

Increasing Women's Leadership in Academic Medicine: Report of the AAMC Project Implementation Committee

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EXECUTIVE SUMMARY

AAMC's Increasing Women Leadership Project Implementation Committee examined four years of data collected from schools on the representation of women faculty and leaders, results of interviews with department chairs, and new research from other sectors on the advancement of women. With women comprising only 14% of tenured faculty and 12% of full professors, the Committee concludes that the progress achieved within academic medicine over the last 25 years is incomplete and inadequate. Few schools, hospitals, or professional societies have what might be considered a "critical mass" of women leaders, and the pool of women from which to recruit academic leaders remains small. Scientific and medical careers involve considerable personal and public investment, but the potential of most women is being wasted.

Because academic medicine needs all the leadership talent it can develop to address accelerating institutional and societal needs, this wastage is of growing not receding importance. Only those institutions able to recruit and retain women will likely maintain the best house staff and faculty. The long-term success of academic health centers is thus inextricably linked to the development of women leaders.

The Committee therefore recommends that medical schools, teaching hospitals, and academic societies focus on the following opportunities: 1) Emphasize faculty diversity in departmental reviews, evaluating department chairs on their development of women faculty; 2) Target the professional development needs of women within the context of helping all faculty make the most of their faculty appointment, including guidance for men to become more effective mentors of women; 3) Assess which institutional practices tend to favor men over women's professional development, such as defining "academic success" as largely an independent act and rewarding unrestricted availability to work (ie, neglect of personal life); 4) Enhance the effectiveness of search committees to attract women candidates, including assessment of group process and of how candidates' qualifications are defined and evaluated; and 5) Financially support institutional Women in Medicine programs and the AAMC Women Liaison Officer and regularly monitor the representation of women at senior ranks.

BACKGROUND

In 1996, AAMC approved the report of its Increasing Women's Leadership in Academic Medicine Project Committee.¹ President Jordan J. Cohen charged an Implementation Committee with prioritizing the 15 recommendations (Appendix 1) and working to advance them.

At the outset this Committee recognized that: 1) The number of women entering medical school has led to the premature conclusion that gender equity has been achieved; 2) Drawing a circle around difficulties specific to women's advancement is impossible because men and women's professional development goals and needs are more alike than different; 3) Few medical schools treat faculty as human resources to be retained and developed, thus a framework is often

lacking for improving faculty professional development in general; and 4) The paucity of research on leadership development and executive selection in academic medicine means that a framework is also lacking for understanding how best to improve women's leadership development.

But these complexities need not deter medical schools, teaching hospitals, and academic societies from further work to increase the number of women leaders. The 1996 Report presented the rationale as: 1) principles (the right thing to do); 2) pragmatic (the smart thing to do) and 3) prevention (of litigation and the loss of women's talents). The Project Implementation Committee finds the second of these to be the most persuasive: an effective business strategy includes the development of women leaders as central to the long-term financial success of the medical center.

METHODS

While the Implementation Committee found value in virtually all of the original recommendations (Appendix 1), its data-gathering efforts centered primarily around two.

First, for the last 4 years the Implementation Committee collected from dean's offices (via an AAMC President's Memo) data on the representation of women; on average 95% of schools responded. Annual publication of results from this "benchmarking survey"² has encouraged schools to monitor these data themselves and to compare their statistics with national averages.

Second, since the goal of increasing women's leadership is hindered by a lack of understanding of the role of department chair, the Committee recommended a qualitative study of chairs' leadership challenges. Funding was obtained from the Robert Wood Johnson Foundation to support an experienced investigator's inductive analysis of open-ended, in-depth interviews with a sample of 34 chairs and two division chiefs. While the stated focus of the study was chairs' leadership challenges, the sample was drawn to also facilitate study of chairs' views of how to increase women's leadership and of differences between women and men chairs' leadership challenges. Accordingly, three specialties were chosen to include an adequate number of women chairs (i.e., family medicine, pathology, ob-gyn) as well as two specialties with a high-profile role in academic medicine (i.e., medicine and surgery) (in order to increase the number of female surgeons in the sample, two division chiefs were interviewed along with the chairs). Within each specialty, individuals were also chosen to achieve balance with regard to geographic locale, longevity in the position, and public/private sponsorship of the institution.

Other information-gathering methods utilized by the Committee included: examination of medical schools' Women in Medicine (WIM) initiatives and faculty mentoring programs; review of new research on women's advancement in academic medicine and other sectors and professions; and consultations with experts on gender vis-a-vis organizational change, leadership development programs, and the executive search process.

RESULTS

The results of this information-gathering are organized as follows: 1) Data from AAMC Sources and Benchmarking Surveys; 2) Results from Department Chair Interviews; 3) Results of Recent Research on Women's Careers; and 4) Medical School Women in Medicine (WIM) Programs and Initiatives.

Data from AAMC Sources and Benchmarking Surveys

Table 1 compares women faculty data from 2001 with the 1995 data from the previous AAMC report.¹ The proportion of full-time medical school women faculty increased from 25% to 28%. The proportion of full professors who are women grew from 10% to 12%. However, although women now comprise close to half of medical students (45%) and instructors (46%), on average there are still only 21 women full professors per medical school (i.e., about 1 per

department including both non-tenured and basic sciences faculty) compared to 161 men at this rank.

Dramatic differences among departments also remain, with internal medicine, surgery and the surgical subspecialties particularly lagging at the professor rank. In emergency medicine, otolaryngology and orthopedic surgery, the proportion of professors who are women actually declined—from 11% to 6%, 8% to 7%, and 2% to 1% respectively.

Not shown in the Table, the percent of tenured faculty (all ranks) who are women is 14%—a decline from 15% in 1995. Between 1995 and 2001, the percent of women who are tenured dropped from 14% to 12%, about the same proportional decline as the percent of men tenured (32% to 28%).³ Faculty Roster System data also reveal that, while the faculty attrition rate has been declining slightly since 1980, the average annual rate of women faculty attrition (9.1%) still exceeds that of men (7.7%).⁴

With regard to the distribution of men and women across faculty ranks, these proportions have remained quite stable at all ranks over at least the last 20 years. In 2001, 10.9% of women and 30.9% of men are full professors; 19% and 24%, associate professors; 50% and 36%, assistant professors; 19% and 8% instructors (remainder missing).⁵ In 1985, 9.9% of women and 31.5% of men were full professors; thus it has taken over 15 years for the proportion of women faculty who are professors to increase a whole percent.

Such snapshots are not as telling as cohort analyses. A study of all women and a sample of men physician faculty appointed in 1980 at US medical schools found that eleven years later, 83% of men compared to 59% of women had achieved associate or full professor rank; 23% of men and only 5% of women had achieved full professor rank.⁶ These men and women reported the same degree of preparation for an academic career in terms of board certification, advanced degrees and research during fellowship training. But women were less likely to have office or laboratory space, protected time for research, or to have begun their faculty careers with grant support. These women worked about 10% fewer hours per week and had fewer publications than their male counterparts; however, even after adjustment for these factors, they remained substantially less likely to be promoted.

