

The Importance Of Mentoring In Academic Medicine And Orthopaedics

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Introduction

The importance of mentors and mentoring programs in the advancement of women and minorities in industry, academics, and medicine has become apparent over the past 30 years. Several recent articles address the benefits in medical institutions and among academic women/minorities when formal programs are founded. This article briefly outlines the evolution of mentoring, gives suggestions on how to mentor, who should mentor whom, and the stages of mentor relationships. The final paragraphs review mentoring programs specific to the field of orthopaedics.

Evolution Of Mentoring In Medicine

Mentoring in the field of medicine came of age over the past two decades beginning with the publication of *The Seasons Of A Man's Life*, (21), an exploration of adult development. A senior experienced person guides a younger person and teaches him specific skills, facilitates entry and advancement in his profession, and introduces him to important men. The mentor provides advice, encouragement, and constructive criticism while serving as an example for their protégé to emulate.

Levinson's work was followed by a wave of articles and books on the subject of mentoring. With the women's movement, it became painfully clear that the lack of a mentor resulted in stagnant progress on the ladder to boardrooms. Inversely, women mentored by men senior to them in their professions secured faster advancement than other women did.

In academic settings, women with mentors publish more articles, have enhanced employment opportunities, more confidence in their abilities, and more satisfactory careers. Mentoring continues to be pertinent to all professionals. Either the absence of appropriate mentoring or presence of inappropriate mentoring

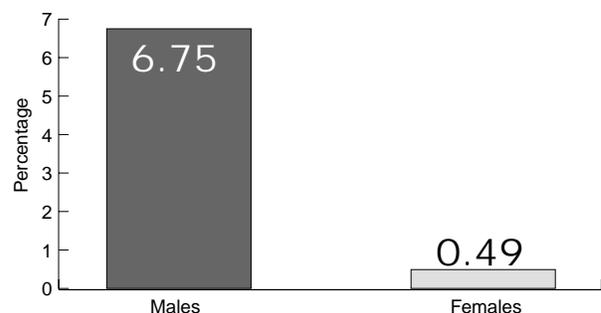
contributes to the persistent glass ceiling first described in the late 1980s. (13.17.24.26)

Industry has led the way in educating both potential mentors and mentoring candidates about the benefits of mentoring. Medicine is now following suit.

The limited number of women and minorities in senior positions coupled with the cloning tendency of mentors to select protégés similar to themselves can leave women and minorities without the support necessary for career advancement. The critical need for mentor programs for women and minorities in academic medicine has been well established. (6.11.12.18.22.23.25)

In 1997, a steering committee of the American Academy of Orthopaedic Surgeons (AAOS) acknowledged a need for mentors for women and minority medical students and residents to decrease the barriers currently faced in the surgical specialties. (3) In addition, the Ruth Jackson Orthopaedic Society (the women's orthopaedic organization), determined that one of the reasons for the low percentage of women applying for orthopaedic residencies, despite a 43% female medical student body representation, was lack of exposure of medical students to women orthopaedists. (13) **Figure 1** shows the percentage of men who obtained an orthopaedic residency (6.75%) compared to the percentage of women (0.49%).

Figure 1. Percentage of Medical Students Obtaining an Orthopaedic Residency by Gender in 1996.



Mentors are important at all stages of training, faculty as well as students. Programs are being developed at select universities to formalize the academician mentoring process. These formal programs are sometimes designed for both men and women junior faculty and sometimes for women junior faculty only. A mentoring workshop, "Experimenting In Improving Faculty Mentoring," offered at the November 1996 American Association of Medical Colleges (AAMC) was so well attended the audience spilled out into the hallway as panelists from Stanford University School of Medicine, Albert Einstein College of Medicine, and University of Arkansas Medical Sciences related their experiences and successes with formal mentoring programs.

In response to faculty retreats and discussions begun in early 1992, Stanford Medical School developed a program to ensure retention of a young talented faculty at the institution. The discussions illuminated the serious morale problems of the entire Stanford junior faculty. A faculty mentoring program was established in the spring of 1994. Questionnaires completed in 1996 indicate general satisfaction with the program. The University of Arkansas has also established a formal mentoring program. It is currently in its second trial year.

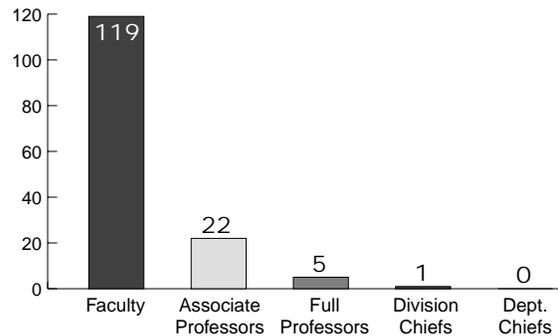
In a recent (1996) *JAMA* article (18), Linda Fried and her colleagues reviewed the Johns Hopkins University School of Medicine interventions undertaken to substantially improve women faculty career development. Fried reported on multifaceted interventions begun in 1990 to correct obstacles faced by women faculty. Inadequate mentoring was listed among other impediments such as isolation and structural career hindrances, and poor problem identification.

