

## PRACTICE MANAGEMENT

# On Mentoring

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As academic clinicians and investigators, it is important to facilitate the training of young investigators and clinicians so they can become knowledgeable, competent, and independent in their careers. This process of mentoring is a form of facilitative learning that has its origins extending thousands of years. It began with the “oral law” or the passing down of knowledge from generation to generation in many cultures such as the tribes in Africa, Native Americans, and Orthodox Judaism. This process allows for the continuation of traditional values and, with regard to the field of medicine, can preserve medical and scientific knowledge and wisdom through apprenticeship, where the protégés later become mentors to future generations. Within academic medicine, this process has become formalized through training grants from the National Institutes of Health (*e.g.*, T32 awards), preceptorships, residencies, and fellowships. Yet, there has been limited attention to the *process* of mentoring. How should the mentor and mentee interact? What are the goals, benefits, and challenges of mentoring? Finally, how do we judge success? This column sets forth some suggested guidelines for trainee supervision through a mentoring relationship with a senior faculty member in a research or clinical environment.

### THE VALUE OF A MENTORING RELATIONSHIP

Mentoring is a development-enhancing relationship between a more experienced or senior investigator and a trainee or a junior investigator. Within the academic environment, mentoring is a means to systematically assist trainees and junior faculty in their career development, usually by a single senior faculty member. However, this may also occur with more than one mentor. Mentoring is a constantly changing iterative process that leads to professional growth for both participants. The values of mentoring are displayed in Table 1.

There is evidence that a mentoring relationship leads to enhanced professional development for the protégé. Studies show that mentored faculty: (a) spend more time on research, (b) rate their research skills higher, (c) are more likely to receive grant funding, (d) rate higher support for teaching research and administration, and (e) have greater career satisfaction (1). Furthermore, successful researchers are more likely to have had mentors before, during, and after their train-

ing and they maintain these relationships with their advisors throughout their career (2).

The attributes of a successful mentor are displayed in Table 2. They relate not only to the provision of knowledge and resources, but also to several personal values relating to integrity, effective communication skills, and enjoyment of the work and mentoring process. In turn, the mentee must, in a similar fashion, respect and value the contribution of the mentor and work with him or her to achieve professional knowledge and skills with the expectation of assuming a mentor role in the years to come.

### THE MENTORING PROCESS

The mentoring process can be viewed as evolving in discrete stages. Initially, the mentor takes on most of the responsibility for the protégé’s learning and provides most of the resources. This can involve discussing goals and expectations, scheduling meetings, providing the agenda based on the needs of the mentee, and providing feedback. The mentor also identifies and addresses the mentee’s views and facilitates the acquisition of knowledge. This can be of immediate and concrete relevance, such as helping to write an abstract, or providing articles and other educational resources, and assisting with writing grants, budgets, and presentations. Through these activities, the mentor must create a “need to learn” in other relevant areas (psychosocial and communication skills, biostatistics, writing skills, and creative thinking).

Over time, as the relationship matures, the mentor takes more of a “back seat” and becomes a facilitator, encouraging the mentee’s professional growth and responsibility for tasks. Table 3 breaks down the process into 5 levels, beginning with the more traditional pedantic learning (*i.e.*, where the “teacher” sets the agenda for learning), and evolving through androgogic (*i.e.*, adult learning where the agenda is set by the learner), the most developed stage being full collaboration. The time in which these levels can be achieved is determined by the parties involved, their skills and needs, and the quality of the mentoring relationship.

### CLINICAL MENTORING

Within a clinical context, mentoring is a preceptorship, where the mentor provides the initial knowledge and guidance for

**Table 1.** Mentoring Values

Mentoring Values	Protégé	Mentor
Career gain	Receives expert guidance	Exercises higher level of dynamic teaching
Work productivity	Gains knowledge and resources	Protégé extends work productivity
Personal	Gratification from expert attention, support, direction	Rejuvenation of work and enhanced self-esteem via protégé's enthusiasm
Interpersonal	Long-term personal and professional relationship	Long-term personal and professional relationship

clinical decision making until the protégé becomes self-sufficient and then is available as needed for consultation. While many attendings believe they need to be the ultimate purveyor of the knowledge, in modern times, this is nearly impossible. The rapid expansion of the data in medicine makes it difficult for one person to “know it all.” Instead,