A more recent analysis limited to Faculty Roster System data on all U.S. medical school faculty from 1979 and 1993 found that 36% of “eligible” men on tenure-track (that is assistant professors for at least two years) were promoted to associate professor compared to 24% of women.⁷ On non-tenure tracks, 18% of eligible men and 10% of women were promoted to associate professor. Disparities from associate to full professor were not as great, suggesting that promotion from assistant to associate professor is the critical career event for women. Another important finding was that women medical school graduates are no longer more likely than men to become full-time faculty.

With regard to academic administrative roles, in 2001 women chair approximately 214 departments (91 basic science and 123 clinical departments) (*including interim/acting chairs*), which is about 8% of all medical school chairs. Departments with the largest number of women chairs include microbiology, pathology, anesthesiology, family medicine, obstetrics/gynecology, and pediatrics (Table 1). In 1995 only 115 women chaired a department. However, 214 makes an average of just 1.7 per medical school, and at least 20 of 125 medical schools have no women chairs (most of these have never had one).

The number of women assistant, associate, and senior associate deans now total approximately 422 (an average of three per school); three schools had no woman in a decanal position. As of July 2002, women hold deanships at eight of the 125 U.S. medical schools (2 are interim).

Results from Department Chair Interviews

Chairs universally acknowledged the existence of barriers to the advancement of women and proposed a spectrum of approaches to address them, requiring individual as well as institutional action.⁸ The chairs' explanations for the continuing scarcity of women leaders centered around constraints of traditional gender roles, manifestations of sexism in the medical environment, and lack of effective mentors. Their suggested strategies ranged from one-on-one interventions (e.g., confronting instances of bias, advising women on selecting mentors) to institutional changes such as extending probationary periods, instituting mechanisms for responding to unprofessional behavior, and establishing mentoring networks across the university.

The other gender-related findings from the interviews is that, once on the job, women chairs face challenges that men do not, particularly: lack of recognition, inappropriate attention paid to them, resistance reporting to them, and constraints on their leadership and decision-making styles. The following quotes (all from women chairs) illustrate these challenges: 1) "A woman has a harder time getting the floor. And when she starts talking, the degree to which people are listening versus preparing their rebuttal or signing their charts, goes way out of whack. There's still condescension." 2) "Women are never taken as seriously. . . [I] present ideas, and nobody says anything. But six months later a male colleague presents the exact same thing and wow, it's the greatest idea." 3) "For a man having a female boss is threatening. . . or just a feeling of failure....If my boss is a woman, what does this say about me?" 4) "When you become dictatorial then you really are on the outs. If you raise your voice as a woman you're a bitch. You do that as a man and it's kind of like he's having a bad day." 5) "Women are often perceived as not being tough enough for these jobs. And so I think you have to show that you can be tough. But I also am very conscious that I have much more of a kind of interactive and negotiated approach to solving problems and some of that is, I think, more characteristic of women in leadership positions". This last observation was echoed in a positive vein by many men chairs describing women's leadership for instance as: "a more collaborative decision-making process," "managing the interpersonal dimension of a problem in a meaningful way," and "better at bringing a group to consensus."

Recent Research on Women's Careers

Since the last comprehensive status report on women in academic medicine was published⁹, numerous new studies have elucidated gender differences in advancement (Appendix 2 summarizes many of these). Key points include:

*Women face many more challenges than men in obtaining career-advancing mentoring, such that they frequently lack "social capital" and hence essential information; this isolation further reduces their capacity for risk-taking, often translating into a reluctance to pursue professional goals or a protective response such as niche work or perfectionism (the obverse strategy of identifying a hot topic).¹⁰

*Many men have difficulty effectively mentoring women (as whites do ethnic minorities); a contemporary approach to mentoring builds on the recognition that styles and advice that worked for the mentor may not work for their proteges.¹¹

*Without being conscious of their "mental models" of gender, both men and women still tend to devalue women's work and to allow women a narrower band of assertive behavior.¹² These cumulative disadvantages combine with women's "surplus visibility" such that women who make mistakes are less likely than men in similar circumstances to be given a second chance.¹³

*Women physicians face more difficulties than men in garnering help from nurses¹⁴ and in controlling their work lives (e.g. patient load, office scheduling) and are more likely to burnout.¹⁵ They continue to earn significantly less for the same work.¹⁶

It is also now clear that strategies aimed primarily at “fixing women” can only achieve partial results. Strategies to promote women must also target features of the work culture that may be “simply the norm” but that disadvantage women.¹⁷ The National Science Foundation, convinced that only institutional transformations will remove barriers to women scientists’ advancement, has initiated a new grant program to encourage such institutional-level policy change, e.g. reconfiguring the tenure track.¹⁸ The most prestigious law schools have studied why only 16% of partners are women and concluded that firms need to: measure the cost of turnover; track the numbers of men and women promoted; conduct confidential postdeparture interviews with each lawyer the firm regrets losing; survey clients on their priorities and definition of quality; and support the choice to work reduced hours and create career path flexibility.¹⁹ The corporate world has been faster than academia and the professions to move along these lines. For instance, Bestfoods, a major multinational, is engaged in an organizational change process led by the CEO to develop women leadership.²⁰ The urgency of the problem of high turnover of women led Deloitte & Touche’s CEO in 1991 to create an Initiative for the Retention and Advancement of Women, which has tripled the percentage of women partners. The CEO states that “the changes are by no means complete...but we have opened our eyes to differences in style that go beyond gender to include culture... Although this Initiative has made managing more complicated, the benefits are substantial: greater creativity, and greater performance for our clients.”²¹

Medical Schools’ WIM Programs & Initiatives

How are medical schools facilitating the development of women faculty? Only 13% of medical schools have a formal women faculty organization; an additional 31% have an informal one (both types vary greatly in scope and characteristics). Thus, at over half of U.S. medical schools, no locus exists for activities supporting women’s professional development.

For the last 25 years, almost all medical schools have appointed one or two AAMC Women Liaison Officers (WLO).¹ However, support for this position and related activity is often lacking. At only 36% of schools does someone’s job description include staffing or overseeing the WIM function. Since most schools have been experiencing secretarial and other staff cuts and since measures to increase clinical productivity amount to disincentives for volunteering time, this lack of designated responsibility almost ensures lack of coordination and of continuity of WIM programs. At 69% of schools, the dean’s office allocates some annual funding for WIM (for example, to fund an event to bring women students and faculty together or to support selected women to attend an AAMC women faculty professional development seminar). Thus at about a third of schools, there is no financial support from the dean’s office.²²

AAMC’s benchmarking survey also found that at least 40% of schools have conducted a salary equity study in the past 5 years. A number of schools reported that their studies revealed no disparities, but a greater number found unexplainable gender-related differences. Schools correcting the inequities found that a relatively small amount of money could “buy” disproportionate increases in the morale of the women faculty.²³

The most comprehensive analysis to date of initiatives to develop women faculty examined the seven medical schools identified by the DHHS as Centers of Excellence (COE) in Women’s Health.²⁴ Commonalties among these schools included conducting an assessment to identify issues of greatest concern to women faculty and targeting programs at those needs and ensuring the representation of women on institutional committees. These schools also focused on improvements not specific to women: heightening department chairs’ focus on faculty development needs, preparing educational materials on promotion and tenure procedures, improving parental leave policies, allowing temporary stops on the tenure probationary clock and a less than full-time interval without permanent penalty, and conducting exit interviews with

1 About 241 of the 377 COTH members and 28 of the 95 CAS members have appointed a WLO.

departing faculty. Beyond faculty utilization of these programs and options, these schools regularly evaluate their initiatives by comparing recruitment, retention and promotion of women and men faculty and by conducting faculty satisfaction and salary equity studies. Surveying faculty about their career development experiences and their perceptions of the environment, comparing the responses of men and women, and presenting the results to faculty and administrators have proved particularly useful. As other schools have found as well, this process establishes a baseline, builds institutional support and guides initiatives.^{25,26,27} In all this work the support of the top leadership has been instrumental.

