

# Mentoring Young Academic Surgeons, Our Most Precious Asset

Wiley W. Souba, M.D., Sc.D., MBA<sup>1</sup>

*Department of Surgery, Massachusetts General Hospital, Harvard Medical School, Boston, Massachusetts 02114*

Submitted for publication January 13, 1999

Picture the following. It is late June and the new surgical interns have just started on the service. At one of the orientation sessions, the program director makes the following remarks: "This is a tough program but surgeons have to be tough. There is no room for mistakes—we cannot afford to have patients die. We will monitor your progress on a monthly basis to be certain that you do your job by the book and that you do it well. If you can't cut it we will find someone who can—we had 500 applications for six positions this past year."

In another city miles away, a second program director addresses a different group of new surgical house officers. "We are here to help you become the best you can be," she says, "and we recognize that excellence is not created overnight. While we have high expectations of you, we know that each of you will make mistakes in the months ahead. Together, we will try to learn from these mistakes so that, whenever possible, they can be avoided in the future. One of our primary goals is for each of you to develop greater initiative, independence, and self-confidence. We measure the success of our residency by both the professional and personal quality of the surgeons that complete the program."

Based on the above dialogues, which program is more appealing to you? Which scenario best represents the personality of training program in your department? In the long run, which program is likely to produce better surgeons?

Power, control, and subservience rule the first interchange between faculty and young trainees. In marked contrast, the second exchange is governed by trust, commitment, and empowerment. It describes the kind of environment in which we would all like to work. It embodies many of the essential characteristics of mentoring.

Presented at the Annual Meeting of the Association for Academic Surgery, Seattle, Washington, November 18–22, 1998.

<sup>1</sup> Address correspondence to author at Division of Surgical Oncology, Massachusetts General Hospital, Cox 626, 100 Blossom St., Boston, MA 02114.

## WHAT IS MENTORING?

Used in the most inclusive sense, a mentor is someone who takes a special interest in helping another person (a mentoree<sup>2</sup>) develop into a successful person. Mentors come in all shapes and sizes—they can include parents, teachers, clergy, friends, and work associates. Traditionally in academic surgery, mentoring has been thought of as a formal process whereby an older, more experienced member of the department taught a handpicked younger member the tricks of the trade. Mentoring brought to mind a senior surgeon who took a gifted tenderfoot under his wing, guided him, and sponsored him, often in preparation for a promotion or a particular job. As is sometimes the case today, these senior people were not infrequently interested in preserving their own agenda and power base; what better way to do it, they reasoned, than have their man at the helm—a man they could influence if not control (after all, he owes me everything)—and a helm with which they were very familiar. Today, this conventional role, which has been spurned for displaying favoritism and often resulting in an unfounded advancement for the fair-haired boy, has fallen out of favor. While many senior surgeons have a favorite son, they are careful not to be too obvious about it.

Relationships between teacher and pupil or sponsor and protégé can be categorized as a function of the formality of the association, the length of time it exists, and the nature of the relationship. A worthy mentoring relationship is infrequently short-term—it takes time to develop. Similarly, the majority of exceptional mentoring relationships are, with time, relatively informal. Mentors have resources (time, energy, power, knowledge, experience, access to the political battlefield, physical assets)—to the extent that they share them tells us something about the degree to which they value the mentoree's development. Mentoring can be defined as a

<sup>2</sup> The term mentoree (or mentee) can be used to designate the person being mentored. It is synonymous with protégé, another term used frequently to denote the mentor's apprentice or pupil.

fundamental and vitally important form of human development where one person invests time, energy, and personal know-how in helping another person grow and improve to become the best that he/she can become [1].

Although the concept of mentor in a department of surgery is often equated with faculty adviser, there are fundamental differences between mentoring and advising. An adviser's job is to offer advice and provide counsel—the dialogue between the adviser and the resident is often unidirectional and perhaps formal. The interchange may occur only once—the resident does not necessarily view the adviser as a role model. Mentoring, conversely, involves a personal as well as a professional relationship, one that develops and grows over an extended period of time—the mentor is invariably an important role model for the mentoree. Mentors are people we look up to; they are those individuals we emulate and want to be like. They embody many of the qualities we most admire and would like to possess ourselves.

