

Chapter 21

Mentoring and Advising

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“Advice is like mushrooms. The wrong kind can prove fatal.”

–unknown

Abstract Mentorship refers to the development of a relationship between a more experienced individual (the mentor) with a less experienced individual (the mentee or protégé). The role and expectations of the mentor in the development of the junior faculty member’s academic relationship is extremely important. As such, this chapter discusses the expectations of the mentor, mentee, and the mentor-mentee relationship.

Keywords Mentorship • Mentoring guidelines • Advising

Mentoring vs. Advising

Mentorship refers to the development of an ongoing, advisory relationship between a more experienced individual (the mentor) with a less experienced individual (the mentee or protégé). Historically, mentorship goes back to ancient Greek and Hindu times and the word itself was inspired by the character of Mentor in Homer’s Odyssey. Today, the definition of mentor continues to encompass ‘a trusted

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counselor or guide', and a 'wise, loyal advisor or coach.' True mentoring however is more than just answering occasional questions or providing *ad hoc* help. It is about an ongoing relationship of learning, dialog, and challenge. "Mentoring" is a process that always involves communication and is relationship based, but its precise definition is elusive. One of the many definitions that have been proposed, is: mentoring is a process for the informal transmission of knowledge, social capital, and the psychosocial support perceived by the recipient as relevant to work, career, or professional development; "mentoring entails informal communication, usually face-to-face and during a sustained period of time, between a person who is perceived to have greater relevant knowledge, wisdom, or experience (the mentor) and a person who is perceived to have less (the protégé)" [1].

Mentoring in the research sense developed mostly in the basic science laboratories, where an experienced researcher would literally take a junior person 'under their wing' and would help them develop research independence. This concept has been adopted and encouraged by the NIH through its K23 and K24 programs which, in turn, serve as templates for career development programs supported by other organizations. The problem has always been, that there is little in the way of formal training in how to be a good mentor, and there is usually little external reward for the time spent in mentoring.

In academic settings, mentoring and academic advising are frequently used synonymously, but we view advising as a lesser responsibility than mentoring. One can over-simplistically say that advising is an 'event' while mentoring is a 'process'. A mentor has both a professional and personal relationship with the mentee while an advisor, in general, does not have the same sort of personal relationship. Also, mentoring is more dynamic, in that there is a distinct, evolutionary change over time.

Although there is no single formula for good mentoring, most would agree that a good mentor is approachable and available, and this is where good mentoring too often comes up short, since in a busy academician's life (who has multiple demands including their own requirements for promotion, research grants, manuscripts, etc.); little academic reward is provided for mentoring. It is for this reason that, although perhaps more empathetic with the role of the mentee, junior faculty are often ill-equipped to serve as mentors. Factors militating against effective mentorship by junior faculty include an (appropriate) emphasis on one's own career advancement, limited resources to devote to the mentee, and limited opportunities to promote the mentee's career by virtue of limited personal recognition as a result of being early in one's career. Students, for their part, must recognize the professional pressures and time constraints faced by their mentors, but still must insist on obtaining adequate time and availability from their mentors, or be willing to change who their mentor is. Much misunderstanding can be circumvented with a well-intentioned discussion about these issues prior to choosing a given mentor. As such, both the mentor and mentee should be clear about their respective expectations, have a clear agreed upon career development plan, with regular meetings a priority. On the one hand, the mentor cannot be too busy, otherwise they should not have accepted the responsibility, but the mentee cannot expect unlimited access.

Table 21.1 Five common techniques used by mentors

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|---------------|---|
| Accompanying: | Committing in a caring way |
| Sowing: | Laying the foundation even if the mentee does not yet understand its importance |
| Catalyzing: | Plunging the mentee into a new way of thinking |
| Showing: | Making something understandable |
| Harvesting: | What have you learned, and how useful is it |

From: Aubrey and Cohen [3]
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In some instances the use of a “mentoring contract” which both the mentor and mentee work together to delineate the goals and structure of the relationship in writing can provide the clarity of purpose that is the foundation of most successful mentoring relationships.