Only the Department of Medicine at Johns Hopkins has comprehensively evaluated its interventions to increase the number of women succeeding in the department.²⁸ A follow-up three years after the interventions began revealed that a 66% increase in the proportion of women expecting to remain in academic medicine and a unexpected 57% increase in the proportion of men expecting to. Moreover, the number of women at the associate professor level increased from 4 to 26, with no change in promotion criteria. But as Dr. Emma Stokes (the department's organizational development specialist) explains: "Improvements do not last unless you address the culture." Under the aegis of the departmental mission to "foster a collegial work environment that promotes the success and well-being of faculty, staff, students and patients," efforts at Hopkins continue, guided by "insights about the links between gender bias and expensive turnover and poor productivity."²⁹

KEY FINDINGS

On the one hand the numbers of women faculty, department chairs and deans have never been higher. However, this growth has not substantially reduced gender differences in advancement or sufficiently strengthened the pool of women candidates for administrative positions. Thus, the progress achieved over the last 25 years is incomplete and inadequate. Few schools, hospitals, or professional societies have a "critical mass" of women leaders. And the pool from which to recruit women academic leaders remains shallow. Moreover, for the first time in recent history, young women physicians are *not* more likely than men to become full-time faculty⁵; women's interest in an academic career is diminishing more than men's during residency training,³⁰ and the attrition rate of women faculty exceeds that of men. DeAngelis has speculated that the reasons for women's diminishment of interest in an academic appointment include disheartenment at the paucity of women in positions of power.³¹ Many women physicians and scientists in their 40's and older, especially those in academics, are losing faith that equity beyond graduate education will ever be achieved. Even when they achieve leadership roles, women still experience more resistance to reporting to them and more constraints on their decision-making and leadership styles.^{6,32}

Ironically, at the same time, most male physicians and medical students are concluding that equal opportunity is now or soon will be a reality. And many young women, surrounded by women peers and unaware of their predecessors' struggles, are assuming that women may be freely choosing to reap fewer rewards than men for their work but that they themselves won't have to settle for less.³³ Thus, impetus for change is lacking, as the women who are leaving academic medicine—or simply not gaining promotion—tend to be invisible.

Medicine and science have not realized and are not currently realizing the full value of their investment in women. Scientific and medical careers involve considerable personal and public resources, but the leadership potential of most women continues to be wasted.³⁴ This is a collective loss—all the more unaffordable given the leadership challenges facing medicine.³⁵

There are both short- and long-term payoffs for academic health centers that capitalize on women's intellectual capital.³⁶ For instance, women leaders are essential to the effective marketing of a women's health initiative. And beyond women's health per se, patients are seeking women surgeons and subspecialists, as students are seeking women role models in these fields.³⁷ As women

constitute an increasing proportion of students, only those institutions able to recruit and retain women in all departments will have the best house staff, faculty and administrators.³⁸ And strong women will attract other strong women; the absence of women in key positions is a negative signal to women candidates.

In natural systems, as diversity increases, so does stability and resilience.³⁹ The corporate world has been quicker than academia to recognize such benefits. Moreover, evidence is accumulating that diverse teams outperform homogenous ones^{40, 41} Exposure to diverse colleagues helps managers make better decisions and cultivate new ideas by drawing on a larger pool of information and experiences; diversified staff also help increase market share by facilitating marketing to an increasingly diversified customer base⁴². Companies with reputations for good management of diversity are more successful in attracting and retaining top-quality employees (some of these link managers' compensation to their success in recruiting and advancing women and minorities).⁴³ Thus, diversity is good business. Companies with high ratings on equal employment opportunities outperform those with poor ratings on hiring and advancing women and minorities.⁴⁴ Fortune 500 companies with the highest percent of women executives deliver earnings far in excess of the median compared to large firms with the fewest women.⁴⁵ Even among IPOs (Initial Public Offerings) compared to those without women, companies with women in senior management received higher valuations (measured in terms of market price to book value per share) and performed better over the long haul.⁴⁶

RECOMMENDATIONS

Following are the Committee's recommendations about the most salient opportunities in the work that remains:

1) *Emphasize faculty diversity in departmental reviews, evaluating department chairs on their development of women faculty.*

With regard to access to academic rewards, disadvantage is created and reinforced largely at the department level. Thus the department is the seat of change, with the department head the key.⁸ Chairs play many pivotal roles in faculty development, including integrating women and minorities into the department.⁴⁷ But, as MIT's investigation of senior faculty revealed, non-democratic practices and cronyism in many departments translate into women's having fewer academic resources than men.⁴⁸

Suggested actions include questioning candidates for the position of chair on how they have handled and plan to handle gender equity and faculty development responsibilities (Appendix 3 includes examples of such questions). Dean's executive meetings with chairs can regularly focus on women faculty development, perhaps built around a case study and facilitated by the faculty affairs administrator or by an organizational development expert. Finally, departmental reviews afford a critical opportunity to emphasize diversity issues: how effectively is the chair recruiting and developing women and minority faculty, serving as a role models for the role models, planning for his or her succession? Two reinforcements would optimize this strategy: 1) award chairs who achieve diversity goals a bonus or some important form of recognition; 2) offer chairs having difficulties developing a diverse workforce a safe place to acknowledge their developmental needs and to build skills. An organizational development expert (a change facilitator) and an ombudsperson (a neutral complaint handler)⁴⁹ can both be very useful in this work.

2) *Target the professional development needs of women within the context of helping all faculty make the most of their faculty appointment, including guidance for men to become more effective mentors of women.*

Compared to men, women face more challenges obtaining career advising, mentoring, and time for scholarly activities⁵⁰ and are at greater risk of burnout.¹⁵ Of all faculty subgroups, junior women clinicians appear most at risk for not realizing their professional potentials; and within this subgroup, *minority* women face additional challenges.⁵¹

These needs are best addressed within the context of general faculty development. A human resource and “talent management” approach would facilitate faculty members’ achieving both their own and their institution’s goals.⁵² But at too many schools this context is lacking; no medical school currently has what might be considered a comprehensive faculty development system.⁵³ Since the costs of turnover and recruitment in most cases greatly exceed the costs of faculty development (see Appendix 4), institutional resources are being wasted.

A healthy empowered faculty is necessary for sustained productivity—unlikely unless the medical school invests in its workforce. The development of human capital translates into financial capital; an American Management Association study found a remarkably strong correlation between training budgets and profits.⁵⁴ A number of schools now do offer advising and mentoring programs, including handbooks and agreements, designed to assist chairs and senior faculty in meeting career advising responsibilities (Appendix 5). One way to reinforce the importance of mentoring junior faculty is to evaluate senior faculty on this dimension. Handbooks and discussion sessions can assist men lacking experience or success in mentoring women to improve their skills.⁵⁵

3) Assess which institutional practices tend to favor men over women's professional development, such as defining “academic success” as largely an independent act and rewarding unrestricted availability to work (ie, neglect of personal life).