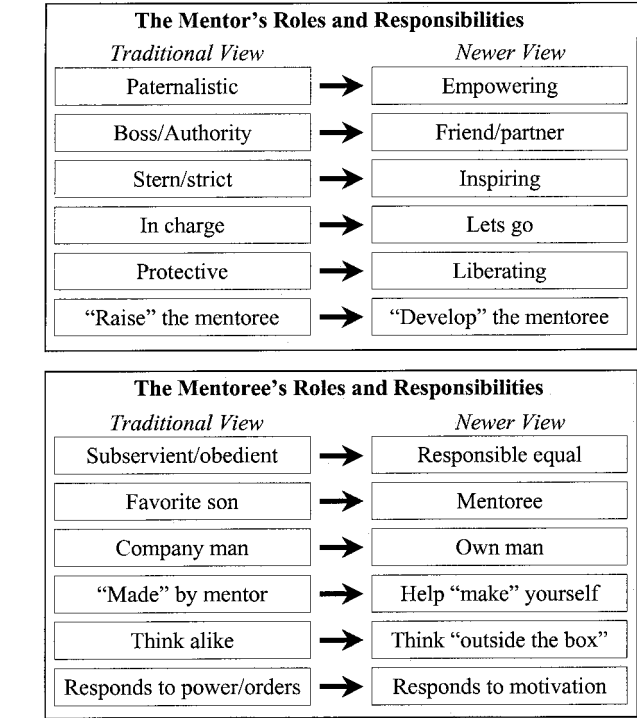
The mentor–mentoree relationship is a two-way street based on trust and commitment. Our perception of the ideal arrangement has changed over the years. This changing perception has evolved from an improved understanding of how mentoring best works to foster the development of the mentoree while providing fulfillment (and therefore growth) for the mentor (Fig. 1). It is now apparent that mentors have a set of responsibilities and roles that are fundamental to a successful mentoring relationship. The older view of mentors as paternalistic, authoritarian, strict, and protective has shifted to one that looks upon mentors as empowering, inspiring, and liberating. Similarly, the traditional view of the mentoree as a subservient favorite son has changed to one that views the mentoree as a responsible equal whose job it is to acquire, over time, independence and self-assurance.

MENTORS WEAR MANY HATS

Mentors don many guises—they must learn to be cast in multiple roles. The specific hat they wear with a particular mentoree depends on the needs of that individual and the situation at hand. Surgical residents vary tremendously in the amount and type of attention, advice, information, and support they require. A skillful mentor understands and cherishes this variety and is approachable, available, fair, and nonjudgmental.

Adviser/Counselor/Consultant

In an advisory role, the mentor essentially provides advice and offers counsel. He serves as someone the surgical resident can bounce things off of—he may provide a reality check or even play the devil's advocate. While it is tempting to want to solve your mentoree's problem for him, it is best to let him resolve it, as this approach fosters independence and self-reliance. The down side to



**FIG. 1.** Changing views of mentor and mentoree roles and responsibilities. This shift has evolved from an improved understanding of how mentoring best works to foster the development of the surgical resident. The older view of mentors as paternalistic and domineering has transitioned to one that looks upon mentors as empowering and enabling. Similarly, the traditional view of the mentoree as the obedient "fair-haired" boy has changed to one that views the mentoree as a responsible equal whose job it is to acquire, over time, initiative and independence.