Prior research has suggested that mentorship in academic health science centers has an important influence on productivity and personal development [2]. But, most programs have been modest in scope. Feldman et al. did analyze the baseline variables prior to instituting a structured comprehensive mentoring program at one institution in order to assess the characteristics associated with having a mentor along with the content of mentor-mentee interactions. More than half the respondents to a survey (with a 56 % response rate) stated that they had a mentor, and that there were no differences in having a mentor based upon gender or ethnicity. Having a mentor was associated with greater satisfaction with time allocation at work, and reported that discussions of funding, manuscript preparation, promotion and tenure were among the most important topics.

A 1995 study of mentoring techniques most commonly used in business [3] found that the five most commonly used techniques among mentors were (Table 21.1):

1. *Accompanying*: making a commitment in a caring way, which involves taking part in the learning process side-by-side with the learner.
2. *Sowing*: mentors are often confronted with the difficulty of preparing the learner before he or she is ready to change. Sowing is necessary when you know that what you say may not be understood or even acceptable to learners at first but will make sense and have value to the mentee when the situation requires it.
3. *Catalyzing*: when change reaches a critical level of pressure, learning can escalate. Here the mentor chooses to plunge the learner right into change, provoking a different way of thinking, a change in identity or a re-ordering of values.
4. *Showing*: this is making something understandable, or using your own example to demonstrate a skill or activity. You show what you are talking about, you show by your own behavior.
5. *Harvesting*: here the mentor focuses on “picking the ripe fruit”: it is usually used to create awareness of what was learned by experience and to draw conclusions. The key questions here are: “What have you learned?”, “How useful is it?”.

Guidelines for Faculty/Student Interactions

Faculty members often develop a close working relationship with students, especially advisees. Often a relationship is formed that provides benefits to both the faculty member and the student. Faculty should be cognizant of the power differential in these types of relationships and set appropriate boundaries. Although faculty members may not intend a favor or request to be an obligation, they should be aware that this may place some students in a difficult position. Some students are intimidated by faculty members and may not feel free to decline such requests [4]. It is recognized that many situations are ambiguous. Examples are of some of these ambiguous situations include:

- **Asking a student to drive you someplace, including the airport, home, or main campus.** Such a request does not fall under a student's duties. A situation when this may be acceptable is when the student has the same destination.
- **Asking student to work extra hours or late hours.** Students should be expected to work the hours they are paid for. Students may volunteer to put in extra hours to gain more experience (e.g. grant writing) or gain authorship on a paper or help meet a deadline – but these extra hours should not be an expectation.
- **Asking an advisee to housesit, take care of your children or pets, or help you move.** While some students may not mind house sitting, taking care of children or pets, or helping someone move, others may only agree to do this because they feel obligated or worry that saying no will somehow affect their relationship with the faculty member. To avoid this situation, faculty members may post a request for a sitter or mover for pay without any faculty names attached to the flyer – ensuring that respondents really want this job.

Advising

Expectations for advising vary between institutions but mainly in terms of frequency of meetings. It seems to these authors that minimal expectations should include (Table 21.2):

1. academic advisors should meet with their advisees at least twice per semester, but more often is preferable. These meetings should be scheduled, but there should also be opportunities for *ad hoc* meetings to deal with acute problems.
2. Academic advisors should respond in a timely manner to requests from advisees for meetings or responses by telephone or e-mail, even if this is to schedule the requested meeting.
3. Academic advisors should provide general guidance to students about coursework, fieldwork, project selection, and career planning.
4. Academic advisors should make students feel welcome to the Division.