Reality is socially constructed in every culture such that the group with the most control over the resources finds its own view most accurately reflected in the institutions it creates.⁵⁶ Thus, while many organizational practices may appear to be “simply the norm,” they do not reflect the experiences of most women, so most women will not “measure up” as easily as men do. For instance, medicine tends to over-value heroic individualism compared to the largely invisible work of preventing crises and maintaining relationships. Since women faculty tend to be doing the less visible, collaborative, relational work, their contributions remain under-recognized.⁵⁷ Also, medical organizations tend to construct power hierarchically, as if it were a limited quantity at the top rather than an energy which expands when shared, as women are more likely to construct it.⁵⁸

The need to develop women faculty is not the only indicator that academic medicine should take a fresh look at certain practices. For example, though research is now team-based and multidisciplinary and an increasing percentage of clinical work depends on physicians’ partnerships with other health professionals, faculty promotion criteria still define “success” as largely an independent act that must attain national recognition via publication.^{59 60} These criteria actually divert emphasis from contributions to local missions and to collaborations. New models of mutuality are needed to recognize and reward contributions of all team members.⁶¹ Such methods would encourage collaborations among basic, population and clinical researchers and others by defining the contributions of the team and then dissecting the individual contribution of each member.⁶²

Another practice inviting re-examination is the devaluation of the scholarship of application, teaching and integration compared to “discovery” scholarship—even though excellent examples of expanding the traditional definition are now available^{63 64}. Many societal needs cannot be met by “discovery” scholarship alone. For instance with regard to the current diabetes epidemic, while discovery research on the molecular biology of diabetes is important, so is research on prevention, epidemiology, psychosocial dimensions, and family systems—research areas to which women are more often drawn than men. However, many investigations in these latter areas require qualitative or outcomes research (“soft science”) rather than randomized controlled trials (“hard science”). Unfortunately, researchers using qualitative and outcomes methods find fewer grant sources and

fewer places to publish.

Another norm deserving of reconsideration is unrestricted availability to work taken as evidence of commitment to the profession, in essence rewarding neglect of family and personal life.^{65,66,67,68} Many schools' tenure and promotion systems force unnecessary "either work or family" choices during the most critical childrearing years. Moreover, evidence is accumulating that work-home interference strongly contributes to the burnout of both women and men physicians (i.e., "a syndrome of emotional exhaustion, depersonalization and reduced personal accomplishment.")⁶⁹ As the upcoming generation is less willing than previous ones to sacrifice quality of life, academic medicine will lose both women and men if greater work-life balance is not achievable.⁷⁰ Idiosyncratic "under the table" arrangements provide temporary fixes but leave each family to find its own solutions; creating widely available options is more efficient and innovative.⁷¹ Unfortunately little progress has been occurring in expanding on-site child care. Some medical schools have, however, been adding temporal flexibility to faculty tracks and creating promotion tracks for less-than-full-time faculty.^{72,73}

Practices for academic societies and teaching hospitals, as well as medical schools, to assess for gender-related effects also include: how committee assignments are distributed (women tend to be under-appointed to the most powerful committees), how candidates for leadership positions get nominated and how visiting professors are selected. Even apparently small changes can have important long-term effects.⁷⁴ For instance, increasing the number of women visiting professors can improve their visibility and recruitability. But such efforts cannot be one-time events. No organization would say "we did accounting last year, we don't need to do it again." Yet this is often how investment in learning new ways of working together are viewed, as one-time events rather than as ongoing processes.⁷⁵

4) Enhance the effectiveness of search committees to attract women candidates, including assessment of group process and of how candidates' qualifications are defined and evaluated.

The comparatively low number of women faculty being "groomed" for leadership by a powerful mentor is a major contributor to the present difficulties institutions face in recruiting women leaders. But the frequently anachronistic nature of the search process itself also contributes--e.g., inappropriate preoccupation with candidates' research credentials⁷⁶ and lack of attention to group process issues. Improvement of the search process in general,⁷⁷ and educating search committees on pitfalls and opportunities in targeting women candidates can improve an institution's recruitment of women. Suggested approaches include:

- Search committees should assess their processes and interview techniques for unintended gender bias. Committees tend to judge women candidates by different standards than they judge men. For instance, while sometimes veiling their intent, search committees may ask women candidates' questions such as "Are you really sure this is right for your life?" and "Does your husband support your goals?" Interviewers are less likely to ask men such questions even though many have responsibilities and interests that might conflict with the position. Also, groups tend toward "homosocial reproduction"—that is, people tend to promote individuals who resemble them and with whom they feel comfortable. This "comfort factor" in selecting candidates for senior positions works against women; when a culture's leadership is dominantly male, even highly qualified women may be viewed as "risky" simply because they do not look or sound like the traditional executive.⁷⁸ Since members of search committees may not be aware that their "mental models" influence their decision-making, they need processes to facilitate self-examination with regard to their treatment of women and other minorities. An organizational development specialist or other skilled facilitator can assist committees in gaining objectivity, as well as in recognizing gaps between what committee members say they seek in candidates and how they actually behave.
- Committees need more than one respected woman because "token" members tend not to be taken seriously. In "skewed" groups (20% or less of persons from another social type),

tokens tend to lack clout and face loyalty tests, and any discrepant characteristics receive undue attention.⁷⁹ Because of the paucity of women professors and because most already have so many institutional responsibilities, it may be necessary to expand eligibility requirements to include women associate professors.

- Search consultants can help increase the diversity of the candidate pool.⁴¹
- The earlier partner/spouse relocation issues can be addressed, the better.⁸⁰
- Some institutions and departments are not ready for women leaders, i.e., there may be too much resistance or bias on the part of key players for the woman to succeed no matter what her qualifications. Savvy women look for environments where someone has already set a tone for women to become leaders.⁸¹ But recruiting a woman into an environment where she is almost bound to fail would harm both her career and the institution. Because so few women hold highly visible positions, their failures stand out more than men's failures, with negative memories lingering for years. Rather than "blaming" the women, institutions where such failures have recently occurred and schools with low success at recruiting and retaining women in senior positions might better investigate what institutional characteristics may be contributing factors.
- A strategy to increase the likelihood of a new woman leader's success (especially if the position has not been previously held by a woman) is to build into her recruitment package the services of a professional coach. Leadership development programs such as ELAM⁸² should also be explored.

Finally, AAMC's Faculty Roster System (FRS) Recruitment Assistance Service offers medical school search committees the option of requesting basic data (including mailing address) for specified categories of faculty (eg, all women professors of surgery). FRS can also generate mailing labels for women chairs in any specialty, many of whom may know of possible women candidates in their fields. AAMC's WIM office maintains a listing of WIM specialty organizations which may serve as useful points of contact with potential women candidates in that field.^{83 84}

5) Financially support institutional Women in Medicine programs and the AAMC Women Liaison Officer and regularly monitor the representation of women at senior ranks.

