The C-Change Project: A National Initiative on Gender, Culture and Leadership in Medicine

ACE-Alfred P. Sloan Invitational Conference for Medical School Deans

September 24, 2010

Deborah E. Powell, M.D.
Associate Vice President for New Models of Medical Education
Dean Emeritus
University of Minnesota Medical School

C-Change Research Project

To foster an organizational culture in academic medicine that helps all faculty realize their potential

To address the lack of women, under-represented minority and generalist faculty in senior and leadership positions in academic medicine

Generously supported by the Josiah Macy, Jr. Foundation, the Brandeis University Women's Studies Research Center, and supplemental funds provided by the Office of Public Health and Science, Office on Women's Health, and Office of Minority Health; NIH, Office of Research on Women's Health; AHRQ; CDC; and HRSA.

C - Change Research Team

- Linda Pololi, MBBS, MRCP (PI) Brandeis University
- Arlene Ash, PhD, University of Massachusetts Medical School
- Phyllis Carr, MD, Boston University School of Medicine
- Peter Conrad, PhD, Brandeis University, Sociology Dept.
- Lisa Cooper, MD, MPH, Johns Hopkins Univ. Sch. of Medicine
- David Kern, MD, MPH, Johns Hopkins Univ. Sch. of Medicine
- Sharon Knight, PhD, RN, ECU, School of Health and Human Perf.
- Edward Krupat, PhD, Harvard Medical School
- Geno Schnell, PhD, MBA, Schnell Management Consulting

Invited five medical schools to participate in a set of research activities. The schools were selected to provide balance in geographic distribution and to be representative of different organizational characteristics of medical schools.

Five Original C-Change Schools and Their Deans at the Origin of the Project

- Duke University School of Medicine – R. Sanders Williams, MD
- George Washington University School of Medicine & Health Sciences – James Scott, MD
- Tufts University School of Medicine – Michael Rosenblatt, MD
- University of Minnesota Medical School – Deborah Powell, MD
- University of New Mexico School of Medicine – Paul Roth, MD

C - Change Activities

- Faculty interview study in five schools
- C - Change national faculty survey (CFS)
  - The experiences of faculty in academic medicine
  - Organizational culture perceived by faculty
- Promising practices
- Learning Action Network
- Evaluation
- National Advisory Group
- Dissemination

Learning Action Network

The Learning Action Network links the member institutions and engages them in a collaborative group process to drive change in their own institutions

- Biannual gatherings
- Regular teleconferences
- Communications infrastructure
- Cross-school Innovation Work Groups
- School change activities

Learning Action Network

- Provide support for change agency around culture, equity and diversity
- Deepen understanding of factors related to the recruitment and advancement of women and under-represented minority faculty
- Collaborate in learning
- Stimulate organizational culture change activities at C-Change medical schools to realize the potential of all faculty

Learning Action Network

Convened December 2006

LAN members: 4-6 participants from each of the

C - Change schools

- Deans
- Senior leaders
- Department chairs
- Junior faculty
- PhD scientists
- Men and women
- URM (25%)

Two-day meetings occur twice a year with interim communication by teleconference and extranet

Learning Action Network Meeting Activities

- Review of C - Change research findings
- Promising practices
- Collaboration on learning, action steps and change activities
- Local meetings. Example: New Mexico

Interview Study

This hypothesis-generating qualitative study was designed to document the experiences of faculty and organizational culture in academic medical centers

We conducted in-depth interviews with male and female faculty from diverse disciplines (generalists, subspecialists and research scientists).