Table 21.2 Advising expectations

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| Meet regularly: Scheduled not ad hoc |
| Respond in a timely manner to requests |
| Provide general guidance about course work, etc. |
| Be welcoming |
| Act as a contact person and direct to appropriate resources |
| Act as a resource for bureaucratic and political issues in the school |
| Balance over extending ones self with important opportunities |

5. Academic advisors should act as a contact person for the student and help direct them to the appropriate resources in the Division given whatever issues or problems the students may have.
6. Academic advisors should act as a resource for the student when bureaucratic or political problems in the University, School or Division may be interfering with the student’s effective progress toward his or her degree.
7. Although the advisors role is to help the advisee to not over-extend themselves, they should also help them see what an important opportunity is.

Advising may include a number of diverse activities such as procedural advising (e.g. should the student drop a course), academic advising (e.g. how satisfied are they with the program, career planning, selecting course work), and advising ‘students’ on the conduct of their research. Excellent advising requires a significant time commitment.

What are the mentor’s responsibilities? They should find out what are the junior investigators career goals, determine how often formal meetings should take place, what the mentor’s expectations are (this should be spelled out in terms of frequency of meetings, metrics, and outcomes), and devise the best way(s) to communicate (face to face, e-mail, telephone). The advisee also has responsibilities. They should take the lead in scheduling meetings, and contacting the advisor if there are problems. Finally, there should be clear expectations of what protected time will be provided for the mentee’s career development. If this is not under the control of the mentor, the mentor should aid the mentee in establishing protected time with whoever the responsible person is. There are many pitfalls in the term ‘protected time’. One of the most important is the denominator for calculating it. For example, is the % of protected time based upon a 40 h, 60 h, or 80 h-week. What other responsibilities will the mentee have (i.e. clinics, ward rotations, committee meetings, teaching, conferences etc.).

Mentoring Committees

With increasing emphasis on translational research as a career path, mentorship by committee has become more popular. This approach provides trainees with access to content experts in several different disciplines relevant to their career

development and can be quite successful. There are several potential pitfalls to mentorship by committee as well. The benefits of a mentoring committee are maximized when the committee meets as a whole with the mentee to discuss plans and progress, not when the mentee is subjected to a series of individual meetings in which different mentors may differ in terms of their advice regarding prioritization and progress. A second common problem with mentoring by committee is the failure to identify a “primary” mentor who has major responsibility for advice to the trainees. When this does not occur and problems are encountered, a failure to take responsibility for the mentoring process can lead to confusion and misdirection for the mentee.

Effective mentorship has been shown to be essential for faculty career success and good mentoring relationships are more likely to result in the mentee remaining at an academic health center and be promoted more rapidly. Binkley and Brod point out that effective mentorship is also associated with greater career satisfaction, and better performance [5]. Despite this, they note that at one large academic health center, the average prevalence of mentorship was 50 %.

K23 and K24 Awards (Figs. 21.1, 21.2, and 21.3)

The NIH has developed a number of Career Development Programs (K awards), in fact there are now 13 different awards available and these are dependent upon such factors as one’s career stage and how they may interact with other NIH Awards. However, there are common elements of NIH career awards, such as specified levels of salary support, allocations for research/development costs, and award duration. In addition, entry-level awards require a mentor, and at least 75 % protected time for the awardees to spend on research and other career development activities. For non-mentored senior awards a 25–50 % time commitment is typically required. Eligibility for NIH awards requires a Doctoral Degree (generally), that the applicant be a US citizen, Non-Citizen National, or a Permanent Resident. Should the awardee change their Institution or Mentor prior approval of the NIH awarding component must be advised.

For most of the readers of this book, the K23 award is likely to be the most appropriate. The guidelines for K23 Awards include an application that includes information about the nature and extent of supervision that will occur during the award period (co-mentors must supply similar information), and there must also be a career development plan that incorporates a systematic approach towards obtaining the necessary skills necessary to become an independent researcher. This plan should include course work appropriate to the experience of the candidate. The mentor’s research qualifications in the area of the project and the extent and quality of his/her proposed role in guiding and advising the mentee, as well as previous experience in mentoring are critical. The application must include the applicant’s career goals and objectives with a detailed description of what the candidate wants to achieve following the completion of the award.