Active WLOs and WIM programs add value to their institution. Long-standing WIM programs (whether the locus is a faculty organization, dean's committee, office, or an outgrowth of one department) contribute initiatives and energy far beyond the scope of "women's issues"--an inaccurate label in any case. For instance, at many schools, WIM programs have focused on improving professionalism, mentoring, promotion and tenure policies, and leadership skill development.²² But too many WIM programs depend solely upon volunteered time, meaning they are always in jeopardy. Financial support is a necessary but not sufficient ingredient of effective initiatives. Other ingredients are a respected leader's commitment, a strong women faculty organization with multiple sources of energy, and the assistance of an organizational development expert or other change-facilitator.²⁶

Schools lacking a WIM focus now have numerous examples of how to create and sustain one.^{85,86} Schools with established programs should be evaluating them and considering how to extend improvements.

What organizations measure they tend to improve. The Liaison Committee on Medical Education (LCME) now requires schools undergoing a full accreditation survey to document the number of women faculty across academic ranks. Since 1997, AAMC's collection and publication of school-identified data on the representation of women have been stimulating schools to monitor where they stand in relation to the national mean. AAMC will continue this practice, as well as

offering tailored Institutional Profile System institutional ranking reports on the representation of women.

Other tools include:

- Building a salary and promotion database that can be reviewed annually; such a database would greatly facilitate gender equity studies.⁸⁷
- Surveying faculty on their career development experiences and needs and on morale issues, comparing responses of men and women and comparing departments (AAMC has a number of examples of such instruments).
- In departments with enduring problems with recruitment, retention or advancement of women faculty, conduct focus groups to probe difficulties and identify change strategies.

CONCLUSION

The implementation of all these recommendations depends on the leadership of the dean and other senior administrators of the institution. In Table 2 the Committee offers a variety of tools for assessing and monitoring interventions under each of the above recommendations.

The long-term success of academic health centers is inextricable from the development of women leaders. As Jordan Cohen recently stated: "Cultivating diversity in our faculty and in our leadership is an indispensable strategic instrument for meeting the challenges that academic medicine faces in the 21st century. Grooming women for leadership positions and eradicating the barriers currently impeding their success are essential components of this strategy. Those institutions that fail to seize the advantages offered by elevating talented women to positions of power are destined to be eclipsed by those that do."⁸⁸

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Appendix 1: Recommendations of Original Increasing Women's Leadership in Academic Medicine Project Committee

Note: Italicized recommendations are those selected by the Implementation Committee for greatest emphasis. Numbers in parenthesis refers to the objective under which the recommended task appears in Project Committee Report:

- (1) developing and mentoring women faculty, administrators, residents and students;
- (2) improving pathways to leadership and leadership development;
- (3) fostering readiness to change.

I) *Tasks for Academic Medical Leaders/Institutions:*

- A) *create mentoring and professional development programs, open to all with special focus on needs/concerns of women faculty* (1)
- B) add temporal flexibility to resident and fellow training opportunities and faculty promotion policies (1)
- C) improve resources which support family roles, e.g., child care centers (1)
- D) offer assistance to job candidate partners (1)
- E) support the work of AAMC Women Liaison Officers and women faculty organizations/committees (1)
- F) *monitor representation of women at senior ranks and on major committees (to include summary report to governance, showing the hiring/promotion of men and women faculty by track)* (1)
- G) model highest standards of professionalism and assure that meeting these standards is explicit part of evaluation process of all members of academic community (perhaps with values articulated in mission statement) (1)
- H) evaluate faculty and administrators on abuse of power (1)
- I) *encourage search committees to make extra efforts to identify women candidates* (2)
- J) provide guidance to search committees regarding evaluation of women and minority candidates (2)
- K) encourage important committees to undertake training in conflict management, to engage in discussion of leadership styles, and to examine gender stereotypes, in particular, how the same words may be viewed differently depending on the sex of the actor (2)
- L) *when recruiting department heads, place more emphasis on management/nurturance of faculty/residents and on team-building skills* (2)
- M) provide training in management/nurturance of faculty/residents and in team-building skills for current department heads/administrators (2)
- N) *hold chairs accountable for accomplishment of goals (such as career guidance to junior faculty/residents and in proportion of women faculty promoted)* (2)
- O) incorporate these issues/recommendations into strategic planning efforts (with the goals of assuring professionalism and excellence and of meeting social contracts) and in self assessments (with a focus on achieving stated missions and evaluating staff/students perceptions of the learning and organizational climate) (3)

II) Tasks for AAMC:

- A) continue professional development seminars (1) [15th Early Career and 8th Senior/Mid-Career Women Faculty Professional Development Seminars held in 2001]
 - B) publish resource guide (1) [Enhancing the Environment for Women in Academic Medicine: Resources and Pathways
[<http://www.aamc.org/about/progemph/wommed/wimguide/start.htm>]
 - C) develop speaker's bureau (1) [ongoing]
 - D) offer assistance and consultation to institutions in developing strategies/seminars (1) [ongoing]
 - E) *interview women department chairs regarding factors critical to their success and advice they would give younger colleagues aspiring to major administrative posts (2) [see Methods section]*
 - F) interview major search firm heads to garner perspectives on finding/placing women candidates (2) [discovered to be unfeasible except for meeting with one managing partner]
 - G) create a leadership development seminar, targeted at senior faculty and administrators, for building an institutional focus on faculty development (focus on overcoming gender-related communication barriers, managing change and building teams) (2) [session included in Executive Development Seminar]
 - H) provide assistance to institutions in developing local and regional leadership development workshops targeted at administrators and department heads (2) [as requested]
 - I) create National Leadership Honor Society (NLHS) to encourage/award students who distinguish themselves as values-based, service-oriented leaders (2) [the Committee was not attracted to the idea of creating a special society]
 - J) continue efforts to increase the number of women at AAMC's executive and management staff levels, on its committees and within its governance (3) [increases have been accomplished]
 - K) integrate Project Committee's recommendations into ongoing programs and strategic planning (3) [insufficient progress]
 - L) consider and create opportunities for interdisciplinary discussion among AAMC Administrative Boards and among other AAMC constituent groups (3)[insufficient progress]
 - M) via LCME, examine gender breakdowns of faculty data by promotion and hiring rates and by rank and tenure and of membership on major committees and encourage institutions to conduct salary equity studies and self-assessments of gender climate and faculty development needs (3) [as of 2001 LCME asks site-visited schools for faculty gender data by academic rank]
 - N) make available to institutions tools for these types of assessments (3) [ongoing].
-