Faculty Interviews in C - Change Schools

Semi-structured interviews with male and female faculty from each site (N = 96)

- Early career
- Plateaued
- Leaders
- Left academic medicine

Oversampling: Women: 55%

Under-represented minority (URM): 21%

Generalists: 20%

17% PhD, 83% MD

C - Change Survey of Medical Faculty (CFS)

- Quantitative, ~20 minute, web-based survey
- Explores themes identified in the interview study
- Fielded nationally with AAMC assistance

Purpose

Clarify the extent to which the interview findings reflect the experience of academic medical school faculty

Sampling Design

Two-stage selection: sampled faculty within sampled schools

- 5 C-Change schools
- 21 additional schools

Constrained randomization of schools to achieve regional and private-public balance

Stratified sampling of 150+ faculty per school

- Balanced on sex and seniority (2x3)
- Oversampled: URM faculty, women surgeons

C - Change Faculty Survey

Fielded to 26 academic medical schools nationally (including the 5 C - Change schools)

Today's presentation is based on data from over 500 respondents (5 schools with achieved enrollment goals)

Achieved response rate: 60%

- 54% of the respondents were women
- 21% of the respondents were URM

- Preliminary national data have similar findings

Faculty Satisfaction

I find my work to be personally satisfying.	93%M	92%F
I feel energized by my work.	76%M	75%F
I am proud to work here	77%M	77%F
My institution has a high level of faculty morale	37%M	37%F

Voices of the Faculty: Isolation vs. Integration

- “What I struggled with for a long time here was the feeling that I was invisible. My opinion didn’t matter, what I was feeling didn’t matter. I felt like that for at least the first 10 years.” (female)

• I feel invisible or ignored here.	18%M	36%F
• I feel isolated here.	27%M	33%F
• I feel burnt out.	41%M	48%F

Voices of the Faculty: Input into Decisions

"I truly believe in a democratic process for decision making and for sharing power and resources… and that does not happen in academic medicine." (male)

My input makes a difference in decisions that affect me. 51%M 44%F

Voices of the Faculty: Gender Equity

"It's just sort of an exaggerated old boys' club. Things get done behind the scenes with relationships and power and all that kind of stuff… there's a huge amount of gossip and innuendo and behind the scenes going on… I'm not a part of the cliques… I'm not a guy, I don't play golf, I'm not in their particular research group." (female)

I feel that advancement here is as open to me as to anyone else. 64%M 43%F

The institution treats women and men equitably with respect to promotion. 69%M 43%F

It is harder for female faculty to get ahead here than for male faculty. 27%M 60%F

Voices of the Faculty: Advancement

"Women are chosen less often for these types of leadership positions. Definitely women are less nominated for awards, grants, etc. I think that might be because the senior people who are nominating people are mostly men. Men tend to nominate men and women tend to nominate women. I don't think it's conscious at all. I think it's very subconscious." (female)

My institution seems firmly committed to my success.

47%M 40%F

My institution actively supports women in achieving leadership positions.

71%M 51%F

Voices of the Faculty: Values Alignment

"Publications and being invited to speak at other institutions, getting a lot of grants; that is valued higher than patient care. If you were to ask somebody, "who is most accomplished?" - those people are not necessarily the ones most adept at patient care." (female)

My institution's actions are well aligned with its stated values and mission.	56%M	48%F
My institution puts its own needs ahead of its educational and clinical missions.	31%M	24%F

Voices of the Faculty: Being Authentic

"Well, I think the hardest thing for me was to be in a department where you couldn't express yourself without feeling that you were jeopardizing your career. The hardest thing was that I wasn't honest to myself sometimes and because I was afraid that I would lose my job - I would get kicked out of the department. Because there were people in our department who lost their jobs over their being expressive. Their lives were made absolutely miserable." (female)

I often feel the need to hide what I really think and feel.

30%M 40%F

Voices of the Faculty: The Need to Be Competitive

"…but I think what it breeds - and this gets into the heart of the academic culture certainly at its lower and mid levels, is kind of an unpleasant place in a lot of ways. People are scrambling up over one another trying to find their way and find their niche and find their grants and so forth. And I don't like it. I don't like what it does to people. And I think very nice, thoughtful people become very selfish and self-indulgent." (male)

I find myself being more aggressive here than I would like.

