



# Mentoring

Nurturing clinician and physician scientists in an academic career

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**A**lthough it offers some of society's highest recognition, a career in medicine is arduous. This is especially true for those choosing clinical or basic research at an academic center. But the intellectual rewards and, often, financial security make the effort worthwhile. For a successful and satisfying career, the clinician or physician-scientist needs to be appropriately prepared, must progress through career milestones in a timely fashion, have some luck, and be rewarded at multiple stages in his or her career. Appropriate mentoring often helps sustain the initial enthusiasm present at the beginning of a career, and may help in devising strategies for continued success. It is true, however, that in the twenty-first century a faculty person may require more imaginative, innovative, and individualized help than before.

My thoughts about career guidance are not based on any special insight, other than what I have gleaned during an academic medical career including clinical medicine, education,

research, and more than twenty-five years of medical administration. I have always appreciated the opportunity to give advice when asked by specialty trainees and faculty.

I have been immensely helped by and most grateful for the mentoring I have received.<sup>1-3</sup> Now, as a senior physician, I want to encourage others who may have special expertise in mentoring to expand on my comments about the best ways to prepare, train, and sustain our replacements on medical faculties, especially physician-scientists.

## The early phase

An accomplished subspecialty fellow just joining the faculty may feel capable of performing as a “triple threat”—for a while. Research momentum has begun, probably supported by a National Institutes of Health (NIH) career training grant in the mentored K-series that may phase into the R-series of research awards,<sup>4</sup> or with a clinical investigator award obtained from a professional society or private foundation. Spirited teaching ability, possession of current clinical information, and good procedural skills are important currency for aspiring junior faculty. Recognition for teaching from students and house staff may have occurred, providing satisfying personal feedback and enjoyment. But any one of the following may portend problems for the aspiring academic:

- A department's insatiable need for more clinical work
- A struggle for the protected time stipulated on grants

- Increases in teaching assignments
- The stress of beginning on the tenure track
- Heightened family demands.

Moreover, as young faculty witness the jockeying and competition occurring between more senior colleagues for any number of things, medical politics may become uncomfortable. The burden of educational debts and the greener pastures enjoyed by colleagues who have gone into private practice may compound tensions, and disenchantment with an academic career can develop.

At this early career point the young faculty member needs a good advisor, one with experience in guiding young investigators. Such a mentor should be identified to address issues and possibly intervene with a division chief or department chair. Once a comfortable relationship has developed, a sage mentor can save his protegee's fledgling academic career by negotiating for better protected time, keeping research on track, helping to unload some committee assignments, or advising on family or personal problems. Unfortunately, a plentiful supply of versatile and willing mentors may not exist in most departments.<sup>5</sup> Moreover, trying to link up a senior faculty member with one just joining the faculty, in the hope of establishing an ongoing mentoring relationship, may be ineffective.<sup>6</sup> While the spontaneous choice of a mentor by a young faculty person can occur, that choice may not necessarily be the ideal one. Regrettably, a division chief or a chair can neither undertake to do all of the needed mentoring, nor expect to be successful with every challenge. Each unit of a department should devise a strategy to identify mentors and offer training to make them become more proficient.

The impact of mentoring on recruiting physician-scientists to pursue an academic career was assessed in a survey about career development of subspecialty fellows and junior faculty in U.S. and Canadian pulmonary and critical care medicine and neonatology divisions.<sup>7</sup> Results compiled from one study showed that both fellows and junior faculty gave the highest rating to a mentor's availability to critique scientific work, and not to the mentor's availability to give advice about other components of an academic career. Most of the 531 respondents identified four to five persons as important mentors, including at least one mentor holding a PhD degree. Another survey of 122 junior faculty about their perceptions of mentoring found that fewer than half of them felt adequately mentored.<sup>6</sup> Thus, all junior faculty may benefit from improved mentoring. However, although mentoring is perceived to be important in an academic career, a recent review concluded that the evidence to support this perception was not strong.<sup>8</sup>

### Mid-academic career

Faculty members who have progressed well into mid-career may not seem to need further advice or guidance, but changes in circumstances and professional interests may be unnoticed and remain undetected until something unexpected occurs.

A desire to change career focus may affect even the most successful faculty person at the peak of prominence. Several examples illustrate the spectrum:

- A top clinical investigator wishes to switch into more departmental administration or into dean's office affairs
- A successful general internist, who is well published in evidence-based medical research, wants to fulfill an unrequited desire to train as a proceduralist and enter a demanding subspecialty fellowship
- A physician-scientist with good success in basic research, but whose likelihood of achieving tenure is uncertain, decides to leave a medical faculty and seek a different career path at the NIH in extramural program management.