Appendix 2: Results of Recent Research on Women's Careers

A) *Academic Advancement*

- Cross-sectional studies have largely corroborated findings of cohort analyses showing that women reap fewer rewards than men in terms of academic rank and compensation, even after adjustments for specialty, hours worked and other variables.⁸⁹ Studies of plastic surgeons⁹⁰ and cardiothoracic surgeons⁹¹ found no gender differences in background, hours worked or professional activities, but women made lower salaries and women in academics held lower rank and were less likely to be tenured. A survey of academic pediatricians found that compared to men, women spent more time in teaching and patient care and less in research, had less institutional support for research and less adequate mentorship, and were less academically productive; adjustment for all independent variables did not eliminate gender differences in salary.⁹² A study of surgeons in one large department found that women faculty were far less likely than the men to believe that clerical support, technical support and non-research start-up funds were adequate; even though these women were more likely than the men to have extramural funding, they published less.⁹³
- MIT investigated differences in resources allotted to men and women professors. Findings included: "Marginalization increases as women progress, accompanied by differences in salary, space, awards, and offers from outside...Even though each new generation began by believing that gender discrimination was solved in the previous generation, the pattern repeats itself... Problems especially flourish in departments with non-democratic practices, i.e., administrative procedures whose basis is known only to a few lead inevitably to cronyism and unequal access to resources...While the reasons are complex, a critical part of the explanation [for the few women at the professor rank] is our collective ignorance of what discrimination looks like. It turns out to take many forms, including a pattern of difference in how male and female colleagues are treated and of powerful but unrecognized assumptions that work systematically against women even in the light of obvious good will."⁴⁸ Subsequently, the leaders of M.I.T., Yale, Stanford, Princeton, Harvard, University of Pennsylvania, University of Michigan, University of California and California Institute of Technology, have begun to work together toward equity and the full participation of their women faculty members. They are sharing annual gender analyses of salaries and resources and hiring and working to implement more family-friendly policies.⁹⁴
- Based on over 450 in-depth interviews and on a quantitative survey, a new longitudinal analysis of women in science allows numerous conclusions:
 - a) Increasing the number of women doesn't automatically produce positive effects. As the numbers of women in a department increase, they divide into distinct subgroups sometimes at odds with each other, e.g. age and race/nationality.
 - b) Women still experience isolation within an activity that for men, is highly social and socializing. When a woman seeks affiliation through women's groups, this is labeled as a 'special need'. This paradox is compounded when similarly isolated women are appointed as tokens to committees and pointed to as 'role models' (i.e. expected to be 'solutions' to a 'problem').
 - c) Gender differences in advancement are rooted in the ways work is organized. For instance, the tenure system is a forced march in the early years, allowing a slower pace later on. Most women would prefer the opposite timing.
 - d) The majority of departments studied were severely competitive and individualistic. The departments that showed the most improvement in recruitment of women had a more collegial, cooperative atmosphere. Since much of the process by which disadvantage is created and reinforced occurs at the department level (e.g. recruitment, access to benefits), this is the seat of change, with the department head the key. Thus departmental reviews should include emphasis on diversity issues.¹⁰

B) *Mentoring*

- Many studies have found that women gain less benefit from the mentor relationship. One internal medicine department found that mentors more actively encouraged men than women proteges to participate in professional activities outside the institution and that women were three times more likely than men to report their mentor taking credit for their work.²⁸ Among cardiologists, women found their mentors to be less helpful with career planning than men did and more commonly noted that their mentor was actually a negative role model (19% of women vs. 8% of men). They were also less likely than men to negotiate for salary, benefits, travel, space, support staff, and administrative duties—reflecting a combination of naivete and under-use of their professional network.⁵⁰ The American Orthopaedic Society asked women academics to rate obstacles to academic advancement; the 3 most frequently identified were: lack of protected time for research, inadequate mentoring and need to see more patients to support the department.⁹⁵ Women's informal networks are less extensive and less likely to include superordinates or colleagues from previous institutions.⁹⁶ Women tend to be more modest than men about their achievements and less apt to see themselves as qualified for top positions even when their credentials are equivalent or superior.⁹⁷ Consequently, women actually have a greater need for mentoring than men do.^{98,99}

- A study of the career progress of minorities at US corporations reveals similar results: that is, minorities face extra challenges obtaining mentoring. Insights from this research apply directly to women.¹¹ Conclusions include: 1) Of the minority professionals who became executives (vs those who plateaued), even though they were not on an obvious fast track during stage 1 of their career, influential mentors were investing in them as if they were. These relationships opened the door to challenging assignments and protected the protégé from unfair criticism. 2) Managers who plateaued received mentoring that was basically instructional, whereas those who became executives enjoyed fuller developmental relationships with mentors, particularly early in the career when confidence-building is crucial. These mentors gave both coaching (i.e. technical advice) and counseling (i.e. experiential cues and emotional support). 3) Cross-race and cross-gender relationships may encounter numerous extra difficulties forming and maturing: a) A mentor who holds negative racial or gender stereotypes is unlikely to give proteges the benefit of the doubt (whereas fast-track whites are likely to be evaluated based on their *perceived potential*), with the consequence that the minority is less likely to take risks. b) When the mentor has trouble identifying with the protégé, seeing beyond the protégé's weaknesses is harder; also a "protective hesitation" interferes with communication about race and other thorny issues. c) A protégé adopting the behavior of the mentor might produce different results (e.g., an aggressive style successful for white men may get women and minorities labeled "angry"). d) Because cross-race relationships are rare, people focus on them, adding to their fragility and discouraging people from participating in them. 4) A key task of the mentor is helping the protégé build a network which needs to be heterogeneous along three dimensions: functionally (from sponsors to peers); position and location; and demographically. 5) The work of mentoring minorities does not end with one-on-one relationships but requires broader initiatives such as executive development workshops addressing these issues, helping colleagues manage their discomfort with race, and offering a range of career paths so that people can move at their own speed.

C) *Mental Models of Gender*

Gender stereotypes are perceptual shortcuts acquired early in life but are far from innocuous because they interfere with evaluations of competence. Both men and women asked to rate works of art, articles and curriculum vitae give lower ratings when they believe they are rating the work of a woman.¹² An analysis of peer-review scores for postdoctoral fellowship applications revealed that women applicants had to be 2.5 times more productive than the average man to receive the same competence score.¹⁰⁰ Moreover students judge women faculty who are not nurturing much more harshly than they do men professors who are not nurturing.¹⁰¹

Negative mental models of women persist in part because individuals, especially dominant personalities, tend to ignore information discrepant to their stereotypes.¹⁰² Features common to clinical medicine, ie time pressures, stress and cognitive complexity, also stimulate stereotyping and “application error” (ie, inappropriate application of epidemiological data to all group members).¹⁰³ Even so, most scientists and physicians appear to believe that they work in a meritocracy and that they are not influenced by stereotypes.¹⁰⁴ Some even conclude that women are advantaged compared to men. But as Michael Kimmel¹⁰⁵ has observed: “while individual men do not feel powerful, power is so deeply woven into their lives that it is most invisible to those who are most empowered.” In fact, a pervasive barrier to achieving organizational diversity is that “people tend to be attracted to others who are like themselves. . .[thus] unless the people in charge recognize their own biases. . .[women and minorities] will have difficulty achieving the secret handshake.”¹⁰⁶

D) *Other Disadvantages*

- The first such study of physicians’ work lives found that compared with men, women physicians have more patients with complex psychosocial problems. Women physicians also reported substantially less work control than men, i.e., volume of patient load, selecting physicians for referrals, and office scheduling. Women were 1.6 times more likely to report burnout than men, with the odds of burnout by women increasing by at least 12% for each additional 5 hours worked per week over 40 hours. This study also found a \$22,000 gap in income between men and women, after controlling for age, specialty, practice type, time in current practice, uninsured status of patients, region, hours worked, and other variables.¹⁵
- A 1998 survey of Board-certified internists in Pennsylvania found that women earned 14% less per hour than their male counterparts, even after adjustment for demographic, training, practice and family characteristics, suggesting that institutional factors may contribute to salary inequities.¹⁶
- Women physicians also face extra difficulties in the doctor-nurse relationship. A survey of over 3500 Norwegian physicians found that compared to men physicians, women are met with less respect and confidence and receive less help. By refusing to do things for women physicians, either by neglecting orders or by telling them to do things themselves, nurses ‘cut’ women physicians ‘down to size.’ Women must therefore “calculate and negotiate behavior to avoid conflicts. . .[whereas] men do not have to involve themselves in such negotiations in order to get respect and the service work done.”¹⁴

Appendix 3: Questions to Assess the Faculty Development and Diversity Orientation of Candidates for Chair and Dean Positions

- What do you think motivates most faculty to work hard and achieve?
- In a large department, how would you assess the needs of the most significant subgroups of faculty?
- What would faculty that you have mentored say is your approach to career development? What motivated you to work with and mentor these faculty in the way you did? Describe some of your successes and your less successful experiences and outcomes? If you wanted to validate your assumptions about how your advisees experienced your approach, how would you do it?
- At your current institution, is there a women faculty organization or committee on women? What has been their approach to defining and addressing women faculty career development?

