In the biomedical literature, articles related to mentoring have been increasing in number at a much larger rate than those on teaching or advising (Table 1). This implies that important needs related to mentoring are being considered seriously. Although there are extensive reviews on mentoring (e.g., Frei et al., 2010; Sambunjak et al., 2009), detailed studies of failures in mentoring or barriers to effective mentoring are few in number (e.g., Perlmuter, 2008; Puljak, 2006; Sambunjak et al., 2009). This editorial includes suggestions about how those needs can be addressed and how real or potential difficulties can be overcome.

In earlier editorials this year, Dr. Bergstresser has addressed many of the issues related to mentoring and how institutions and individuals are addressing the mentoring process in positive and proactive fashions. This editorial continues those considerations, enhancing mentoring for the mentee, the most valuable and limited resource for the future. Professionals, especially investigators, must acquire the knowledge and skills of their discipline; this is usually accomplished through study and practical experiences, including the planning and execution of experiments, writing, and presenting and publishing results. In laboratories and clinical settings, knowledge and skill frequently may be derived from individuals a few years senior to the learner; the next stage is the exquisite burnishing of those skills and knowledge through close and intense interactions with a senior individual.

Distilling and supervising the panoply of skills and knowledge to be learned is quite different in character from the other mentoring that is required for a successful career. This other kind of mentoring derives from the “senior mentor,” as defined by Dr. Bergstresser (2011). This mentoring is the inculcation of attitudes and professionalism of the scientist, and this mentor is usually responsible for connecting the mentee with mentor peers in the search for new opportunities. The senior mentor functions in the formal and informal curriculum that shapes the next generation of scientists. Some of the relevant attitudes can be taught in small groups that discuss and analyze case histories, difficult issues of ethics, and scientific strategies, but that education occurs most effectively in one-on-one conversations between mentor and mentee.

Mentoring conversations may occur in the airport, in restaurants, at the workbench, on a park bench, and during meetings when work presented by others is critically assessed. These are quality-time discussions affording the opportunity to address such critical questions as when is the correct time for the post doc to leave the nest, what kind of job or institution is best, and how to balance personal life and science. These conversations often come without any formal briefing papers or prethought on the part of the mentor and the mentee, so they may not lead to perfect answers, and each of these conversations is usually a part of a reiterative process. Making those conversations productive for the mentees and mentors is what mentoring is really about.

Mentees choose mentors to attain knowledge and skills, and in the overwhelming number of instances that pairing is successful after brief interviews focusing on science. Rarely is there a serious mismatch of mentor and mentee, and it is in the best interest of the mentor, the mentee, and the institution that mismatches be identified early and, if not repairable, ended via a “no-fault” procedure. The multiplicity of causes of such failed relationships have been summarized (Sambunjak et al., 2009). Often there has not been enough care in the initial matching of mentor and mentee. Some institutions formally define the mentoring relationship, set the numbers of hours to be spent in mentoring, and have a “contract.” Studies will still be required to determine how much formalization is necessary for successful relationships. To paraphrase the first lines of Anna Karenina, all successful mentor–mentee relationships are alike and every unhappy relationship is unhappy in its own way.


© 2011 The Society for Investigative Dermatology www.jidonline.org 1587
Mentoring may occur at many times during a career, not just in the initial phases. When advice is sought, the mentor is performing his or her essential function; there are no simple answers to questions such as whether this is the correct time in my career to work in industry, to take over a demanding job as a journal editor, or to chair an NIH study section. All mentors will answer from their own circumstances, history, and whatever objective and timely external information may exist. These are the kind of questions that require face-to-face conversation—e-mail mentoring or mentoring by tweeting will have hazards. The more junior the mentee, the more important the direct face-to-face relationship.

Conflict of interest between mentor and mentee is a difficult issue that must be addressed directly, sometimes with institutional, journal, or governmental guidelines, but often with Solomonic consideration of the issues involved. Examples of such issues include authorship and position on a list of authors, balancing time spent in education of others and one’s own research when tasks are assigned by the mentor, authorship on patents, and being the principal (or coprincipal) investigator on a grant application. Although institutions are beginning to formalize guidelines, there will always be gray areas in such endeavors. Institutions will often have formal appeal processes to resolve these issues, but a major question that is not often addressed in the rapidly growing literature on mentoring is how the person who is responsible for the science of the mentee, or for his or her promotion, is insulated from conflict of interest. Disclosure, even when written, is often only the beginning of addressing such potential conflicts.

What mentors say and what they do are critical; words and actions must be congruent. In the best of circumstances, the mentee develops close knowledge of how his mentor carries out important activities. There is often modeling of the mentee based on the mentor.

How does a mentee develop the strength to become a mentor for the next generation? It begins during the first meeting between the potential mentor and potential mentee. All the power seems to be on the side of the mentor, whom the potential mentee has been impressing while displaying skills and aspirations. The mentee begins to evolve toward being a mentor by probing what the mentor is really like and his or her inner nature and values, by asking questions such as “what motivates you?” and “how do you maintain your commitment to science and education?” Evolving from an answerer to a questioner is a crucial stage for the mentee—one that must be encouraged.

Lowell A. Goldsmith
Editor Emeritus

REFERENCES