

# Women in Academic Medicine

## NATIONAL INITIATIVES AND THE JCSW

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Past Chair, AAMC Group on Women in Medicine and Science

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# Conflict of Interest Disclosure

I have no relevant financial relationships with a commercial entity producing healthcare-related products and/or services

# Today's agenda

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- The state of equity in
  - Leadership
  - Academic rank
  - Salary
- Why is the scale still tipped?
- What do we do about it?

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## Resources

### Women in Academic Medicine Statistics

Recent data on full-time faculty, department chairs, and medical school deans are available on the AAMC Faculty Roster website at <https://www.aamc.org/data/facultyroster/reports/>.

The State of Women in Academic Medicine: The Pipeline and Pathways to Leadership, 2015-2016

### GWIMS Toolkit

The GWIMS Toolkit is a series of presentations designed to provide practical guidance on a variety of topics relevant to women faculty in academic medicine. Each presentation provides an overview of the topic, relevant best practices, tips on implementation, and useful references for more information. We encourage you to share these resources with interested colleagues at your organization.

[GWIMS Toolkit](#)

### Webinars

A collection of webinars on topics relating to the issues commonly experienced by women in academic medicine and science.

[Webinars](#)

### Additional Resources

#### Women's Specialty Societies

A listing of women's specialty societies and specialty societies with women's groups or committees. If you know of additional women's specialty societies, please submit a link to their website to [gwims@aamc.org](mailto:gwims@aamc.org).

[Women's Specialty Societies](#)

### CareerConnect



The AAMC's online job board for employers and job seekers in academic medicine

[Visit CareerConnect >](#)