- How have you demonstrated your commitment to the development of women professionals in your various positions and roles?
- In your current position, have you ever seen a woman or ethnic minority faculty treated unfairly? How would/did you handle it?
- Have you observed differences in the mentoring needs of men and women mentees? Of young physicians and scientists today compared to 10 or 20 years ago?

[Developed by Emma Stokes, Ph.D., Senior Organizational Development Specialist, Johns Hopkins University, Department of Medicine]

Appendix 4: Two Approaches to Assessing Faculty Turnover Costs

A) Evaluate Return on Investment of Faculty Development by Comparing Costs of Recruitment to Cost of Mentoring & Development

<i>Average Cost of Recruitment</i>		<i>Average Cost of Mentoring/Development</i>	
<i>Item</i>	<i>Cost</i>	<i>Item</i>	<i>Cost</i>
Loss of productivity in previous faculty member's last 3 months		Administrative staff for faculty development/mentoring program	
Advertising the position		Non-salary program costs (e.g. workshops, food, supplies, web site, publications)	
Search firm and/or administrative costs		Time of junior and senior faculty spent in development/mentoring	
Interview travel expenses (air fare, hotel, meals, etc.)		Mentoring award	
Search committee and other faculty and staff time spent interviewing		Time of boss in developmental planning and performance appraisal feedback sessions	
Work put on hold + lost opportunity costs in not being able to pursue other initiatives until replacement is on board		Education of chairs, division chiefs and senior faculty in developmental planning, mentoring skills, and performance appraisal	
Overload on other faculty and staff (overtime, etc.) to get work done during selection and training of replacement			
Orientation and training time for replacement to become fully productive			
Lost patients, referrals, and grants of faculty member, cancelled clinics, delays before out-of-state physicians become licensed & can bill)			
Lowered morale and productivity, time spent talking about it			

Recruitment package requirements – e.g. signing bonus, release time for scholarship, reconfiguration of lab space, other perks			
Moving allowance			
Loss of other faculty and staff			

[Adapted by Page Morahan, Ph.D. from B. Kaye and S. Jordan-Evans. Retention, Training & Development, April 2000, p.30.]

B) Turnover Costing Exercise: _____
(Job Title)

- A. Typical annual pay for the job _____
- B. Percentage of pay for benefits times annual pay _____
- C. Total annual cost (add A & B) _____
- D. How many employees voluntarily quit in this job in the past 12 months? _____
- E. How long does it take for one employee to become fully productive (in months) _____
- F. Multiply $\frac{E}{12} \times C \times 50\%$ _____
- G. Annual turnover cost for this job (multiply F X D) _____

DIRECT HIRING COSTS

1. Costs for recruiting/advertising _____
2. Staff time for identifying, preparing, placing ad _____
3. Agency and search fees _____
4. Internal referral bonuses _____
5. Relocation expenses _____
6. HR/recruiting staff expenses (salaries, benefits, budget costs) _____
7. Total annual hiring costs (add 1 thru 6) _____
8. Cost per hire (divide 7 by number hired) _____

INDIRECT HIRING COSTS

1. Management/supervisor time per hire in hours _____
2. Management orientation and training time per hire _____
3. Average annual manager/supervisor salary and benefits costs divided by 2,080 _____
4. Average annual management costs for hiring $\{(1) + (2)\} \times (3)$ _____

[Developed by Robert Mathis, PhD, College of Business Administration, University of Nebraska –

Appendix 5: Examples of Medical School Faculty Career Advising and Mentoring Programs

To assist faculty in making optimal use of their academic appointment and to strengthen the institution, many schools have created programs and resources to improve faculty mentoring. These range from assigning all new assistant professors an advisor to offering an extensive guidebook of tools, scenarios and other supports, as at the Medical College of Wisconsin, which has even published an evaluation of its mentoring program.¹⁰⁷ Other examples appear below. Among the goals of all such efforts is building a supportive ecology in which faculty career and skill development more naturally occur.

Contemporary mentoring presents challenges not faced by academic medicine's current leaders, most of whom were "groomed" by someone who was also a white male. The homogeneity of senior faculty contrasts sharply with the heterogeneity of students and young faculty, many of whom present orientations unfamiliar to their potential mentors.¹⁰⁸ Moreover, given the rapidly changing complexities of medicine and career-building, advice applicable even five years ago may no longer be helpful. Thus, many chairs and senior faculty could use assistance in becoming effective "contemporary" mentors. One such resource is Johns Hopkins Department of Medicine's Career Development Guide, which offers advice on techniques of active listening, avoiding assumptions, and how to reflect back.

Evaluating chairs and faculty on how well they meet their mentoring responsibilities can help assure that these responsibilities are taken seriously. A start would be to add items on mentoring to annual faculty evaluations, and to ask senior faculty to name their proteges and junior faculty, to name their mentors.

Stanford University School of Medicine *Faculty Mentoring Program* Web site:

<<http://www-med.stanford.edu/school/facultymentoring>>

- Initiated in 1994 out of Dean's Council on Diversity to address sense of isolation of junior faculty
and sense that patient care pressures put academic careers in jeopardy
- Co-directed by 2 emeritus professors
- Mentees (assistant professors) choose mentors (associate and full professors) from roster and contact them directly (also now most department chairs assign each incoming assistant professor a temporary mentor)
- Program also includes social occasions for discussion of common problems and group mentoring
opportunities with lunch provided

University of Arkansas College of Medicine *Women's Faculty Development Caucus (WFDC) Mentoring Project* (<http://www.uams.edu/cmefd/mentoringpage.htm>)

- Pilot project begun in 1997 through Office of Faculty Development
- WFDC Mentoring Committee paired mentor/mentees based on responses to a survey
- Mentors given CVs of assigned mentees, resource book, mentor guide

University of Wisconsin-Madison Medical School *Faculty Mentoring Program* (Molly Carnes, M.D., <mlcarnes@facstaff.wisc.edu>, (608) 233-0687)

- Faculty policies state that senior faculty responsible for mentoring junior faculty
- Opportunity to find mentors outside department
- Each fall the faculty steering committee contacts junior faculty to participate
- Interested mentors/mentees fill out questionnaire
- Training session for mentor/mentee pairs to facilitate process
- Women in internal medicine meet monthly and take turns critiquing each others' CV

Mayo Medical School *Mentoring Initiative*

- New Staff Orientation stresses importance of intra-departmental and extramural mentors and how to select them and establish a workable relationship
- Faculty affairs dean presents process to department chairs: (1) some responsible leader in the department meets annually with staff to discuss scholarly goals, (2) the chairs assure that all new faculty have an appropriate academic appointment, and (3) the staff understand the criteria to gain them eventual promotion to the next higher rank and when that might be realistic. This program is part of an annual Operating Planning Process that holds chairs accountable.