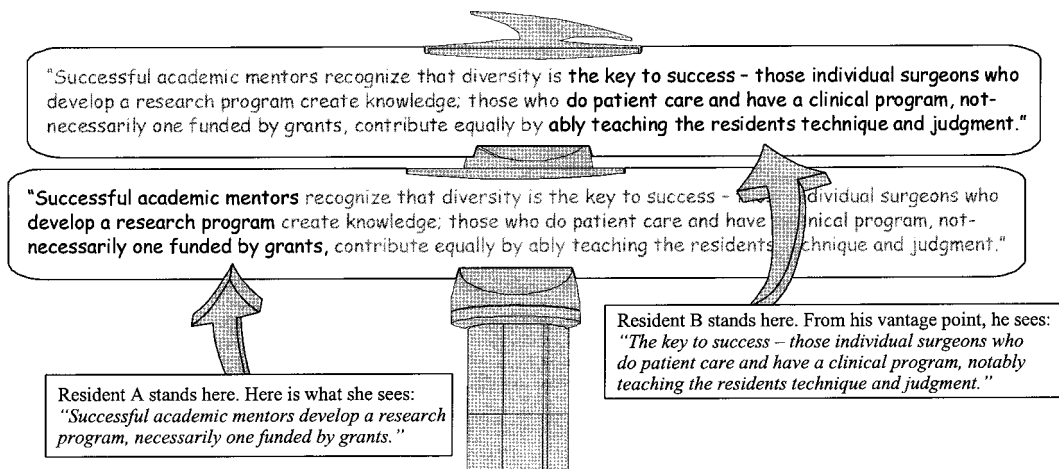
giving advice is that most of us assume we have superior understanding and knowledge related to the mentoree's dilemma. In giving advice it is best to listen carefully to the resident's problem and then provide feedback and ideas that he can use to craft a solution. Most surgical residents are independent and confident—they do not want our advice as much as they value our experience and special insights into things.

Friend

In long-term relationships, friendships invariably develop. As the mentor and mentoree naturally become fond of one another and grow attached, it is important that the mentor be able to distinguish between favoritism and friendship. Periodically, the faculty surgeon may have to remind the resident that impartiality is required in providing a fair and honest performance evaluation. This is often not easy to do. Objectivity, however, is essential for identifying areas for improvement and is clearly in the best interest of the trainee. If you sense that a mentoring relationship that you are involved in has become too chummy, you are probably not alone.

*A sign in the department of surgery reads,*

"Successful academic mentors recognize that diversity is the key to success – those individual surgeons who develop a research program create knowledge; those who do patient care and have a clinical program, not necessarily one funded by grants, contribute equally by ably teaching the residents technique and judgment."



**FIG. 2.** A sign in the hall outside the chief's office cannot be seen in its entirety from across the room because intervening walls obscure it. Only the left side of the sign can be seen from the right side of the room and vice versa—this markedly affects the sign's message. Adept mentors try to understand how mentorees view their environment—then they clarify or adjust this perspective so that the actions that follow lead to the desired outcome. The moral: What we do depends on what we see, which in turn depends on where we stand.

*Agent*

As a mentor, you are your mentoree's representative and advocate. It is your responsibility to support him, to go to bat for him, and to be there for him. As his agent, you should be active in helping him secure a position after residency, whether it be a fellowship or a job as a university-based or community-based surgeon. Some mentors come to depend on those they have taken under their wing; there is nothing wrong with this as long as their dependence does not spill over into possessiveness—the professional development of the mentoree is to be fostered, not stunted. If a tremendous career opportunity presents itself, the exceptional mentor will support the mentoree's choice to move on, recognizing that while the umbilical cord may be cut, the father-son bond will always remain intact. Severing the umbilical cord is a required step in mentoree self-actualization—at some point, the trainee must fly alone and begin the process of becoming a mentor himself.

Mentors must also be careful not to rescue their mentorees when a bail out is not appropriate. Some mentors have a tendency to do this—they side with their mentorees when the facts indicate otherwise. For example, getting help for the resident who has a tendency to be verbally abusive is appropriate—covering up the problem is not. Rescuing the resident, or attempting to take over and solve a predicament, is unlikely to be helpful in the long run.

*Teacher/Helper*

Mentors teach in a variety of ways: in the operating room, during teaching rounds, or by stimulating a re-

search fellow to do a literature search on a particular subject. Equally important, mentors can act as special helpers by enabling residents see a different side of an issue or view things from a different point of view. Often, these special insights and perspectives cannot be acquired through customary networks. By helping us fill in these comprehension gaps, mentors contribute to our knowledge and understanding.

Good mentors in academic surgery help surgical residents in very practical ways: by giving timely advice, by setting an example, by going out on a limb, by plugging knowledge gaps, by providing resources, by sharing insights and perspectives, by acknowledging weaknesses and vulnerabilities, by acting as a source of inspiration, and by teaching a way of living that bring into balance one's professional and personal life.

*Coach*

Coaching is a way of working with young people that leaves them more competent and fulfilled so that they are better able to contribute and add value. In coaching surgical residents, a good mentor knows when to be a cheerleader, when to call a time out, and when to let the resident call the plays. Coaching is not merely telling the residents what to do; rather, it is helping them examine what they are doing in the light of their intentions and goals [1].