Interventions included a structured mentor program, changes in meeting times, and sending women to an AAMC faculty development conference. With these changes, junior women were retained and promoted with a 550% increase in the number of women at associate professor rank and a 183% increase in the number of women who indicated they wished to remain in academic medicine for 10 years. More than half of the women reported improvements in timeliness of promotions, decrease in gender bias, better information access, less isolation, and improved salary equity.

Specific to orthopaedics, statistics show that women are not advancing in academic tenure positions at the same rate as men. The 1996 AAMC Project Committee

on Increasing Women's Leadership in Academic Medicine reported a total of 119 women faculty or administrators in the field of orthopaedic surgery. (8) Of the 119, only 5 are full professors and one is a division chief. **Figure 2** summarizes the AAMC Project data for women in orthopaedics.

Figure 2. Numbers of Women in Orthopaedic Academic Positions.



The committee recommended programs to mentor women faculty, administrators, residents, and students. Since the lack of good mentoring has curtailed women from achieving tenure status at the same rate as men (6.12.18.22), it is fortunate that schools are beginning to develop formal mentoring programs. These programs benefit both women and men, and both junior and senior faculty. Women orthopaedists in the Ruth Jackson Orthopaedic Society are establishing a network of mentor volunteers for each medical school to provide consistent outreach. A counterpart program for minority students is underway as part of the newly formed AAOS Committee on Diversity.

A history of mentoring

The term "mentor" originated in Homer's *Odyssey*. King Ulysses appointed his trusted friend "Mentor" to educate, nurture, and protect Ulysses' son Telemachus. Mentor promoted Telemachus to the nation's leaders and guided him until he obtained his rightful place in the world.

Today, mentoring encompasses a broad spectrum of relationships and possibilities. The classic mentor assists with career development by guiding a mentoree through the clinical, educational, social, and political networks. (24) Mentors function as advisers, coaches, counselors, networkers, sponsors, resource facilitators, and, on occasion, role models.

Mentors can assist at all levels of development. Educators speak of mentors for young boys and girls.

Medical literature emphasizes the need for mentors in academic medicine. Both the mentor and mentoree benefit from the relationship. The mentoree gains confidence, recognition, and knowledge of the unwritten, informal rules of advancement. The mentor gains satisfaction from aiding the development of another person, a fresh outlook on projects, and a network of former mentorees to promote collaborative efforts. (19)

Women and minority students have only limited awareness of orthopaedics as a specialization choice.

Who should be a mentor?

Nancy Collins, in *Professional Women And Their Mentors*, (14) concluded that five criteria are necessary to define one as a mentor:

- Advanced status within the organization
- An authority in his/her field
- Influential
- Interest in their protégé's growth and development
- Willing to commit time and emotion to the relationship

The academic or professional level of the protégé should be considered when applying the criteria to mentoring in orthopaedics. For example, most orthopaedists can mentor medical students with respect to a goal of obtaining an orthopaedic residency, but a general orthopaedist should probably not mentor an academic orthopaedist.

Most important in the medical student/practicing orthopaedist relationship are the last two criteria: **1) an interest in the student's growth and 2) commitment of time and emotion.** Being influential and an authority are less important. The practicing orthopaedist is by definition higher on the organizational ladder than the medical student. Having influence and authority can be beneficial for the student, but overall is less important in the sphere of medical education.

Mentoring takes on the more classical aspects of showing the ropes to junior faculty in academic medicine. The "publish or perish" nature of academic tenure requires all five criteria for a beneficial alliance.

Mentoring medical students

Mentors who work with medical students need to keep a few key points in mind. First, medical students are often young and not established in the hierarchy of medicine. First and second year students have all they can handle just conquering the mass of information delivered to them.

As a result, mentors must take responsibility for establishing first contact and continuing timely meetings thereafter. This may be accomplished via a lunch meeting, through the American Medical Student Association (AMSA) organization, and in the case of female mentors, through the American Medical Women's Association (AMWA).

Mentors should invite students to follow them in their clinical practice and, if possible, into the operating room. This gives the best overview of a given practice. Medical students remember such experiences vividly and are encouraged to drudge through the onslaught of information knowing there is a light at the end of the tunnel.

Mentors should discuss research opportunities and aid students in finding collaborative projects. Mentors can facilitate collaborative arrangements by contacting the nearest medical school's orthopaedic department if they haven't any ongoing research of their own in which to include the mentoree.

Mentors can also provide students with information on residency programs through their own knowledge or developed networks.