**Table 2.** Positive Attributes of a Mentor and Expectations of the Mentee (3)

Knowledge and resources	
1.	Knows how to provide expertise in areas of mutual interest
2.	Knows how to provide direction and guidance on professional issues (e.g., joining organizations, networking)
3.	Is willing to provide resources (e.g., research assistants, source materials, statistical assistance)
4.	Is “connected” to other resources and individuals as needed.
Teaching and supervision	
1.	Is approachable, accessible, personable
2.	Is supportive and encouraging
3.	Provides positive and negative feedback
4.	Possesses good communication skills (writing, speaking, interpersonal)
5.	Seeks to improve the protégé's knowledge, skills, productivity
6.	Promotes independence
7.	Challenges protégé to extend his/her abilities
8.	Employs a learner centered approach – recognizes/adapts to new learning styles
Personal values	
1.	Exhibits professional integrity
2.	Achieves credibility and respect among peers
3.	Communicates satisfaction with career
4.	Acknowledges and facilitates protégé's contributions (e.g., authorship, awards)
5.	Able to tolerate challenges from protégé without reacting personally
Expectations of the mentee	
1.	Takes greater responsibility in setting the agenda over time
2.	Seeks to initiate new ideas
3.	Is respectful of mentor's time and availability
4.	Communicates with mentor on concerns
5.	Provides status of activities and projects
6.	Accepts new challenges
7.	Seeks feedback and takes responsibility to give feedback to mentor
8.	Knows personal limits and when to ask for help
9.	Personally reassesses goals over time
10.	Doesn't overstep boundaries (e.g., overuse of time, dependency on mentor for answers)

**Table 3.** Transitions in the Mentoring Process Over Time

Mentoring – Transition Stages in Relationship		
Level	Protégé	Mentor
I. Pedantic learning	Learns basic elements	Initiates ideas Primary task responsibility Active teaching
II. Tutoring	Increased responsibility Increased self-learning	Supervises work Frequent tutoring
III. Androgogic learning (learner sets agenda)	Initiates/develops ideas Primary task responsibility Tutors when needed	Provides feedback Negotiates ideas
IV. Autonomy	Full responsibility for ideas and work tasks	Feedback when needed
V. Collaboration	Shared responsibility	Shared responsibility

the mentor's job is to teach trainees how to gather the information and to facilitate the trainees' ability to make decisions with the remarkable abundance of information that exists; thus it is the “art of medicine” that is communicated (4).

One study compared the attributes of attendings selected by house staff as excellent role models to those who also taught residents but were not chosen as role models. The attributes attributed to the attending role models include: (a) spending at least one-quarter of the time on teaching (OR 5.1, 95% CI 1.8–14.5), (b) stressing the physician—patient—relationship (OR 2.6, 95% CI 1.1–6.4), (c) teaching the psychosocial aspects of medicine (OR 2.3, 95% CI 1.3–4.4), and (d) having served as a chief resident, presumably to gain more experience as a teacher (OR 1.1, 95% CI 1.1–4.0) (5).

### SURVEY OF EXPECTATIONS WITHIN A MENTORING RELATIONSHIP

In a recent survey of gastroenterology fellows participating in a skills development workshop, 20 fellows and 5 faculties were surveyed regarding expectations and needs of the protégé, and the positive and negative attributes of mentors. The results, shown in descending order of responses, were as follows:

- **Expectations of Mentor:** To have positive personality attributes, accessibility and approachability, technical skill, an ability to listen and provide advice, the provision of honest feedback, and also support for the mentee's career goals.
- **Needs of Protégé:** To be coached in career development and technical skills, to be given honest feedback, and to be stimulated toward developing new ideas.

- **Positive Qualities of a Mentor:** To demonstrate leadership and to serve as a role model, to possess positive personality attributes, energy and enthusiasm, and a facilitative style, and to be approachable and knowledgeable.
- **Negative Qualities of a Mentor:** To be frequently unavailable, to assert a dominant or self-serving teaching style, and to be a poor communicator.