What we do depends on what we see, which in turn depends on where we stand (Fig. 2). Each of us sees things through a different lens—as a coach, our job is to try to understand how our mentoree views her environment (how she interprets reality) and then clarify

or adjust this perspective so that the actions that follow lead to the desired outcome. As faculty members who coach, we often do this by offering a new context that allows the resident to make new observations or see things in a different light. The intern who understands hypovolemic shock as a cellular perfusion problem rather than an arterial pressure problem is much more likely to use urine output (rather than blood pressure) as a resuscitation guideline.

Great coaches encourage risk-taking; they understand that their players need them more when they lose than when they win. They free their mentorees so they can do productive work—the hope is that the mentoree will not only do things right, but will also do the right things.

### *Manager and Leader*

One of the challenges for mentors is knowing when to manage and when to lead [2, 3]. Take the junior faculty surgeon who has secured extramural funding and has developed his own independent research program. In his role as a manager, he must learn how to cope with complexity—the complexity of multiple research agendas, personnel issues, and new molecular techniques he hopes to bring into the lab. In his role as the team's leader, he must cope with change: Where do we want to be in 5 years? What new research directions should we pursue? What new funding strategies should we initiate? As a lab manager he must plan and budget, organize and staff, and maintain order, harmony, and some degree of predictability—as a leader he must align people, motivate them, and inspire them to think “outside the box.” Effective mentors recognize that some degree of tension is critical to enhance the performance of their mentorees. They gently push the residents to operate outside of their comfort zone by motivating them and inspiring them.

### WHAT MENTORS DO

The best mentors in academic surgery are totally committed to the professional and personal growth of their mentorees. Their conduct reflects this goal—they want their mentorees to become the best they can become. Seven qualities determine their credibility as mentors (Fig. 3). Each of these qualities alone is not sufficient to be a great mentor, but each is necessary.

#### *Motivate*

Mentors are invariably effective at motivating people, although the styles they use to invigorate and inspire vary considerably. Some mentors are cheerleaders, others quietly show us the good things in life: the value of hard work and sacrifice, the joy of giving, and the importance of discipline. While a variety of approaches have been shown to work well in motivating people, there are some that will predictably result

### *What Mentors Do*

#### Motivate

#### Empower and encourage

#### Nurture self-confidence

#### Teach by example

#### Offer wise counsel

#### Raise the performance bar

#### Shine in reflected light

**FIG. 3.** What mentors do. Seven qualities (behaviors) determine a mentor's credibility. Each of these qualities alone is not sufficient to be a great mentor, but each is necessary.

in failure. We have all known individuals (who view themselves as mentors) who motivate using threats, fear, or bribery. They are not the kind of people we want to emulate—the only value of their behavior is that we can learn from it and avoid it. Weak mentors are selfish with their time, are restrictive rather than liberating, do not “walk the talk,” and fail to inspire us to want to be the best we can be.

In motivating young people, truly outstanding mentors in academic surgery point out the gratification derived from being connected to something larger than themselves. It is this understanding, i.e., that there is no smaller package than an individual wrapped up entirely in himself, that motivates mentors to give to others. It is this insight that stimulates mentors to give freely, often asking for nothing in return. Great surgical mentors are able to share with the residents their awe at the complexity of the human body, their admiration for science, and their acceptance of the unknown. When human tragedy strikes, they display compassion and vulnerability rather than searching for an answer to explain why suffering exists.

Mentors help by removing obstacles, but only after the mentoree has made a legitimate and convincing attempt to overcome the hurdle herself. Spoon feeding eventually leads to subordination and an inability to act independently. The highly motivated surgical resident will try to solve a problem on her own before asking her mentor for help. Independence and self-confidence come from failing and trying again. Mentors help their mentorees learn that until they spread their wings, they will never know how high they can fly.

#### *Empower and Encourage*

One of the most rewarding aspects of the mentoring expedition involves the mentor and mentoree working together to discover and refine the mentoree's innate but latent abilities, skills, and talents. Here, the mentor encourages the mentoree to take risks to fully develop his potential. Indeed, when people are asked to describe exemplary mentors, they consistently talk



about people who have their best interests at heart and are able to bring out the best in them, a process that generally allows them to accomplish more than they believed was possible. This process of discovering and developing latent talents requires empowerment.