Boston University *Mentoring Program* (Leslie Wright, lmwright@bu.edu)

- Recruited top senior faculty for a 1 hour commitment; junior faculty invited to submit CV and a work in progress to be worked on with the mentor
- 30 pairs matched
- High satisfaction levels; more than ½ of pairs have continued

University of Ottawa Academic Women's Association *Mentoring Program* (Rose Goldstein, M.D., Assistant Dean, Faculty, rgoldstein@ottawahospital.on.ca; (613) 737-8175)

- Begun in 1992 to provide junior women faculty members with a support system when first entering the University.
- To extend networking, matches are made across departments.
- "Guide to Faculty Mentoring" and a resident mentoring handbook published.

MCP Hahnemann University School of Medicine (www.mcphu.edu/COL)

- Preceptoring for 1st year faculty (1 year, primarily informational).
- Mentoring for junior faculty (multi-year, preparing for promotion)

East Carolina University, The Brody School of Medicine

- Two year program for senior faculty to develop effective mentoring skills.
- Two year program pairing junior faculty with a senior faculty member.
- Year-long group mentoring program for junior faculty incorporating career planning and skill development for professional advancement.

Table 1

Proportion of Women Faculty by Department and Number of Women Department Chairs

	Faculty		Associate Professors		Full Professors		Number of Women Department Chairs
	1995	2001	1995	2001	1995	2001	2001
Basic Sciences							
Anatomy	23%	26%	22%	24%	16%	20%	8
Biochemistry	21%	23%	25%	26%	11%	13%	13
Microbiology	23%	26%	24%	25%	15%	17%	22
Pathology (basic and clinical)	26%	30%	25%	30%	13%	16%	12
Pharmacology	19%	21%	21%	22%	11%	13%	7
Physiology	18%	21%	19%	24%	9%	12%	6
Other Basic Sciences	24%	27%	25%	31%	13%	15%	23
Clinical Sciences							
Anesthesiology	26%	28%	23%	22%	8%	11%	12
Dermatology	30%	33%	26%	38%	12%	13%	6
Emergency Medicine	20%	26%	7%	21%	11%	6%	6
Family Medicine	32%	38%	20%	25%	14%	18%	11
Internal Medicine	22%	26%	18%	20%	7%	9%	5
Neurology	22%	25%	17%	22%	8%	10%	4
Obstetrics & Gynecology	35%	39%	22%	28%	9%	12%	12
Ophthalmology	20%	24%	17%	22%	6%	9%	2
Orthopedic Surgery	10%	10%	8%	8%	2%	1%	0
Otolaryngology	19%	20%	14%	16%	8%	7%	0
Pediatrics	39%	42%	32%	34%	17%	19%	16
Physical Medicine/Rehabilitation	38%	40%	29%	38%	17%	17%	9
Psychiatry	32%	36%	24%	29%	11%	14%	10
Public Health/Prev. Med.	36%	40%	33%	34%	19%	23%	1
Radiology	21%	23%	18%	21%	9%	11%	6
Surgery	11%	13%	8%	10%	3%	4%	2
Other Clinical Sciences	28%	30%	22%	21%	14%	15%	21
Total	25%	28%	21%	24%	10%	12%	214*

Data Sources: Faculty data from Faculty Roster system; Chair data from schools via surveys and AAMC Directory of Academic Medical Education, 2000-2001.

*Includes Interim/Acting Chairs

Table 2: Examples of Strategies to Improve Women's Advancement

<u>Opportunity</u>	<u>Interventions</u>	<u>Measurement/Outcome</u>	<u>Accountability/Monitoring</u>
1) Emphasize faculty diversity in departmental reviews	<ul style="list-style-type: none"> - Assess faculty development experience of candidates for chair jobs (Appendix 3) - Reward chairs for developing women faculty <ul style="list-style-type: none"> - Devote portions of executive committee meetings and retreats to improving women faculty development - AAMC continue obtaining and publishing annual statistics on faculty diversity 	<ul style="list-style-type: none"> - Number of women recruited, promoted and retained - Number of women division chiefs - Decline in EEO complaints 	<ul style="list-style-type: none"> - Evaluate and reward department chairs on faculty diversity
2) Target career development needs of women faculty	<ul style="list-style-type: none"> - Department chairs and dean's offices work together to improve human resources orientation toward faculty, including more information about promotions process - Institute mentoring programs & awards - AAMC continue to provide examples of good practices 	<ul style="list-style-type: none"> - Compare costs of faculty development with costs of faculty turnover - Number of valued faculty leaving - Number of mentoring-program-matched pairs continuing - Improvement in faculty satisfaction/morale as assessed by climate survey 	<ul style="list-style-type: none"> - Department chairs and CEOs regularly assess effectiveness of interventions and "return on investment" faculty development/mentoring programs

<u>Opportunity</u>	<u>Interventions</u>	<u>Measurement/Outcome</u>	<u>Accountability/Monitoring</u>
3) Assess practices for gender-related effects	<ul style="list-style-type: none"> - WIM or other committee examine practices/policies for unintended effects on women's advancement - CEOs seek & mentor women for key committees & positions - Expand definition of scholarship at schools and in scientific organizations - Assisted by AAMC, copy successful programs from other schools and industry 	<ul style="list-style-type: none"> - % women visiting professors - % women on powerful committees - Availability of flexible benefits, PT track, family leave, tenure clock-stopping 	<ul style="list-style-type: none"> • Leaders' self-assessment, on such questions as "Do I...": - Develop accountability within the institution for gender equity, including rewards for successful attainment of goals? - Identify areas where gender equity is likely to be a problem? - Explicitly identify women to mentor for leadership positions? - Nominate women for highly visible Posts? - Listen to women's and men's suggestions equally and ensure equal participation of women and men in public settings? - Review proposed policies by women faculty to ensure that there will not be unintended gender-related consequences?
4) Improve search committees and nominating process	<ul style="list-style-type: none"> - Appoint diverse committees - Educate search committees on pitfalls & opportunities re: recruiting women - Academic societies create a database of qualified women to nominate for visiting professorships & other appointments - AAMC publish "good practices manual" for chairs 	<ul style="list-style-type: none"> - Number of committees with greater than 25% women - Number of committees assisted by organizational development or other skilled facilitator - Number of searches identifying women among final candidates 	<ul style="list-style-type: none"> - Dean/CEO mandate inclusion of women on "short-list" - Committees conduct self-evaluation of process

<u>Opportunity</u>	<u>Interventions</u>	<u>Measurement/Outcome</u>	<u>Accountability/Monitoring</u>
5) Strengthen WIM Program	<ul style="list-style-type: none"> - Financially support WIM/WLO - Regularly benchmark representation of women against AAMC published means - AAMC continues to publish annual report on status of women faculty 	<ul style="list-style-type: none"> - Evaluate department chairs on faculty retention and diversity - Conduct salary equity study and faculty morale survey 	<ul style="list-style-type: none"> - Dean monitors national standing on numerous gender-related indicators

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