# The State of Women in Academic Medicine

**The Pipeline and Pathways to Leadership**

2013-14



Learn

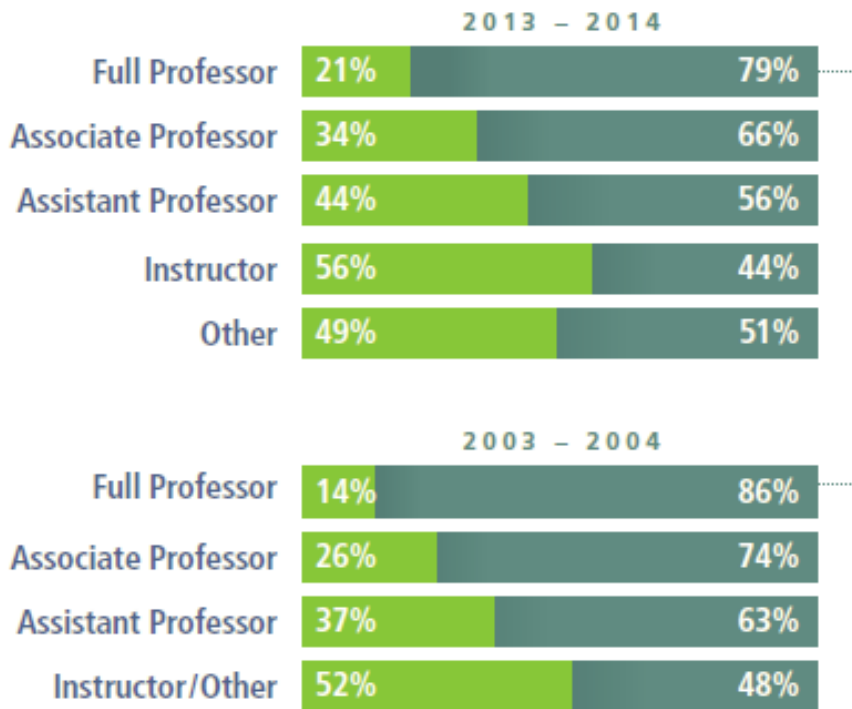
Serve

Lead

# Percent ranks

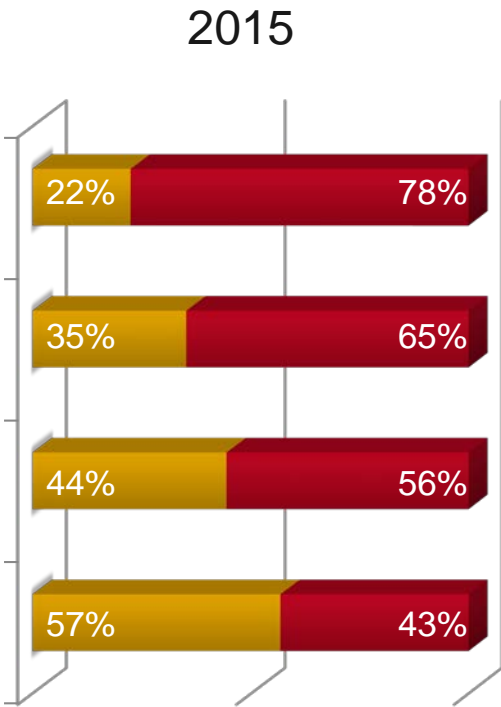
FIGURE 5

Then & Now: Full-Time Men and Women Faculty by Rank

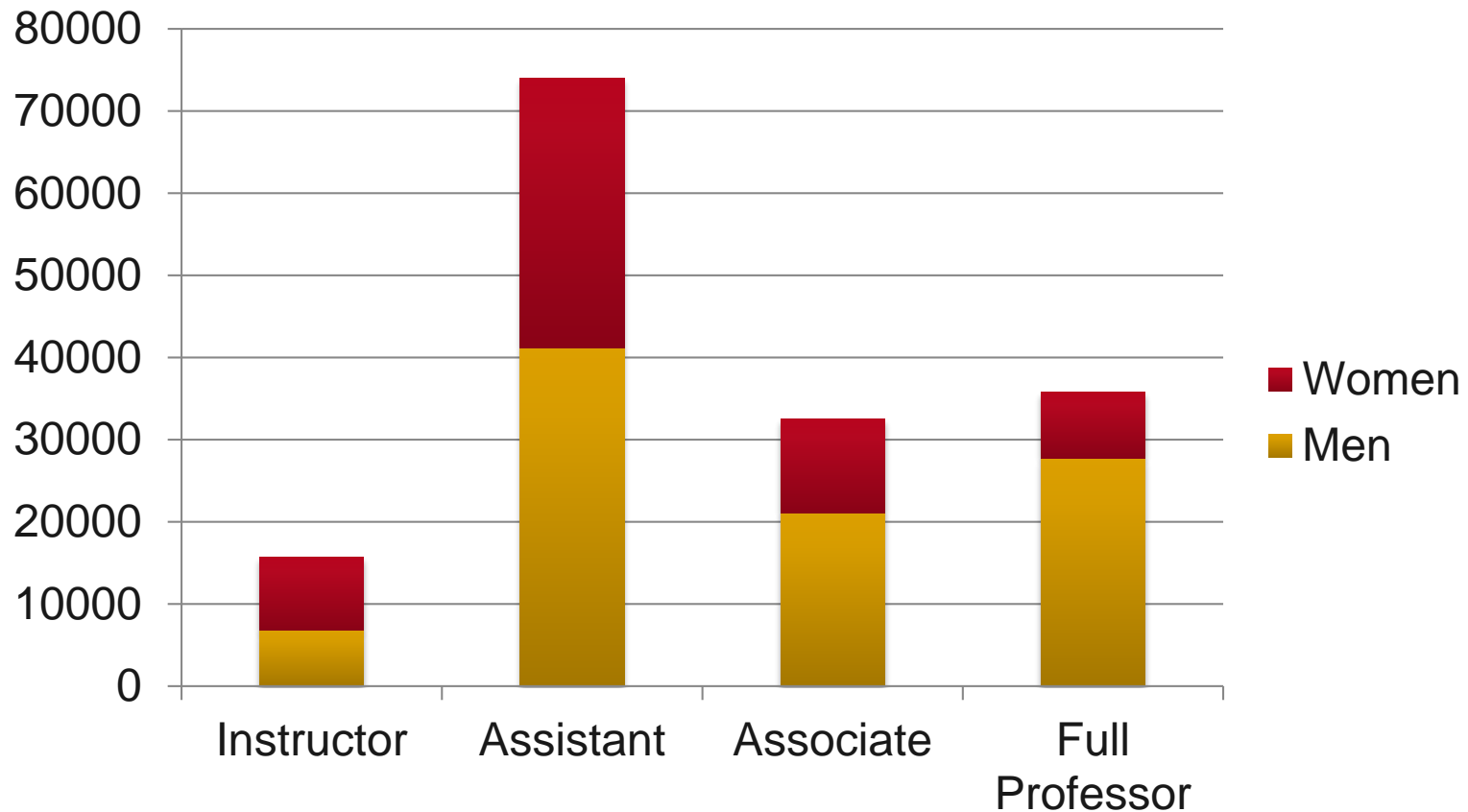


+7%  
points

Full Professor



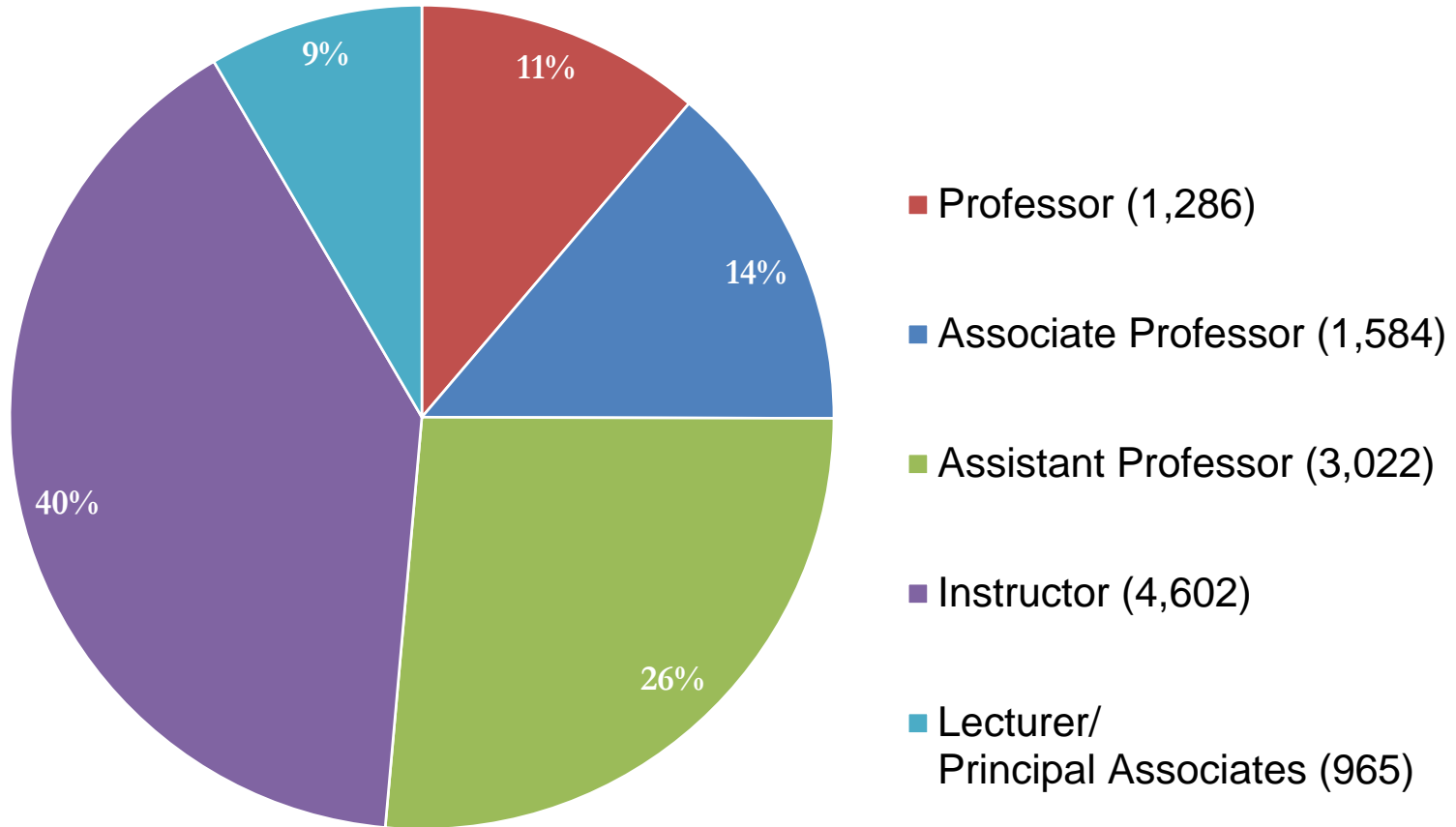
# AAMC 2015: The State of Women in Academic Medicine



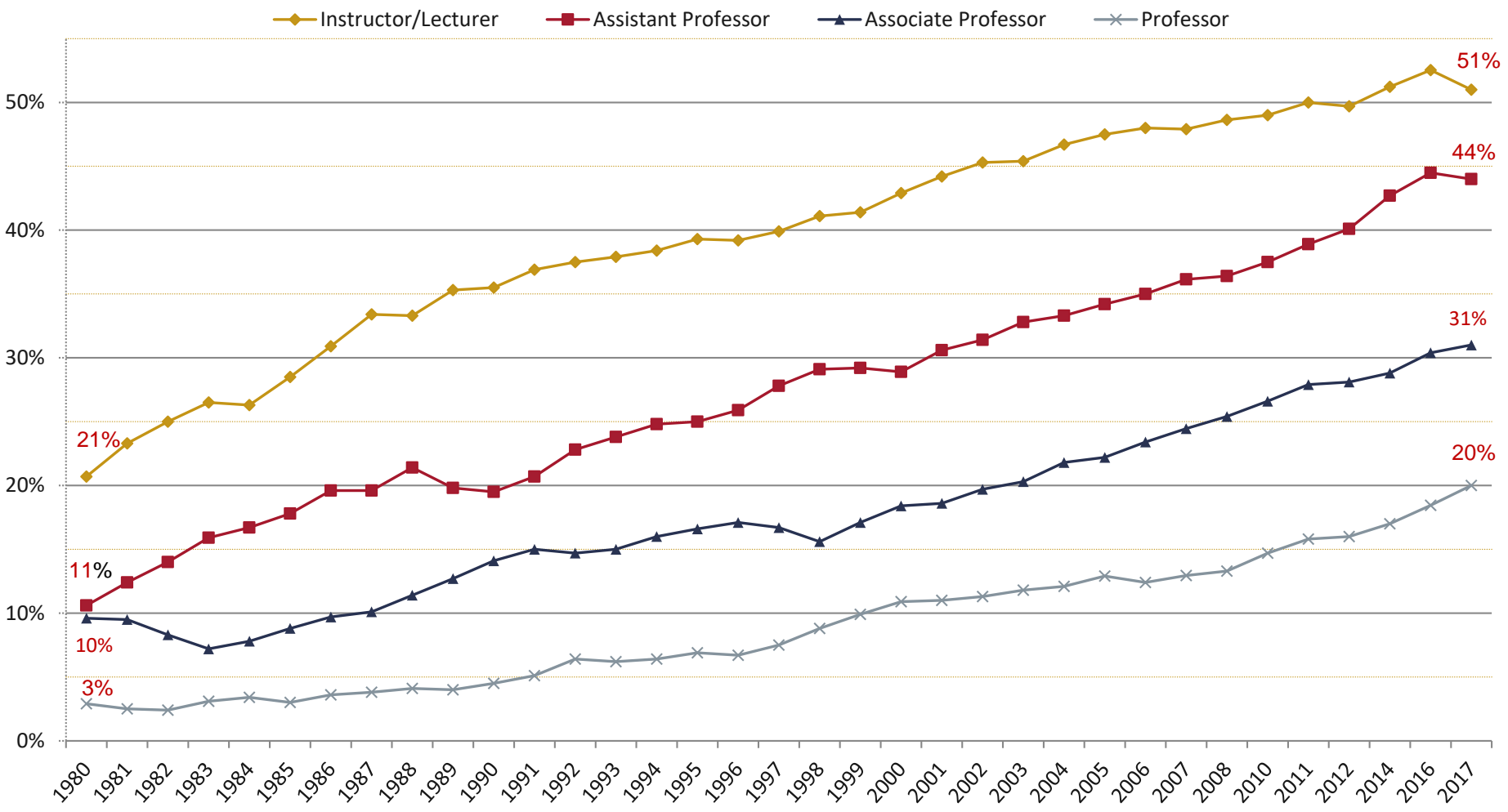
<https://www.aamc.org/members/gwims/statistics/>