Great mentors empower their mentorees in an effort to build their self-confidence, promote their autonomy, and encourage their freedom of expression. They do this in such a way that mentorees recognize the value of humility and the offensiveness of arrogance. Mentors recognize that power, like money, works best when it is shared and circulated. They realize that in sharing power and decision-making their mentoree will often fail or falter—a fumble that in all likelihood would have been avoided if the mentor had carried the ball himself. However, the very nature of superb mentoring in academic surgery requires that mentors empower the surgical residents so they can make mistakes—with the proper guidance, the mentoree will learn from these mistakes and grow.

### *Nurture Self-Confidence*

Much as they motivate and empower, mentors nurture their mentorees with the goal of building self-confidence. The prospects they have for their mentorees are high—these expectations are powerful because they are the frames into which people fit reality [4]. The mentor's primary objective is the development of the mentoree's highest potential. Simultaneously, the goal is to help the mentoree see the rewards of mentoring so he can do the same for others.

### *Teach by Example and by Filling in Gaps*

Mentors teach by modeling the way. They set an example by behaving and conducting themselves in ways that are consistent with their values and beliefs. We measure them, in part, by the consistency of their actions with their words. As our role models, mentors show us the value of making a commitment—a commitment to a set of core values and a core purpose. This commitment is unwavering and is not exchangeable for financial gain. "Partial commitment is dangerous," said Tom Osborne, former Nebraska football coach [5].

Exceptional surgical mentors successfully balance change and continuity, a skill that requires discipline and is closely linked to their ability to develop young people. One of the truest tests of a mentor's commitment to a mentoring relationship is what he pays attention to and what he does. If mentors are truly committed to mentoree development, their deeds will show it. They will spend time with the residents listening to their opinions and questions, they will allocate energy into removing obstacles so the young people can do real work, and they will keep their promises.

Mentors play a key role in training their mentorees using their savvy and judiciousness. They fill in gaps

and provide insights that are outside the realm covered by traditional educational methods. They explain how the internal environment works, including the political dynamics—what makes the department tick, who the major players are, and where the landmines are.

### *Offer Wise Counsel and Guidance*

As valuable reservoirs of guidance and support, mentors assist their mentorees by sharing information, being sympathetic in critical situations, confronting negative behaviors so the mentoree can work on correcting them, and offering career advice. As a source of wisdom, mentors bring seemingly simple, mundane situations and experiences to life, framing them in ways that have long-standing value, meaning, and relevance. They are capable of articulating the critical ideas and issues that make situations memorable and meaningful [6]. They broaden our discernment, insights, and viewpoints.

One of the distinct qualities of superior mentors is that they are effective listeners. Most people know that listening is important; far fewer are good listeners. Our descriptions of great listeners are unmistakably earnest: I felt like my problem was her highest priority and that she was totally committed to helping me solve it. The attending surgeon's goal in listening to a resident's problem is two-pronged: to understand the resident's dilemma and to determine the essential cause of the problem. As an interested listener, the mentor gives the resident his undivided attention—if he is simultaneously shuffling papers on his desk, he will be viewed as disinterested, as if the resident's problem is not important. Listening demonstrates respect for the resident's viewpoint—it builds credibility and strengthens the mentoring relationship.

### *Raise the Bar*

A critical part of mentoring involves setting high standards. Successful mentors have high expectations of themselves and their mentorees. If we expect our residents to perform well, they probably will. If we expect them to fail, they most likely will.

Great surgical mentors raise the bar because they have the best interest of the resident at heart—they want her to reach her full potential. Their expectations are lofty but realistic—they recognize that the resident that achieves every goal he has set probably needs a readjustment of the performance bar. "If you don't shoot for the moon," one mentor said, "you will never get there." At the same time, superb mentors know when the resident has been stretched enough. Their motto: Distend, but don't perforate.

