.
2. Barr LL, Shaffer K, Valley K, Hillman BJ. Mentoring: applications for the practice of radiology. *Invest Radiol* 1993; 28:71-75.
3. Illes J, Glover GH, Wexler L, Leung ANC, Glover GM. A model for faculty mentoring in academic radiology. *Acad Radiol* 2000; 7:717-724.
4. Taljanovic MS, Hunter TB, Krupinski EA, Alcalá JN, Fitzpatrick KA, Ovitt TW. Academic radiology: the reasons to stay or leave. *Acad Radiol* 2003; 10:1461-1468.
5. Kahn CR. Picking a research problem: the critical decision. *N Engl J Med* 1994; 330:1530-1533.
6. Bickel J, Brown AJ. Generation X: implications for faculty recruitment and development in academic health centers. *Acad Med* 2005; 80:205-210.
7. Peluchette JVE, Jeanquart S. Professionals' use of different mentor sources at various career stages: implications for career success. *J Soc Psychol* 2000; 140:549-564.
8. Pisano E. Time management 101. *Acad Radiol* 2001; 8:768-770.
9. Klass P. So where's my medal? *N Engl J Med* 2005; 353:2107-2109.
10. Chin MH, Covinsky KE, McDermott M, Thomas EJ. Building a research career in general internal medicine: a perspective from young investigators. *J Gen Intern Med* 1998; 13:117-122.
11. Kazerooni E. An introduction to academic radiology. *Acad Radiol* 1997; 4:390-397.
12. Liang MH, Roberts WN. The rules of American medicine for the would-be clinical investigator. *Rheum Rev* 87-90.
13. Fisher R, Ury W. *Getting to Yes*. New York, NY: Penguin, 1981.
14. Raiffa H. *The Art and Science of Negotiation*. Cambridge, MA: Harvard University Press, 1982.