# HMS full-time faculty by rank

**Total Full Time Faculty : 9,392**



# Harvard women full-time faculty by rank (1980–2017)



07-1-16

# Why does rank matter?

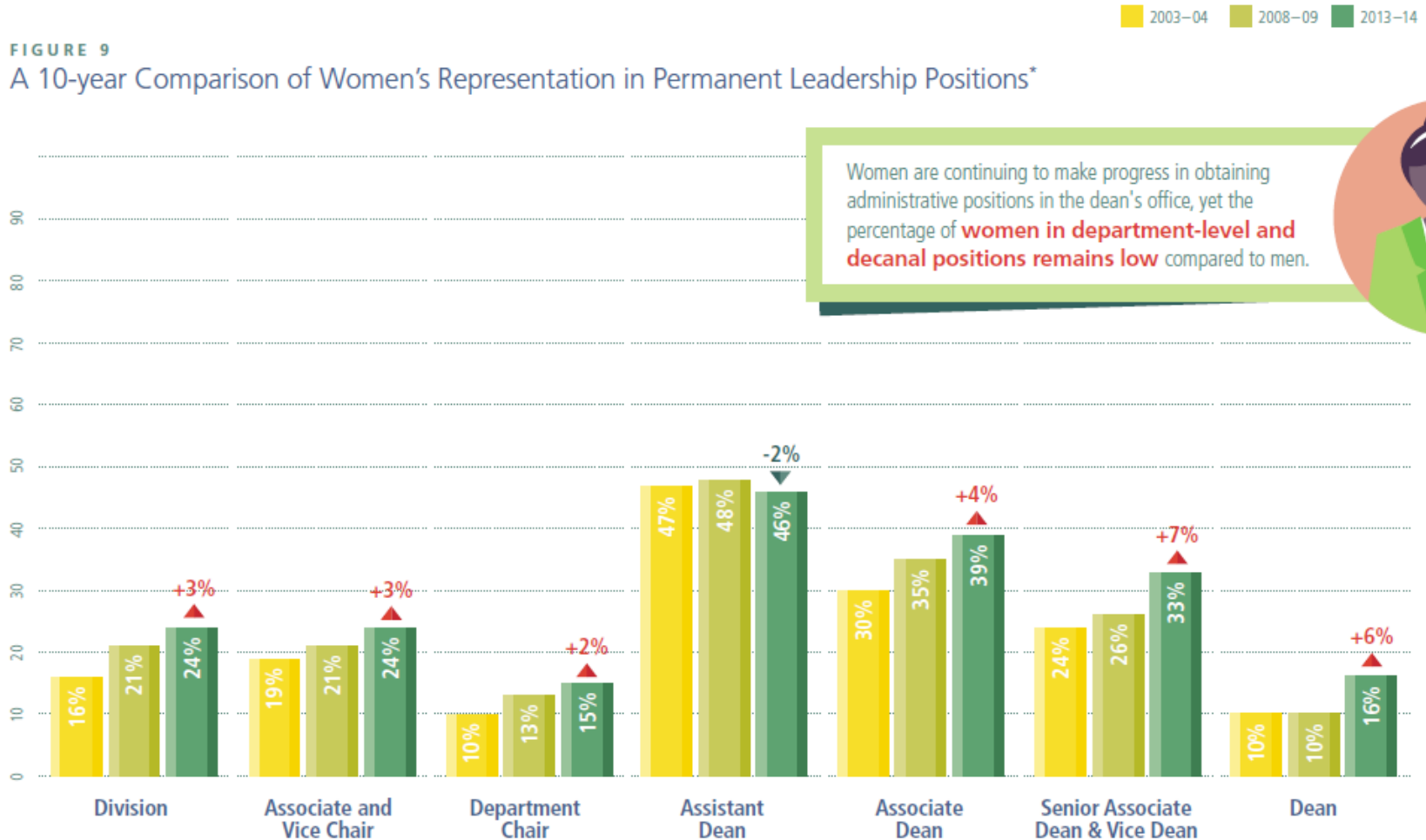
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- Tenure...
- Compensation benchmarking includes rank
- Candidacy for leadership roles
- Self reinforcing – who drives decisions
  - Search committee membership
  - Promotion committees

... and because there should be equity

# National leadership roles

FIGURE 9  
A 10-year Comparison of Women's Representation in Permanent Leadership Positions\*



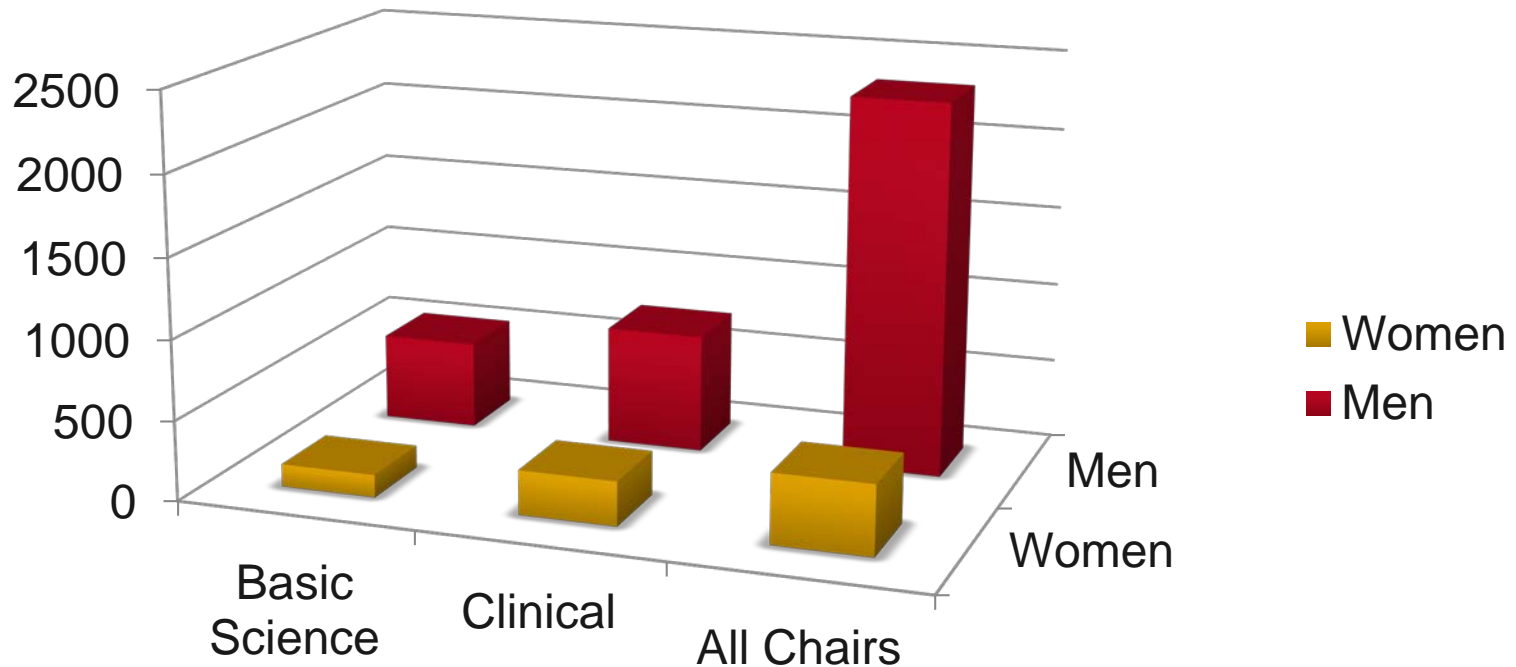
Women are continuing to make progress in obtaining administrative positions in the dean's office, yet the percentage of **women in department-level and decanal positions remains low** compared to men.



# Department chairs and gender 2013

Department	Total # of Chairs	% of Chairs Who Are Women
Social Sciences	2	100%
Other Health Professions	18	39%
All Other Departments	24	33%
Public Health & Preventive Medicine	26	27%
Other Clinical Sciences	42	24%
Obstetrics & Gynecology	129	22%
Anatomy	71	21%
Other Basic Sciences	228	20%
Pediatrics	129	20%
Family Practice	109	19%
Dermatology	68	19%
Microbiology	90	18%
Pharmacology	82	17%
Veterinary Sciences	6	17%
Pathology	122	16%
Physical Medicine & Rehabilitation	49	16%
Radiology	190	16%
Biochemistry	108	15%
Anesthesiology	101	13%
Psychiatry	126	13%
Internal Medicine	130	12%
Neurology	101	11%
Emergency Medicine	83	10%
Physiology	80	9%
Ophthalmology	89	8%
Otolaryngology	72	3%
Surgery	294	1%
Orthopedic Surgery	100	0%
Dentistry	6	0%

# Department Chairs and Gender in 2015



<https://www.aamc.org/members/gwims/statistics/>

# Department Chairs and Gender

	Basic Science		Clinical		All chairs	
	Women	Men	Women	Men	Women	Men
2015 Total	141	546	277	1742	437	2331
2015 Average	1	4	2	13	3	17
2009 Average	1	5	2	13	3	18
HMS 2018	4	7	8	41	11	48