### *Shine in Reflected Light*

Penn State football coach Joe Paterno once said, "I've never been in a game where there wasn't enough glory for everybody" [5]. Paterno is viewed by his players as a

great mentor and his comment is pertinent to academic surgery. A critical test that differentiates ordinary from exceptional mentors has to do with the limelight. Great mentors do not worry much about who gets the credit—in fact, many of them prefer to avoid the spotlight. They are more interested in the growth of their people than they are in publicity, appreciation dinners, speeches, and awards. They would rather bask in the success of the people they have mentored, quietly reflecting on the personal satisfaction they have acquired from giving unselfishly of themselves to others. Often without even being aware of it, great mentors in academic surgery shine in the light that reflects off the people they have trained. The very best mentors never fail to pass the ultimate acid test: they genuinely want their people to do better than they have done.

### CHOOSING A SURGICAL MENTOR

The surgical residency provides plenty of opportunities for establishing mentoring relationships. One of the most powerful forms of mentoring can be the one that develops between the attending surgical scientist and the resident entering the laboratory. In choosing a laboratory, the resident should consider both the mentor and the research environment [7]. It is important to recognize that a great mentor alone will not guarantee academic success—neither will a stellar laboratory without leadership.

With intensifying pressures to generate clinical revenues, most academic surgeons find themselves faced with escalating time constraints. This creates a dilemma for the surgical scientist who has an active laboratory. Time, which is one of the most valuable resources that a mentor brings to a mentoring relationship, becomes a precious commodity. When there is insufficient time to get all the work done, something eventually gives. The risk to the laboratory effort is that it will suffer from inadequate direction and guidance; the risk to the resident is that the intended mentoring will lack in quantity and quality.

There are ways to help plug these gaps. In our laboratory, we have several full-time scientists who play a crucial role in teaching the surgical residents how to design studies, master techniques, interpret results, and write a manuscript. The laboratory experience also creates an excellent opportunity for both scientific dialogue and career-choice discussions. Peer mentoring, as opposed to hierarchical mentoring, can be a valuable means of compensating for the enormous time constraints that many senior mentors are subjected to in today's environment [8]. Surrogates can be invaluable—however, when they are used, the mentor (the individual the resident initially sought out) must be certain to meet regularly with the trainee. One-on-one time becomes even more critical.

There are no hard and fast rules that guarantee

success in selecting a mentor—there is no algorithm that will ensure the perfect experience. There are, however, a few guidelines that all residents entering the lab should consider.

#### *What Do I Hope to Gain from the Mentoring Experience?*

Most residents who embark upon a research experience during their residency do so without having had much formal exposure to the scientific process in the past. Ask them what their goals are and you will get a melange of answers. Some will judge their success on the number of papers they publish; others are more interested in learning study design; some will admit they are looking for a way to secure a fellowship position [7]. More fundamentally, however, most of the young people want to be turned on so they can flourish.

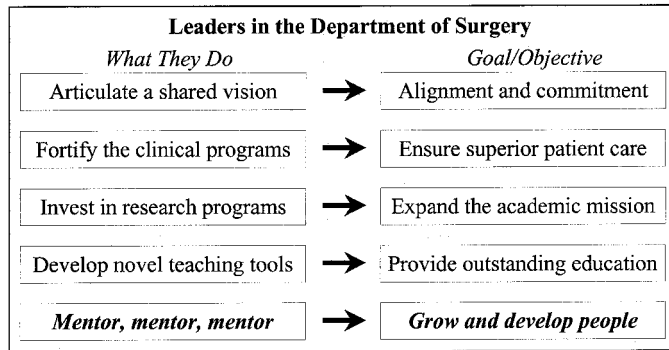
While traditional indices (e.g., area of interest, type of research being done in the lab) should be considered when choosing a laboratory, the resident should look for an experience where he can take another step in self-actualization. If this is your first serious exposure to the lab, focus on the journey (what you learn, how excited you get), not just the destination (e.g., a certain quota of papers you hope to publish, a fellowship you want to nail down). Do not be in a hurry—you have plenty of time ahead of you to become a first-rate surgical scientist. Try to find out if research is truly your cup of tea; realize that research does not always work the way you want it to—it is frequently as frustrating as it is exhilarating. Developing an independent laboratory research program is only one way of becoming a successful academic surgeon.

#### *What Is the Mentor's Track Record? What's the Word on the Street?*

Past mentoring effectiveness is a reliable indicator of future performance. Surgical residents should be encouraged to talk to past mentorees that have spent time in the mentor's lab—these people tell it like it is. While some residents play the game of choosing the politically correct lab, most look at more robust criteria in making their selection. They want first-class science but they also want a first-class mentor. Working under someone's tutelage just because he is a nice guy does not cut it anymore.