19%M 47%F

Voices of the Faculty: Diversity

"So academic medicine is a foreign culture. It's a different culture that isn't friendly to American Indians and Latinos, and I think that's true also for women." (male)

My institution's actions demonstrate that it values diversity. 74%M 58%F

Voices of the Faculty: Equity for Minority Faculty

"You really have to have leaders who do value diversity and push it. It has to be something that they prioritize as a level of importance and make decisions - when everything else is equal - they choose the diversity issue. You have to step up to the plate and choose the person who does bring diversity. So you need leaders who are willing to stand for it." (male)

	nonURM	URM
It is harder for minority faculty to get ahead here than for other faculty.	18%	47%
My institution actively supports minorities in achieving leadership positions.	64%	45%

Voices of the Faculty: Impact on Retention

"But in an academic institution that doesn't value community, culture, partnerships, collaboration, I wouldn't have wanted to stay there. That's where I was going and what I valued. It was really a dead end" (male)

In the past 12 months I have seriously considered leaving my current institution. 48%M 54%F

In the past 12 months I have seriously considered leaving academic medicine. 28%M 31%F

Table 5. Clinical MD Faculty Intent to Leave

	Yes, I plan to leave in the next 1-2 years		No, I plan on staying for at least that long	I don't know
	No. (%)	Department ranking[a]	No. (%)	No. (%)
Anesthesiology	27 (7.4)	12	235 (64.7)	101(27.8)
Dermatology	4 (5.0)	4	59 (73.8)	17 (21.3)
Emergency Medicine	21 (9.3)	15	154 (68.4)	50 (22.2)
Family Medicine/Practice	21 (6.5)	7	239 (73.5)	65 (20.0)
Internal Medicine – General	23 (6.9)	10	229 (69.0)	80 (24.1)
Medicine – Subspecialty	87 (8.5)	14	703 (68.4)	238 (23.2)
Neurology	16 (7.7)	13	150 (71.8)	43 (20.6)
OB/GYN	21 (6.6)	9	224 (70.9)	71 (22.5)
Ophthalmology	9 (10.0)	17	60 (66.7)	21 (23.3)
Otolaryngology	4 (3.7)	2	90 (83.3)	14 (13.0)
Pathology	22 (9.5)	16	150 (64.9)	59 (25.5)
Pediatrics – General	15 (5.5)	5	208 (76.2)	50 (18.3)
Pediatrics – Subspecialty	33 (4.3)	3	582 (76.3)	148 (19.4)
Psychiatry	18 (6.4)	6	191 (67.7)	73 (25.9)
Radiology	9 (2.9)	1	233 (74.2)	72 (22.9)
Surgery – General	8 (7.4)	11	67 (62.0)	33 (30.6)
Surgery – Specialty/Other	38 (6.5)	8	401 (68.5)	146 (25.0)

[a] Department rankings are based on the percentage of faculty planning to leave in the next 1-2 years (excluding those who plan on retiring in 1-2 years); a lower number denotes a better ranking.

Calculation of Replacing Faculty in Current Study Who Have the Intent to Leave Their Organizations

	No. of faculty with the intent to leave their medical school in the next 1-2 years	Mean cost of replacing one faculty member (US$)[a]	Cost of replacing faculty in current sample (US$)[b]
Generalists	72	115,554	8,319,888
Subspecialists	271	286,503	77,642,313
Surgery specialists	38	587,123	22,310,750
Total	381	—	108,272,951
Average per institution	*17*	—	*4,707,520*

[a] Mean cost of replacing one faculty member source: Schloss EP, Flanagan DM, Culler CL, Wright AL. Some hidden costs of faculty turnover in clinical departments in one academic medical center. *Acad Med*. 2009;84(1):32-36.

[b] Cost of replacing faculty in current sample was calculated by multiplying the number of faculty respondents with the intent to leave their organizations by the mean cost of replacing one faculty member; the total row is the sum of the cost of replacing all generalists, subspecialists, and surgery specialists; the average per institution is the total divided by 23 (the number of medical schools in our study).