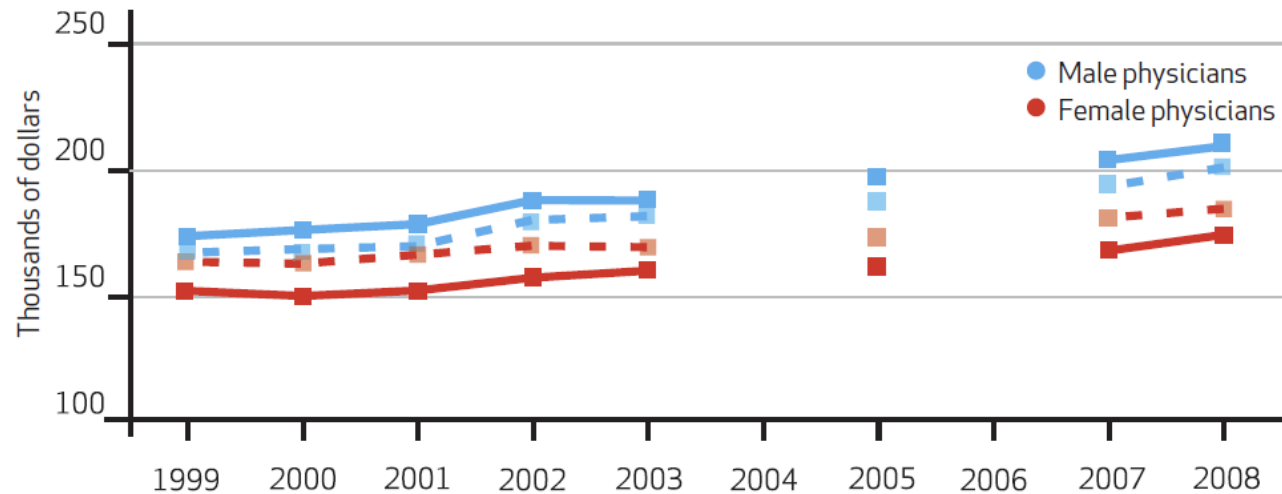
Average denotes average by medical school

2015	Women	Men
Deans	20	105
Interim Deans	3	8
HMS Affiliate CEOs	4	7

<https://www.aamc.org/members/gwims/statistics/>

# Residency graduates in NY state

Physician Starting Salaries Over Time, Mean And Controlling For Observable Characteristics, By Gender, Selected Years 1999–2008



**SOURCE** Authors' calculations from New York State Survey of Residents Completing Training, 1999–2003, 2005, 2007–08. **NOTES** Sample included 4,918 men and 3,315 women. Salary included base plus anticipated incentive compensation, adjusted for inflation using the 2008 Consumer Price Index.

LoSasso et al., Health Affairs, 2011

# Income by race and gender

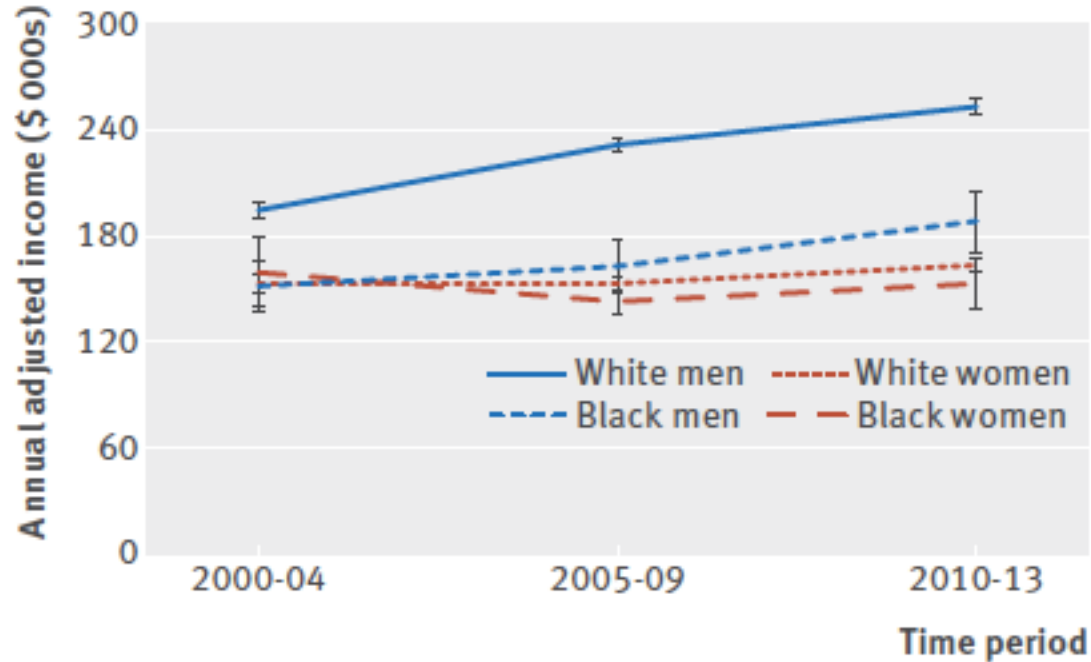


Fig 1 | Trends in adjusted annual median income of US physicians in American Community Survey, by race-sex subgroup, 2000-13. Adjusted earned incomes are

Ty, Seabury, Jena BMJ 2016

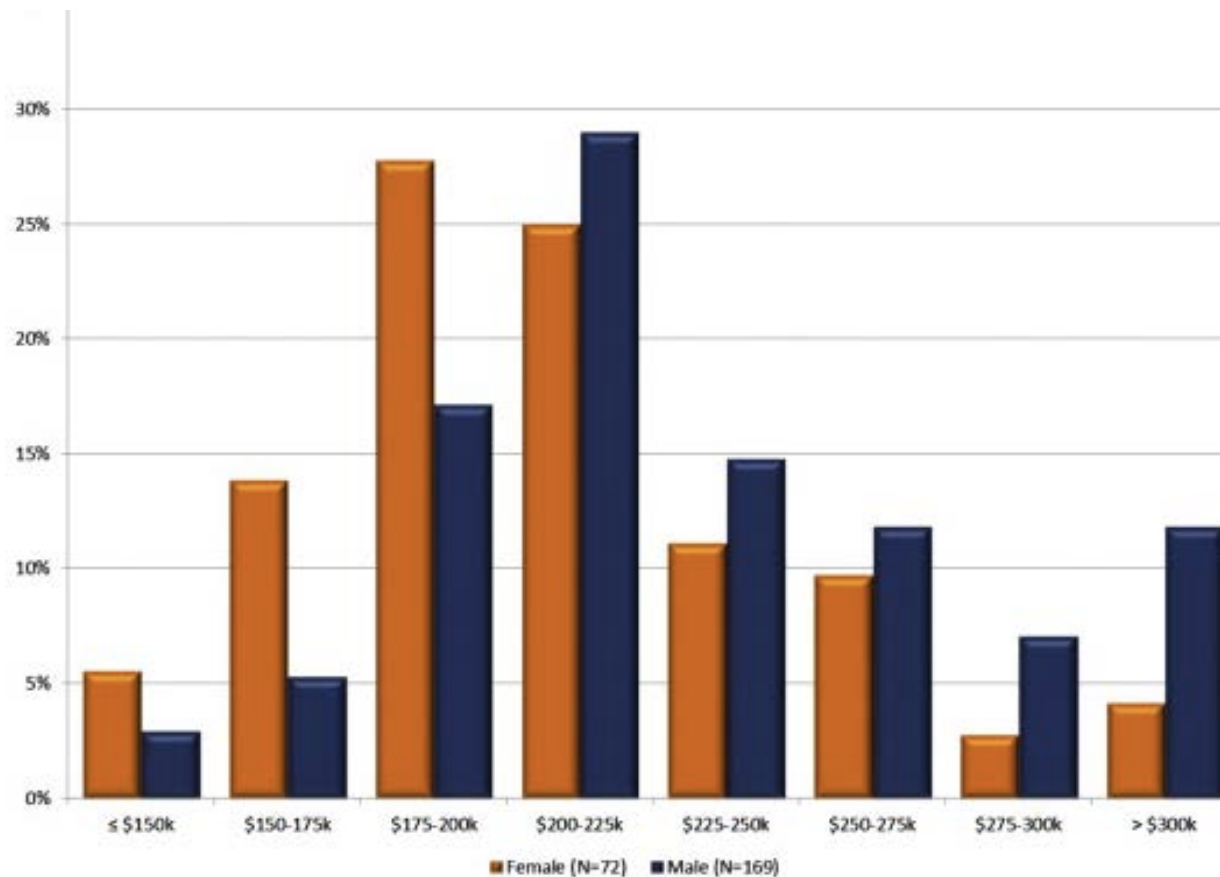
# Salaries for physician investigators

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- Mailed survey to 2000-2003 K award recipients
- Females earned ~\$13,4000 less than males after adjustment for specialty, academic rank, leadership positions, publications, and research time