Mentoring academic faculty

Mentoring in academic medicine more closely parallels the classic role of mentor. This is an opportunity to develop a mentor/mentoree relationship with stages of development and gradual redefinition of the relationship with time. (20)

A mentor relationship can potentially enhance the careers of both individuals involved. The phases defined by Kram begin with "Initiation," move to "Cultivation," progress to "Separation," and end with "Redefinition." In the Initiation phase, the junior faculty admires and respects the mentor, and receives support and guidance. The senior faculty provides development opportunities and can transmit his/her values and perspectives on the world to the protégé. A new phase develops as each individual discovers the value of relating to the

other. Interpersonal bonds strengthen, trust is established, advances made along the tenure track and acknowledgment of the protégé among the medical community occurs. The protégé grows in a sense of competence, develops critical skills and learns the nuances of the organization. The senior faculty benefits from empowerment. The Separation phase occurs as the protégé tests his/her ability to function with less guidance and support. A change in location may also lead to the separation phase.

According to Kram, this is a critical phase since it provides the junior protégé the ability to demonstrate independence and competence. The senior mentor demonstrates the successful development of new talent. The Redefinition phase follows as the mentor and protégé develop a friendship and a relationship based upon equal peer status. Kram developed these phases based upon managerial models, but mentoring in academic medicine follows a similar pattern.

One can find suggestions on how to mentor in many publications. An excellent review is "Academic Mentoring For Women Students And Faculty: A New Look At An Old Way To Get Ahead," written by Roberta Hall and Bernice Sandler and published by the Association of American Colleges. (16) A few suggestions from other publications follow.

Mentors should guide and provide information. This is best done by advising not directing, encouraging not disparaging, praising good work not everything, and expecting improvement. (27)

The role of a mentor is not meant to be that of an intimate or close friend, nor is a mentor the appropriate resource to address or mediate grievances or frustrations. (14)

A mentor may have more than one mentoree and a mentoree may have more than one mentor. (19)

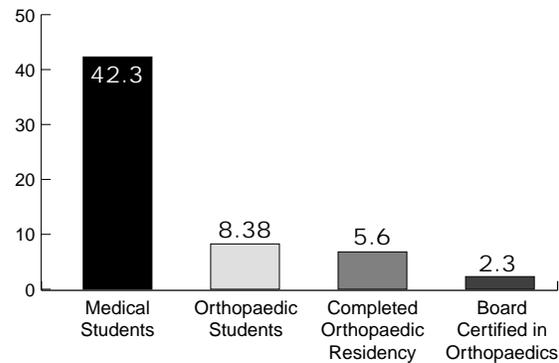
A mentor should recognize and evaluate what he/she can offer a protégé and clarify expectations. Mentor responsibilities can include advocating for the protégé, including him/her in informal activities when appropriate, and scheduling regular meetings at least once every six weeks.

Orthopaedic mentoring programs

The AAOS acknowledges that women and minorities are under-represented in its ranks. **Figure 3** depicts the

current percentages of women at different stages of an orthopaedic career, beginning with medical school through board certification.

Figure 3. Percentages of Women at Different Stages of Training.



Subcommittees and caucuses addressing this issue recognize several underlying factors. First, women and minority students have only limited awareness of orthopaedics as a specialization choice. Second, women continue to be discouraged at the medical school level. This factor is two-fold in its basis: 1) the lack of exposure to fully trained women and minorities in orthopaedics: 2) the ever-present current push of medical students into non-specialty practices.

The Academy, through its recently formed Committee on Diversity as well as the Ruth Jackson Orthopaedic Society (RJOS) are developing two mentoring networks throughout the country. The hope is that these networks will provide medical students with exposure to practicing orthopaedists who are minorities and/or women and provide help in the informal and formal process of obtaining a competitive orthopaedic residency. "Paper mentors," (19) in the form of articles entitled "How To Obtain An Orthopaedic Residency," (13) and "Guide To Orthopaedic Practices And Subspecialties," (16) are available through the AAOS and RJOS.

In conclusion, mentoring programs are an important feature of today's world of medicine. Universities across the country are developing and implementing programs to retain junior faculty and help women in academia advance at equal rates to male peers. Both the institution and the mentoree benefit from these efforts. In orthopaedics, mentor programs are underway to entice qualified women and minorities to consider this specialty. Mentoring has come of age at the close of the 20th century.

Interested in orthopaedics?

Take the next step!

If you would like to help a medical student pursue a career in orthopaedics, please contact AAOS about our unique mentoring programs

The **American Academy of Orthopaedic Surgeons** Committee on Diversity and **JR Gladden Orthopaedic Society** encourage qualified minorities and women to join this profession.

Contact: AAOS Mentoring Program, 6300 North River Road, Rosemont, Illinois 60018-4262

Phone: (800) 626-6726 • Fax: (800) 823-8025 • Email: MENTOR@aaos.org

The **Ruth Jackson Orthopaedic Society** is interested in attracting qualified women into orthopaedics.

Contact: RJOS, 6300 North River Road, Suite 727, Rosemont, Illinois, 60018-4262

Phone: (847) 698-1637 • Fax: (847) 823-0536 • Email: king@aaos.org

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