Examples of Early Change Activities

- Education of chair search committees re non-conscious bias -- https://implicit.harvard.edu
- Women in surgery conference
- Tabulation of gender demographics of search committees
- Workshop for senior women faculty career development
- Lactation rooms
- Mentoring program for female basic science faculty
- New Women in Medicine program funded

Leader - Instigated Change

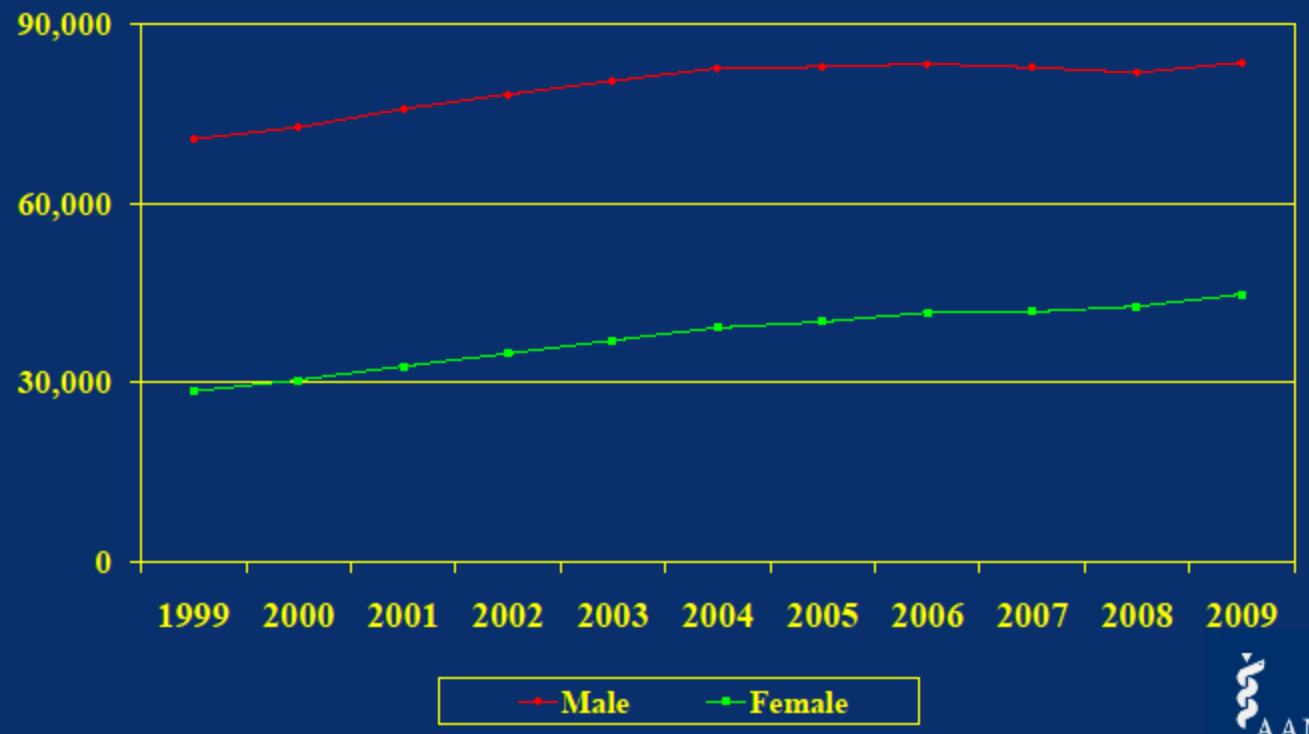
New positions

- Vice-Dean for Faculty Enrichment
- Dean for Multicultural Affairs
- Assistant Dean for Faculty Development
- Associate Dean, Office of Diversity