Jagsi et al., JAMA, 2012

# Internal Medicine Residency Program Directors



Willett LL et al. Am J Med 2015

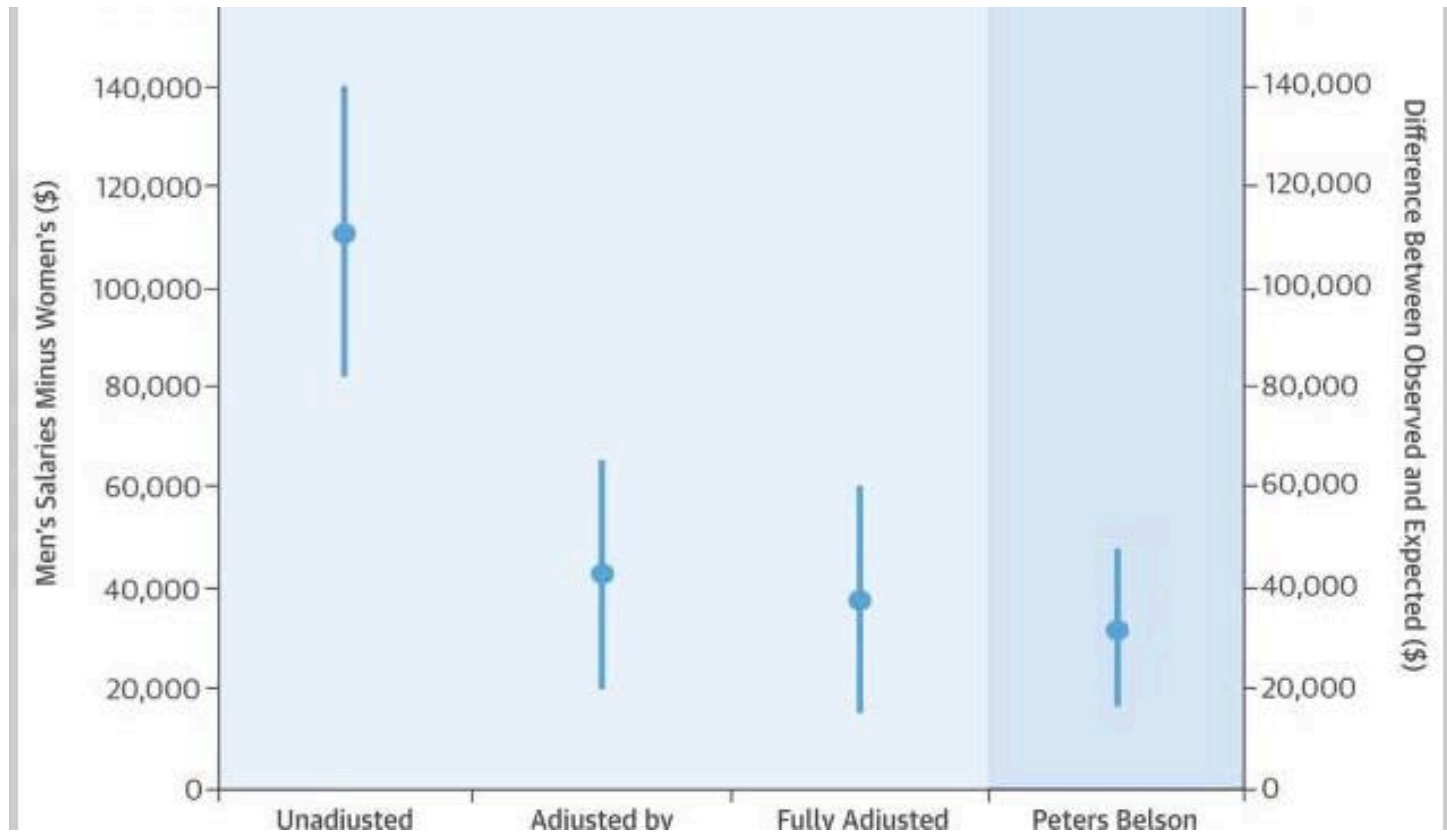
# Salary differential in cardiology

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- National data base of 3187 cardiologists in 161 practices
  - 229 female (7%)
  - 53% of women, 28% men non-invasive cardiology
  - 11% of women, 39% men invasive cardiology
- Analysis adjusted for age, sex, subspecialty, full-time status, half-days worked, days off, wRVUs, types of visits and procedures; practice geographical area, compensation model, ownership model

Jagsi R et al. JACC 2016

# Salary differential in cardiology



Jagsi R et al. JACC 2016

# Resources beyond salary?

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- Administrative support
- Laboratory space
- Access to postdocs, RAs
- Clinical practice support
- Examination room space
- OR block time
  
- No data



**Why is the scale still tipped?**

# Age and Earnings in College Graduates

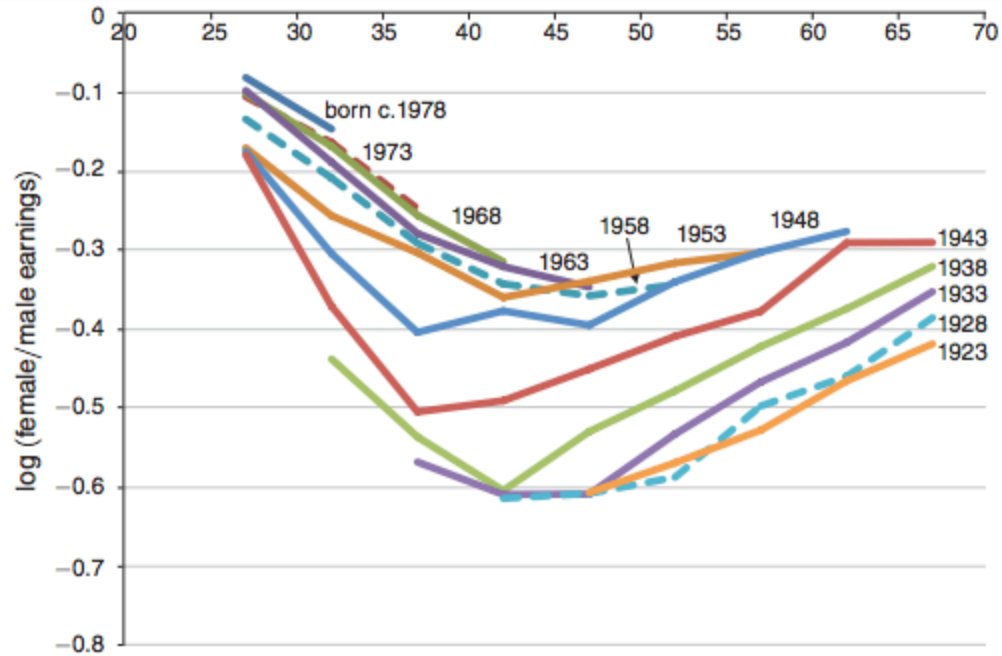


FIGURE 1. RELATIVE EARNINGS OF (FULL-TIME, FULL-YEAR) COLLEGE GRADUATE MEN AND WOMEN FOR SYNTHETIC COHORTS: BORN 1923 TO 1978

Golden C, American Economic Review 2014, 104(4): 1091–1119

# Potential reasons for pay gap

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- “Explained”
- Hours worked
- Education
- Experience/employment gaps
- “Residual”
- Blatant discrimination
  - Sexual harassment
- Implicit bias
- Bargaining and negotiation
- Willingness to leave for another job

Golden C, American Economic Review 2014, 104(4): 1091–1119

# Maternity leave and salary

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- 17 year follow up of ~500 faculty in 24 institutions
- Leave associated with decrease in salary
  - Defined as >2 months on leave
- Median leave <3 months
- Median time part-time <3 years
- Associated with \$28,000 decrease in salary

Freund et al, Ac Med 2016

# Implicit bias



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## Age IAT

**Age ('Young - Old' IAT).** This IAT requires the ability to distinguish old from young faces. This test often indicates that Americans have automatic preference for young over old.

## Gender-Career IAT

**Gender - Career.** This IAT often reveals a relative link between family and females and between career and males.

## Gender-Science IAT

**Gender - Science.** This IAT often reveals a relative link between liberal arts and females and between science and males.

## Weapons IAT

**Weapons ('Weapons - Harmless Objects' IAT).** This IAT requires the ability to recognize White and Black faces, and images of weapons or harmless objects.