Others may switch to industry, seek an administrative position in a medical society, or join an editorial office. Excellent, but very busy, clinical faculty may opt to leave for private practice, and a few may even choose to decompress a heavy clinical caseload into more manageable time and effort by seeing only selected patients in a "boutique" practice for retainer fees.<sup>9</sup> Thus, at mid-career some faculty dropout is inevitable. Key contributing factors are anxiety about continuation of research grant support, becoming overextended, bitterness about academic fairness, or developing a sincere desire to change direction and do something different. At this point, what can a savvy mentor offer to disillusioned faculty, particularly those in research tracks, to prevent them from abandoning academics? Perhaps nothing, if the decision has been made and is irrevocable, but the mentor must continue to be supportive and encouraging.

For faculty who are physician-scientists, a mentor must offer realistic advice about how to balance all the academic demands and still find the time to remain active in research. Maintaining research funding, building a research team, remaining on the "cutting edge," publishing in high-impact journals, and attracting trainees are important issues. As the NIH budget decreases and grant pay lines are lowered, obtaining federal funding is becoming more difficult. This pressure is causing more medical center investigators to weigh alternatives. To counter these pressures and the draining away from faculty positions, a mentor might petition a division chief or other administrative leaders to use discretionary funds to sustain research productivity during a period of grant application resubmissions. While becoming a "Young Turk" by election to the American Society of Clinical Investigation is no longer the mandatory scientific attainment that this society and others like it signaled in the past, this recognition may help with early promotion in the academic research track and indicate tenure potential. A mentor should make certain physician-scientist faculty are nominated for appropriate professional recognition.

A mid-career faculty member may try to take on administrative duties prematurely. Receiving a leadership position early in a career can be tempting. Some will want to position

themselves for senior administrative leadership by pursuing an MBA or other advanced leadership training. These strategies are often encouraged by many institutions and some institutions consider them a requisite for departmental or school leadership. The goal should be supported, but timing needs to be considered. Such extra educational pursuits might be better undertaken earlier in a career when other responsibilities were less.

Mentors must also be aware that faculty members may be diluting their chances for recognition by the home institution by excessive travel. Too much traveling to present research, to do consulting, and to attend meetings can hurt an academic career, even if the extra income from honoraria seems important. Although it is exciting to be in demand, peripatetic faculty members can get distracted, lose research focus, or fail to maintain their medical skills. Lack of personal availability to see patients can cause poor continuity of medical care and can require other colleagues to pick up the slack. This often causes resentment and can affect morale in the department.

A mentor, while cautioning about some of these common pitfalls, might prefer to concentrate on urging the faculty member to maintain a successful clinical research career. Ways to collaborate with colleagues in a less competitive or intense local environment or to seek new scientific partners might be suggested. Taking a short, focused sabbatical to learn new research techniques is often desirable and perhaps a necessity for any investigator. Creeping clinical demands often have to be revisited. Clinical duties can often be better organized to create periods of unfettered time to think about research, write new applications, or assemble data, and write papers. Seeking a different academic job, which might involve a faculty promotion as an inducement, might seem to be either a solution or an escape. A promotion would be a positive, as would more money and space, yet many deterrents must be considered, such as the downtime of getting research started at a new place, and the effect on other careers in the family. This prospect of going elsewhere usually needs the mentor's best advising effort. A mentor can be helpful in working through any of these scenarios that can snare mid-career faculty.

### Later stage

The reality of attaining senior faculty status and the decisions it prompts require yet another perspective. Good health, continued vigor, joyful enthusiasm, confident self-image, new interests, and keeping up with developments in one's field may delay the inevitable. Except for restrictions on holding certain administrative leadership positions, age is not a determinant in forcing retirement in academics or research. However, overstaying in a position can be a problem. Either or both colleagues and family members should give the word; unfortunately, they may not. A tough and frank mentor may be needed. Retirement can offer the prospect of many things

that have been postponed, such as pursuing new educational interests, returning to neglected hobbies, traveling, or participating in community service and helping others. Continuing some medical and educational activities may be feasible. For example, one may continue to teach as a preceptor in physical diagnosis courses. Others give back to the community in different ways. Volunteering in a free medical clinic is a wonderful experience for many, especially for retired physicians.<sup>10,11</sup> A final piece of advice: stay active and engaged, and cultivate a mentor whom you respect and who understands you. One is never too old to be a mentor or need one.

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