Changed mission statement

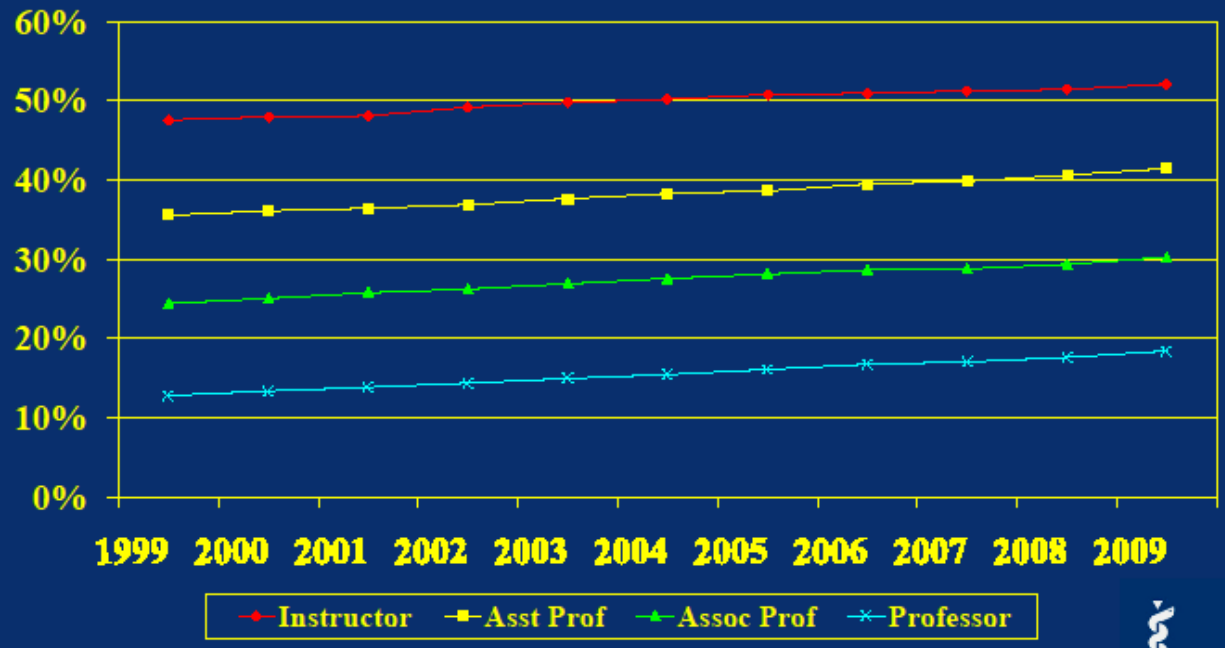
Development of new faculty database to track faculty (Markers of Achievement Inventory)