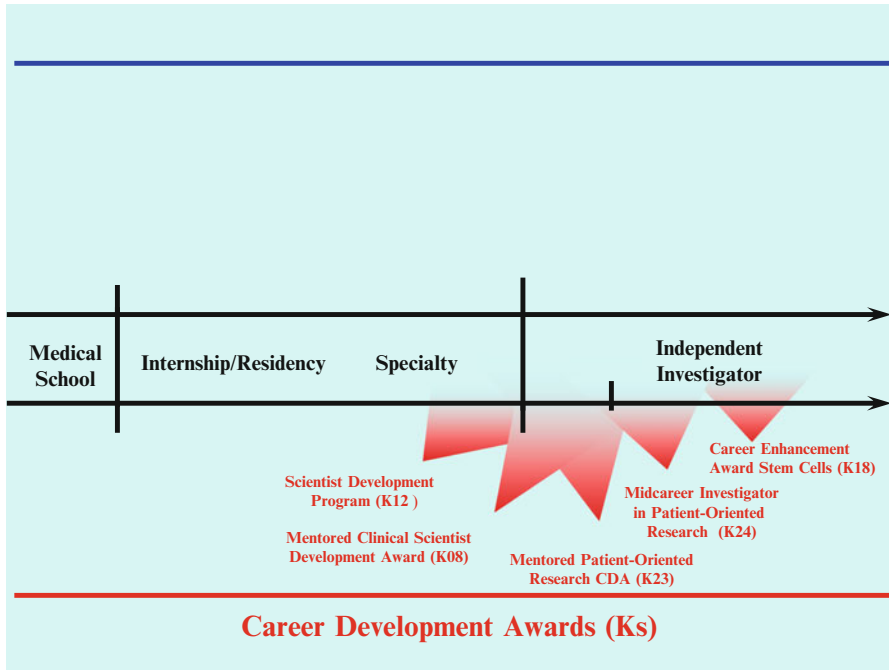


Fig. 21.1 The NIH career development awards (K awards)