### DIVIDENDS OF MENTORING

In the past, mentoring was often viewed as a one-way street, with the mentor giving and the mentoree receiving. This top-down relationship was often based on the assumption that the mentoree was not in a position to do much more than respond in a dutiful and appreciative manner [6]. Today, mentoring works best when it is a true partnership—under such an arrangement both parties benefit. Although the mentor as a rule has greater experience, insights, and wisdom, every relationship pro-



**FIG. 4.** Much as leaders in the department of surgery spend time and energy on building the clinical and academic missions, they should emphasize the growth and development of the young people.

vides an opportunity to grow and to improve mentoring skills.

Mentoring is essential if our young people are to discover their latent talents and abilities. Only when these gifts are discovered can they be developed and refined so the mentoree can work toward realizing his full potential. A philosophy of liberating people to reach their full potential is in the best interest of the trainee and the department as a whole. In a competitive environment where time is one of our most valuable commodities, it is critical to recognize that departments that build mentoring skills perform better. Mentoring is a core competence of any outstanding department of surgery. Goleman [9] notes:

It has been repeatedly shown that coaching and mentoring pay off not just in better performance but also in increased job satisfaction and decreased turnover. But what makes coaching and mentoring work is the nature of the relationship. Outstanding coaches and mentors get inside the heads of the people they are helping. They sense how to give effective feedback. They know when to push for better performance and when to hold back. In the way they motivate their proteges, they demonstrate empathy in action.

### BUILDING SUPERIOR MENTORING SKILLS IN THE DEPARTMENT OF SURGERY

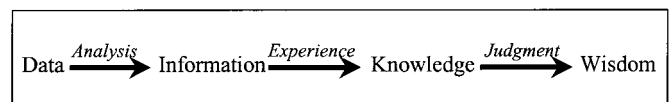
How do we build superior mentoring skills in a department of surgery? The process begins with understanding what mentoring is and recognizing its value to the department. Much as leaders in the department of surgery spend time and energy on building the clinical and academic enterprises, they must also emphasize the growth and development of the young people (Fig. 4). To the extent that mentoring relationships between the faculty and residents are emphasized, the department is more likely to resemble the second, rather than the first, context described at the beginning of this paper.

Mentoring goes beyond obligatory relationships. It is based on trust, commitment, and unselfishness. At the core of being a mentor is a basic understanding of people—what makes them tick, what drives them, what

gives their life meaning and fulfillment. Mentoring is fundamentally an affair of the heart, not the head. At its best, it is exceedingly rewarding because it exploits innate human desires—the mentoree striving to reach his potential—the mentor generously giving of himself to enable the mentoree's self-actualization and fullest development. Thus, until we can understand for ourselves what it really means to be human, we cannot become effective mentors.

Mentoring encompasses a set of skills that can be developed and enhanced [3]. The exemplary department of surgery places a premium on mentoring and embeds the learning process into its culture (Fig. 5). Experience is the single best way of learning to mentor. Through test runs, trial and error, and examining their mistakes, people develop their mentoring abilities. Accordingly, junior faculty should be given every opportunity to practice their mentoring skills—much as they are provided with feedback regarding their professional development, their mentoring and leadership abilities should also be evaluated. Observing how others develop junior faculty is also critical to learning how to become an effective mentor—what we notice provides us with a template of what works and what does not. Formal seminars, workshops, and programs can help integrate and solidify essential mentoring behaviors. Creating a checklist of actions for each party can help to ensure a successful mentoring relationship (Table 1).

Some people have the capacity to see the raw, latent potential in others and the desire to help fuel that potential so it can grow, mature, and blossom. Because these people are in the business of maximizing personal potential, they become our mentors. As our mentors, they help us become the best we can become. They help us appreciate the value of sharing the potential they helped cultivate in us with others around us; they inspire us to want to give back—not out of guilt or debt, but out of gratitude, decency, and humility. Great mentors hope their trainees will do better than they have done—they want them to exceed their expectations, soar to new heights, and set new records. In the process, they want their mentorees to learn to be unassuming. Modesty is a universal quality of outstanding mentors.