U.S. Medical School Faculty by Sex
1999–2009
AAMC Faculty Roster



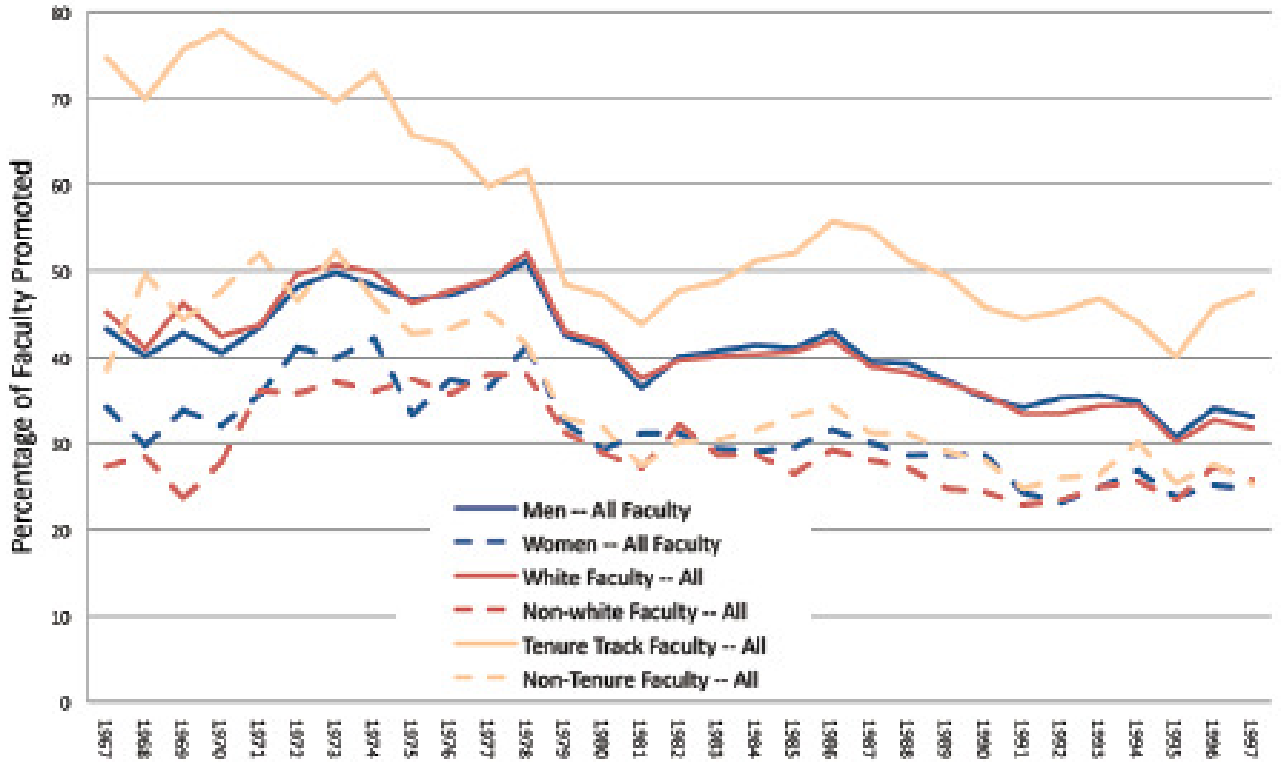
AAMC

U.S. Medical School Female Faculty as a Percent of Each Rank
1999–2009
AAMC Faculty Roster



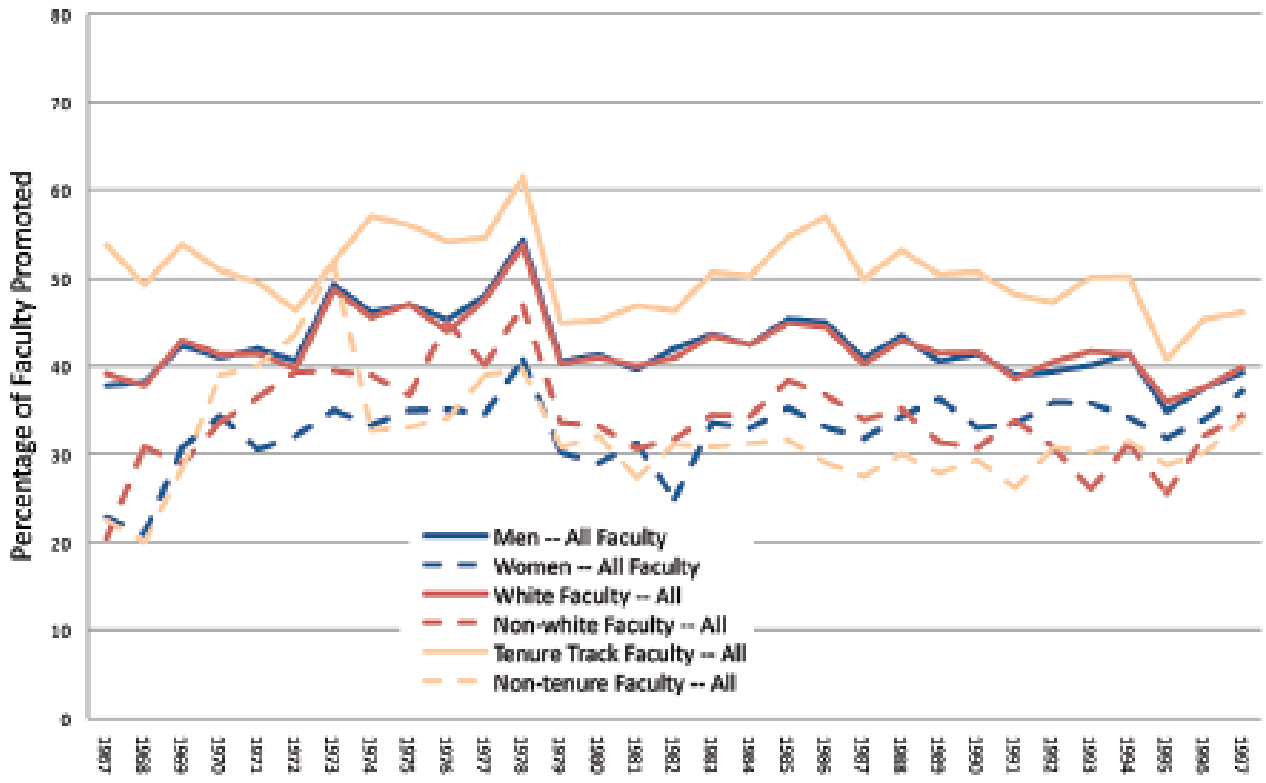
AAMC

Figure 1: 10-Year Promotion Rates* for First-time Assistant Professor to Associate Professors from Academic Years 1967 through 1997