## Sexuality IAT

**Sexuality ('Gay - Straight' IAT).** This IAT requires the ability to distinguish words and symbols representing gay and straight people. It often reveals an automatic preference for straight relative to gay people.

## Race IAT

**Race ('Black - White' IAT).** This IAT requires the ability to distinguish faces of European and African origin. It indicates that most Americans have an automatic preference for white over black.

## Arab-Muslim IAT

**Arab-Muslim ('Arab Muslim - Other People' IAT).** This IAT requires the ability to distinguish names that are likely to belong to Arab-Muslims versus people of other nationalities or religions.

## Presidents IAT

**Presidents ('Presidential Popularity' IAT).** This IAT requires the ability to recognize photos of Donald Trump and one or more previous presidents.

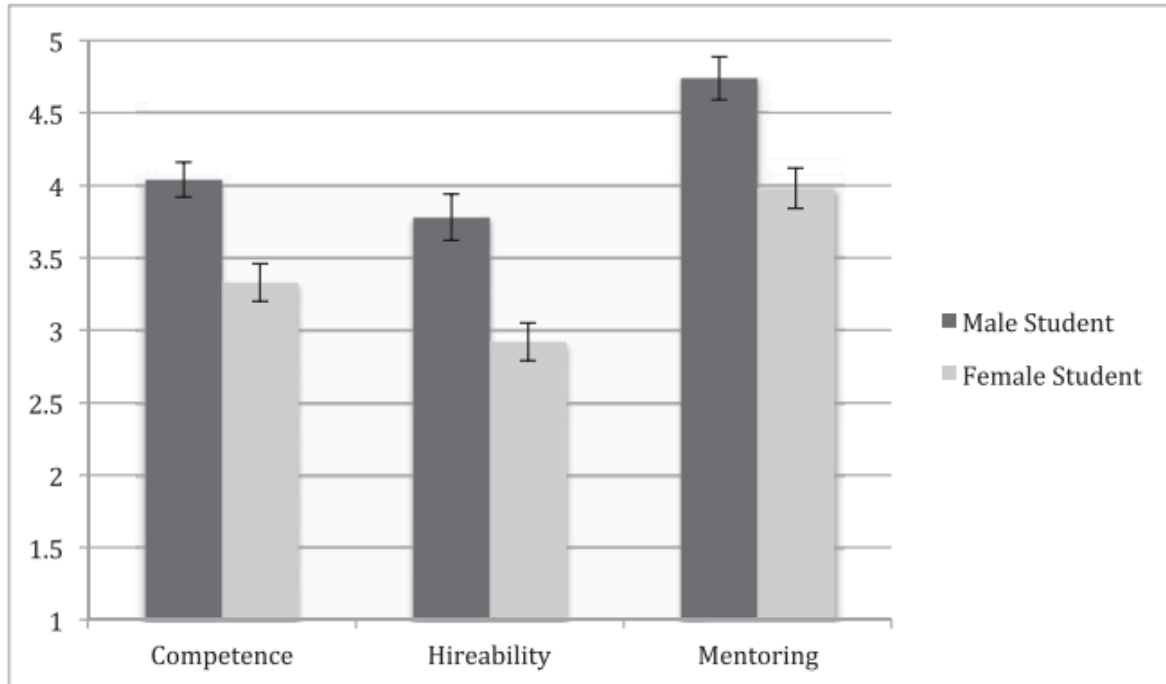
## Weight IAT

**Weight ('Fat - Thin' IAT).** This IAT requires the ability to distinguish faces of people who are obese and people who are thin. It often reveals an automatic preference for thin people relative to fat people.

## Native IAT

**Native American ('Native - White American' IAT).** This IAT requires the ability to recognize White and Native American faces in either classic or modern dress, and the names of places that are either American or Foreign in origin.

# RCT of Jane or Joe



**Fig. 1.** Competence, hireability, and mentoring by student gender condition (collapsed across faculty gender). All student gender differences are significant ( $P < 0.001$ ). Scales range from 1 to 7, with higher numbers reflecting a greater extent of each variable. Error bars represent SEs.  $n_{\text{male student condition}} = 63$ ,  $n_{\text{female student condition}} = 64$ .

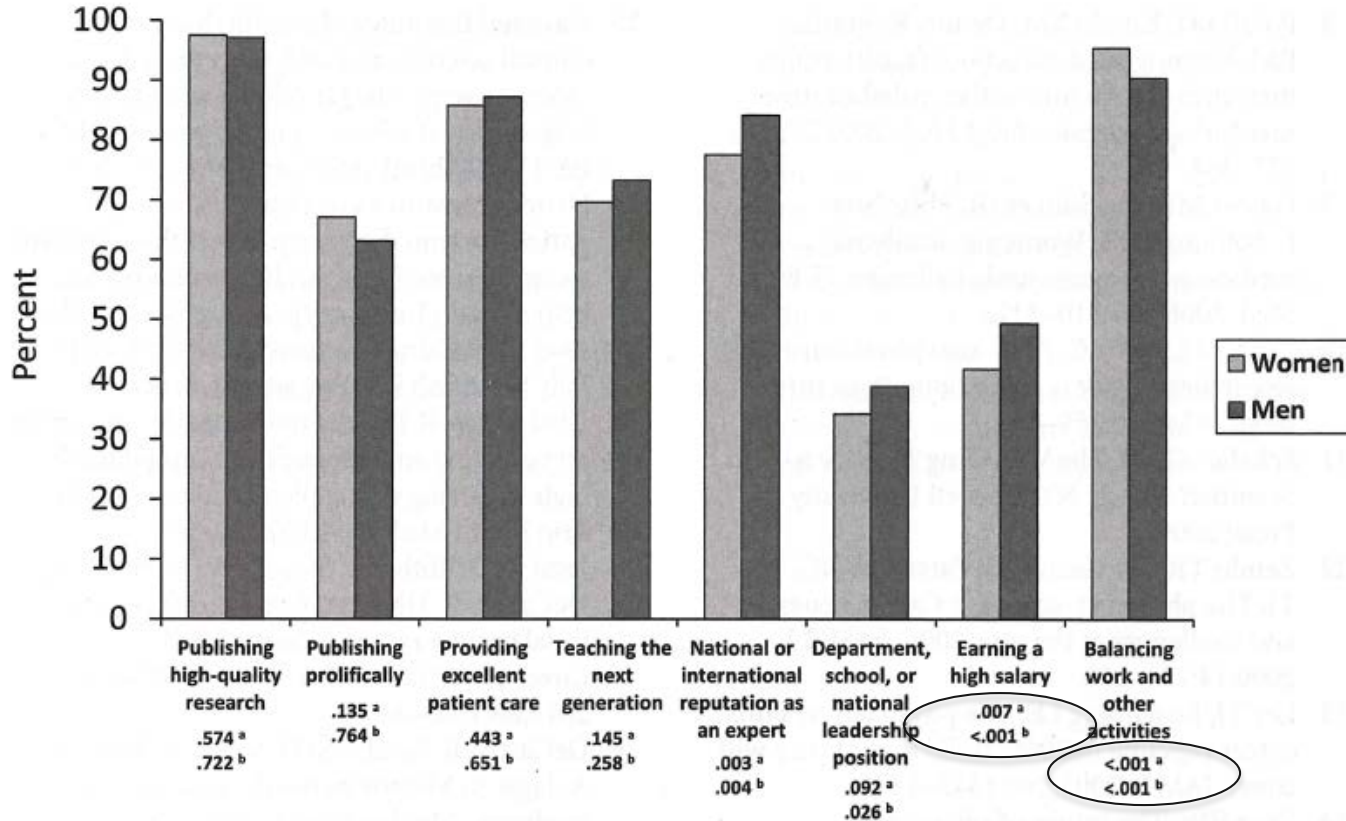
Handelsman PNAS 2012

# Mean projected salary offers

	Male target student	Female target student
Male hiring faculty	\$30,520	\$27,111
Female hiring faculty	\$29,333	\$25,000

Handelsman PNAS 2012

# Are goals influencing outcomes?



Career goals by gender amongst 1267 K award recipients  
Jones et al. Ac Med 2016