**PROVIDING FEEDBACK**

Feedback relating to the mentoring process is a mutual process. In addition to the mentor providing constructive feedback to the protégé, it is equally important for the mentor to also be apprised of his or her strengths and weaknesses. One example of an evaluation instrument used at the University of North Carolina Center for Functional GI and Motility Disorders is shown in the appendix. The form is designed to parallel both the mentor and mentee’s observations. It can be reviewed and updated, usually about twice a year. Through the use of such feedback the mentoring process can not only

serve to help “grow” academicians and clinicians, but it can also become one of the more gratifying experiences for mentor and protégé alike.

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**APPENDIX. Mentoring Assessment**

1. Date      /      /       
mm dd yy

2. You are  Mentor (your name) \_\_\_\_\_ evaluating Mentee (name) \_\_\_\_\_  
                   **or**  
 Mentee (your name) \_\_\_\_\_ evaluating Mentor (name) \_\_\_\_\_

3. Please rate your mentee/mentor’s skills and attributes on a 1-10 scale with 1=None and 10=Highest

A. Regarding skills, my mentee/mentor	None	So So	Highest
Has good fund of knowledge .....	①	②	③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩
Is able to generate creative ideas .....	①	②	③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩
Is able to obtain and utilize resources .....	①	②	③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩
Is time efficient .....	①	②	③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩
Thinks “out of the box” .....	①	②	③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩

APPENDIX. Continued.

B. Regarding attributes, my mentee/mentor	None	So So	Highest
Displays genuine interest in learning .....	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩		
Engages in the work effort .....	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩		
Challenges protégé/mentor to extend his/her abilities .....	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩		
Follows through on tasks and expectations .....	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩		
Is available and accessible .....	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩		
Communicates knowledge and ideas effectively .....	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩		
Is able to receive feedback .....	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩		
Is able to provide feedback .....	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩		
Takes responsibility .....	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩		
Career development (mentor supports/mentee motivated)	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩		

C. **Projects:** Please list ALL your current projects and rate the items from 1-10 (1=None; 10=Highest)  
 Please also list Project Stage: 1=Concept, 2=Initiation, 3=In Process, 4=Concluded, 5=Follow up

Project #1: [rate below ↓] \_\_\_\_\_ Stage:

	None	So So	Highest
1. <u>Quality of work</u>	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩		
2. <u>Importance</u>	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩		
3. <u>Work interaction</u>	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩		

Project #2: [rate below ↓] \_\_\_\_\_ Stage:

	None	So So	Highest
1. <u>Quality of work</u>	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩		
2. <u>Importance</u>	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩		
3. <u>Work interaction</u>	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩		

Project #3: [rate below ↓] \_\_\_\_\_ Stage:

	None	So So	Highest
1. <u>Quality of work</u>	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩		
2. <u>Importance</u>	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩		
3. <u>Work interaction</u>	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩		

APPENDIX. *Continued.*

Project #4: [rate below ↓] \_\_\_\_\_ Stage:

	<b>None</b>			<b>So So</b>				<b>Highest</b>		
1. <u>Quality of work</u>	①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩
2. <u>Importance</u>	①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩
3. <u>Work interaction</u>	①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩

Project #5: [rate below ↓] \_\_\_\_\_ Stage:

	<b>None</b>			<b>So So</b>				<b>Highest</b>		
1. <u>Quality of work</u>	①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩
2. <u>Importance</u>	①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩
3. <u>Work interaction</u>	①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩

Project #6: [rate below ↓] \_\_\_\_\_ Stage:

	<b>None</b>			<b>So So</b>				<b>Highest</b>		
1. <u>Quality of work</u>	①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩
2. <u>Importance</u>	①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩
3. <u>Work interaction</u>	①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩

Project #7: [rate below ↓] \_\_\_\_\_ Stage:

	<b>None</b>			<b>So So</b>				<b>Highest</b>		
1. <u>Quality of work</u>	①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩
2. <u>Importance</u>	①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩
3. <u>Work interaction</u>	①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩

4. *Comments:*

\_\_\_\_\_

*Thank you for completing this survey!*

\_\_\_\_\_