*Every first-time assistant professor appointed in each of the academic years 1967 to 1997 was tracked for 10 years to determine promotion rates.

Figure 2: 10-Year Promotion Rates* for First-time Associate Professor to Full Professors from Academic Years 1967 through 1997



*Every first-time associate professor appointed in each of the academic years 1967 to 1997 was tracked for 10 years to determine promotion rates.

Table 2. Women in Leadership Positions in U.S. Medical Schools, 2005-06

Leadership Position	Count	Percent
Division/Section Chief	887	19
Department Chair	303	10
Assistant Dean	254	43
Associate Dean	306	32
Senior Associate Dean	98	27
Dean	14	11

Women Deans of US Allopathic Medical Schools

YEAR	# OF SCHOOLS WITH FULL OR PROVISIONAL LCME ACCREDITATION	# OF PERMANENT OR INTERIM WOMEN DEANS
1997	126	5
2005	126	11
2008	129	18
2010	133	14

2010 US MEDICAL SCHOOL DEANS

14 WOMEN

TOP SPECIALTIES
- MEDICINE
- PEDIATRICS

119 MEN

TOP SPECIALTIES
- MEDICINE
- PEDIATRICS
- SURGERY, INCLUDING SURGICAL SPECIALTIES

OBSTACLES TO CAREERS IN ACADEMIC MEDICINE

- FAMILY RESPONSIBILITIES
  - CHILDREN
  - ELDERLY PARENTS
- INFLEXIBLE WORK “RULES”
  - SCHEDULING MEETINGS
  - PROMOTION AND TENURE TIME TABLES
- GENDER STEREOTYPING
- FINANCIAL PRESSURES
  - MEDICAL STUDENT DEBT
  - PERCEIVED OR REAL PRESSURE FOR CLINICAL CARE OVER RESEARCH & TEACHING

INVESTMENT IN FACULTY/ FACULTY DEVELOPMENT

- INSTITUTIONAL RESPONSIBILITY
- INDIVIDUAL RESPONSIBILITY

INDIVIDUAL RESPONSIBILITY

- MOTIVATION & SELF ASSESSMENT
- TRAINING/PREPARATION
- KNOWLEDGE OF POLICIES AND TIMELINES
- WORK WITH MULTIPLE MENTORS
- COMMUNICATE OPENLY

INSTITUTIONAL RESPONSIBILITY

- DEFINE VALUES
- PROVIDE RESOURCES FOR FACULTY SUCCESS
  - FINANCIAL – START-UP, BRIDGE FUNDS
  - FACULTY DEVELOPMENT – INTERNAL AND EXTERNAL COURSES, MENTORING, PUBLICATION AND WEB SITES, ASSESSMENT & COUNSELING

INSTITUTIONAL RESPONSIBILITY, cont'd.

- PROVIDE ENVIRONMENT FOR CAREER SUCCESS
  - INFRASTRUCTURE
  - EQUITABLE PROCESSES – IDEALLY WHICH MIRROR INSTITUTIONAL VALUES

"AN ACADEMIC INSTITUTION'S FACULTY IS ITS GREATEST ASSET. THUS, THE RECRUITMENT AND PREPARATION OF THE NEXT GENERATION OF FIRST-RATE FACULTY OUGHT TO BE OF GREAT CONCERN TO ALL WHO ARE INVESTED IN MEDICINE"

BICKEL J. AND BROWN, A.J.
ACADEMIC MEDICINE 80:205, 2005

http://cchange.brandeis.edu