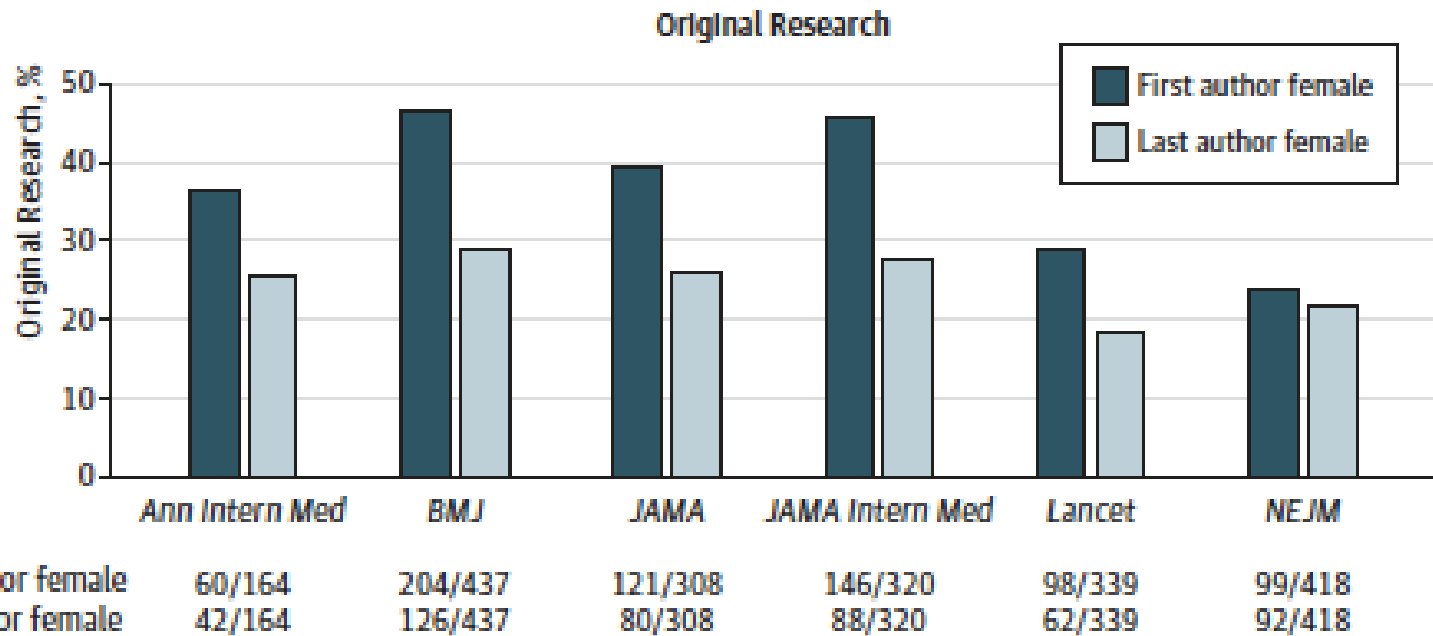
# Academic productivity by gender

	Men	Women	Adjusted relative number	p value
Mean total publications	69	49	0.71	<.001
H-index	34	25	0.72	<.001
Federal funding past 2 yrs	27.6%	29%	0.96	.8

National faculty survey recruited 1995; data from 2012-2013  
24 medical schools, >1200 faculty