**FIG. 5.** Surgical residents are frequently inundated with data from multiple sources—the clinical laboratory, the ICU monitor, the patient's physical findings, and the radiographic subtleties. Surgery departments with a strong emphasis on mentoring produce residents with strong analytical skills—this capability improves their ability to convert unusable data into meaningful information. With time and experience the information they have acquired is refined and transformed into knowledge. Superior mentors recognize that the attainment of wisdom is a life-long process that requires discerning judgment and the removal of prejudice.



TABLE 1

Building Superior Mentoring Skills: Action Items for Senior Faculty Mentors and Their Junior Faculty Mentorees

Senior faculty can and should	Junior faculty can and should
Make themselves available for casual discussions about informal issues such as: What makes the department tick and run? How do you get things done around here?	Engage senior faculty in discussions about academic surgery, its political arena, and the "rules of the game."
Ask junior faculty colleagues: How are things going? What new challenges have come up in your work? (listen attentively to their responses).	Solicit feedback from potential mentors on specific responsibilities and activities; seek out advice about particularly difficult situations.
Share their own stories as to how they reached their current position, the obstacles they faced along the way, and how they overcame those challenges.	Initiate informal conversations with senior faculty mentors: How did you surmount the difficult hurdles you encountered? How did you balance priorities in your life?
Encourage junior faculty to take risks and explore new learning opportunities.	Offer to participate in experiences that afford the opportunity to learn and develop mentoring skills.
Encourage junior faculty to reflect on their experiences and share key defining moments with their peers and the residents.	Provide senior faculty mentors with input regarding specific areas where mentoring for junior faculty could be improved.

While some of the tenets put forth in this paper are based on my experiences, the mentoring “hats” discussed closely parallel the developmental functions that have been demonstrated empirically in other lines of work [10]. In academic surgery, as in other professions, mentoring works best when the gifts of time, wisdom, and self are free—in other words, when the mentor expects nothing in return. Under these circumstances, it is somewhat ironic that the mentor usually discovers that the personal return is titanic—the subsequent meaning and fulfillment that the mentor feels are difficult to describe. For this reason, mentoring can be one of the most powerful aspects of the academic surgeon’s professional life. It is perhaps the major reason why our young people choose a career in academic surgery. When the residents reflect on the special relationships that they were a part of during their training, they invariably feel fortunate and indebted—sometimes they are moved and humbled. When this happens, they genuinely want to give back. They, too, want to become great mentors. When they do, new leaders emerge, and the scales that measure excellence are tilted in favor of the kind of academic surgery department of which we all want to be part.

ACKNOWLEDGMENTS

This work was based on a presentation by the author at the Annual Meeting of the Association for Academic Surgery in Seattle,

WA, November 20, 1998. The author appreciates the helpful comments of Professor Kathy Kram, Department of Organizational Behavior, Boston University School of Management (Boston, MA).

REFERENCES

1. Flaherty, J. *Coaching*. Boston, MA: Butterworth-Heinemann, 1999.
2. Souba, W. W. Reinventing the academic medical center. *J. Surg. Res.* **81**: 113, 1999.
3. Souba, W. W. The job of leadership. *J. Surg. Res.* **80**: 1, 1998.
4. Kouzes, J. M., and Posner, B. Z. *The Leadership Challenge*. San Francisco, CA: Jossey-Bass, 1997.
5. Hendricks, W. *Coaching, Mentoring, and Managing*. Franklin Lakes, NJ: Career Press, 1996.
6. Shea, G. F. *Mentoring*. Menlo Park, CA: Crisp, 1997.
7. Souba, W. W., Gamelli, R. L., Lorber, M. I., et al. Strategies for success in academic surgery. *Surgery* **117**: 90, 1995.
8. Kram, K. E., and Hall, T. Mentoring in a context of diversity and turbulence. In E. E. Koosek and S. A. Lobel (Eds.), *Managing Diversity: Human Resources Strategies for Transforming the Workplace*. San Francisco, CA: Blackwell, 1996.
9. Goleman, D. What makes a leader. *Harvard Business Rev.* **Nov/Dec**: 92, 1998.
10. Kram, K. E. *Mentoring at Work: Developmental Relationships in Organizational Life*. Landam, MD: Univ. Press Am., 1988.