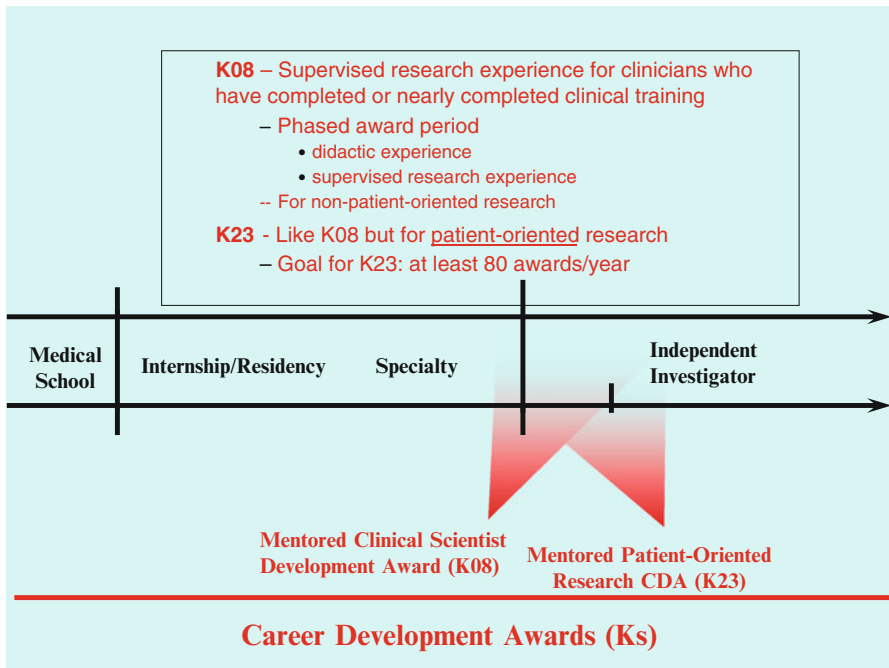


Fig. 21.2 A description of the K08 and K23 awards

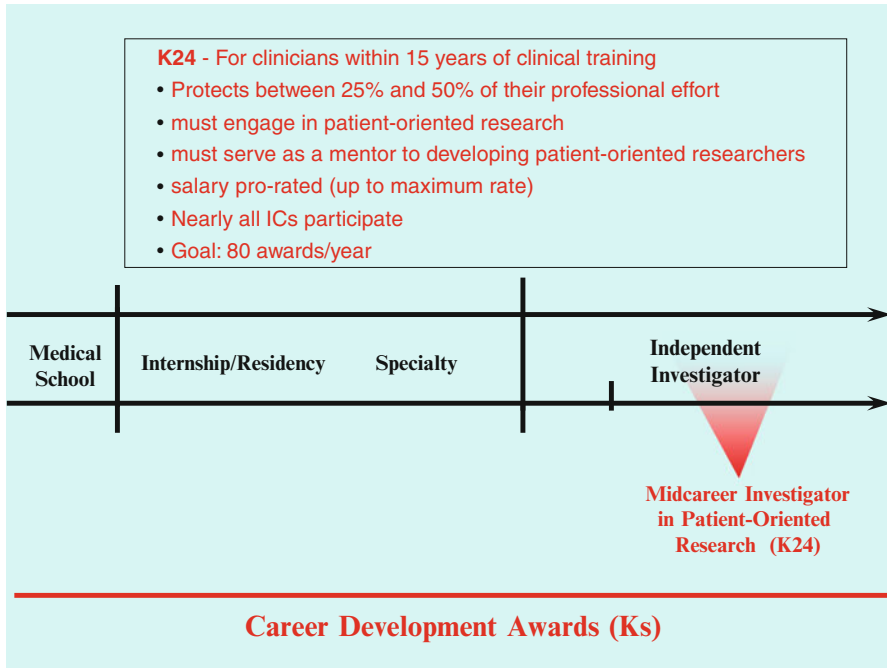


Fig. 21.3 A description of the K24 awards

The K23 application should be very detailed about the mentor's role and responsibilities, how the mentor's area of expertise relates to the research interests of the applicant, how often the applicant will meet with the mentor (and co-mentors), what will happen during those meetings, and how short-comings in the applicant's performance will be addressed. The mentor, on the other hand, should provide the same information, as well as extol the mentor's virtues with prior mentoring activities.

Typically, career development applications should also contain information about formal coursework that will be taken in support of the applicant's career plan, and ideally one that will lead to a degree, such as a Master of Science Degree in Clinical Research (a K30 supported Program). Ideally, the applicants plan will include both an Internal as well as an External Advisory Committee which is formed to provide an objective review of the candidate's progress. More details are spelled out in the grant description, but I have highlighted key components that have been problematic in K23 grants that I have reviewed.

The K24 is a senior non-mentored award that is a natural extension once the K23 is completed. It allows for funded protected time to mentor junior investigators, particularly those seeking a K23 award.

In summary, a number of pitfalls face the junior faculty member interested in a career in patient oriented research. A good mentor/advisor can be of enormous help in guiding young researchers toward their career goals. Unfortunately, many

mentors/advisors, acting as role models have fallen into the same traps that they should be preventing in a new researcher, so the mentors role-modeling is somewhat tarnished. We agree with Grigsey that five of the most important pitfalls in the mentor-mentee relationship are: committing to excessive service time; ‘diffusion and confusion’ i.e. a new faculty member has no clue as to what is or is not a priority without a good advisor guiding them; lack of mentoring/advising; exploitation by other faculty; and, lack of discipline and perseverance.

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