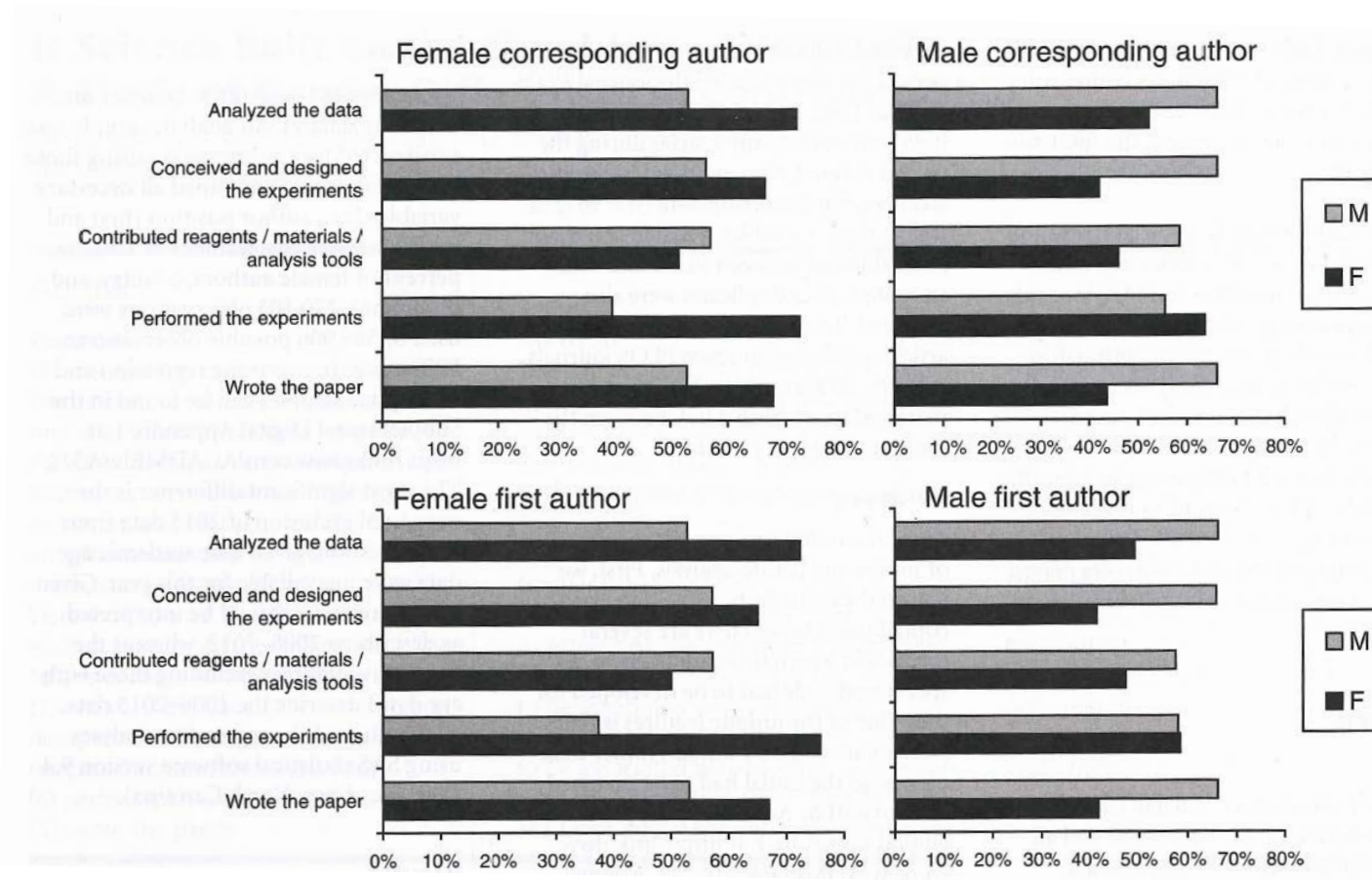
Raj et al. Academic Medicine 2016

# Research publications and gender 2010-11



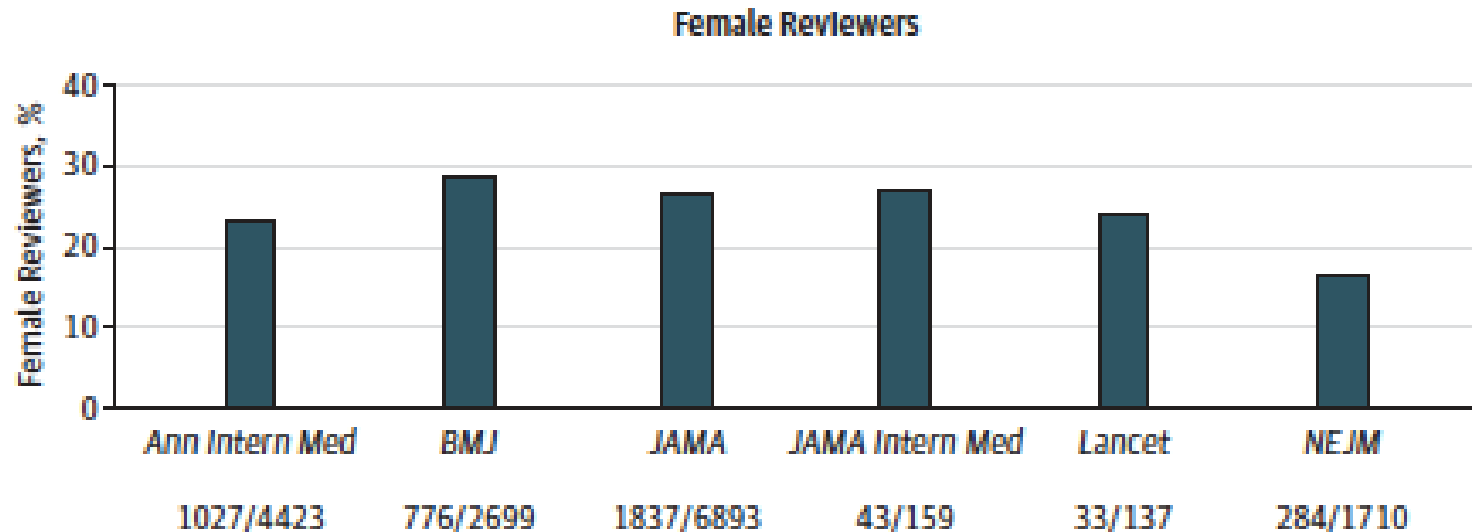
Erren et. Al. JAMA Int Med 2014

# Authorship Roles



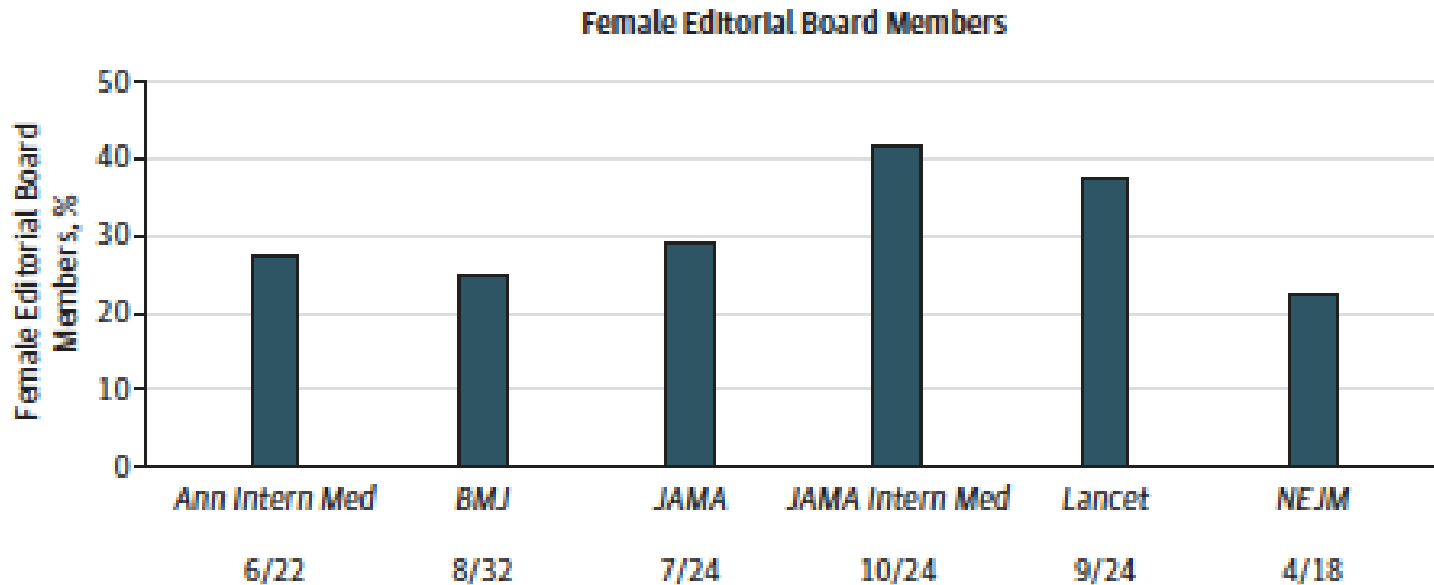
Macaluso et al. Ac Med 2016

# Journal reviews and gender



Erren et. Al. JAMA Int Med 2014

# Editorial board membership and gender



Erren et. Al. JAMA Int Med 2014

# Break the scholarship barrier

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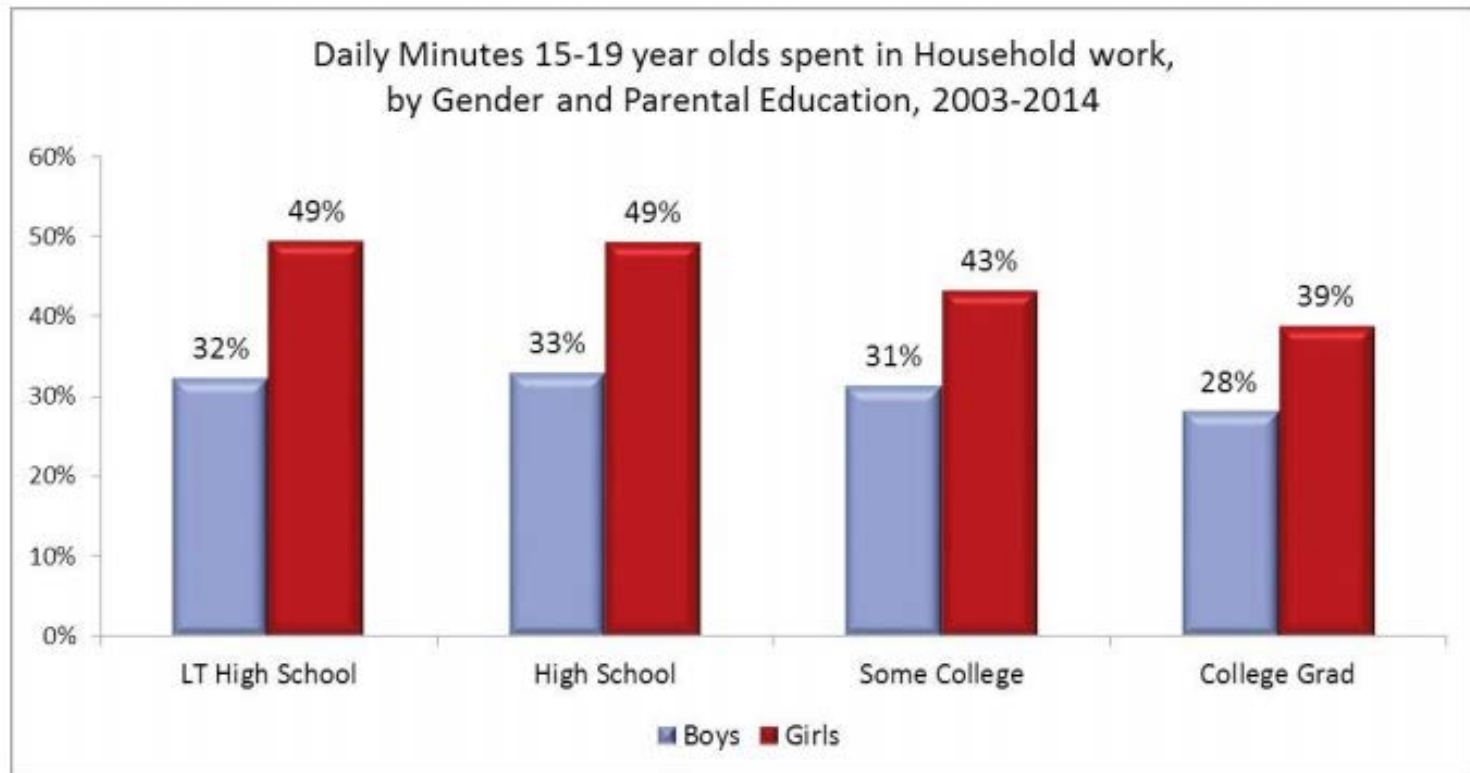
- Negotiate authorship early in projects
- Collaborators
- Mentors
- Commit to timeline
- Schedule on your calendar
- Writing groups
- Resubmit if rejected

# Time spent parenting

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- Study of K awardees
- Women spent 8.5 hours more per week on parenting or domestic tasks
- Women spent 2.9 hours fewer hours per week on research
- Difficulty with completion of after hours work:
  - 41% of women vs 26% of men

Jolly et al, Ann Int Med 2014



Sandra L. Hofferth, Sarah M. Flood, and Matthew Sobek. American Time Use Survey Data Extract Builder: Version 2.5 [dataset]. College Park, MD: University of Maryland and Minneapolis, MN: University of Minnesota, 2015.



**How can we fix this?**

# Increasing women in leadership

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- Stop sexual harassment
- Mitigate bias
  - Hiring, promotions, stretch roles
  - Watch and monitor language in ads, evaluations, promotion letters
- Bystander training
- Mentorship
- Sponsorship
- Transparency

# From >80,000 military evaluations

## Managers Use More Positive Words to Describe Men in Performance Reviews and More Negative Ones to Describe Women

### Words used to describe men

Analytical	
Competent	
Athletic	
Dependable	Arrogant
Confident	
Versatile	
Articulate	
Level-headed	
	Irresponsible
Logical	
Practical	

POSITIVE      NEGATIVE

IN DESCENDING ORDER  
OF RELATIVE FREQUENCY

### Words used to describe women

Compassionate	Inept
Enthusiastic	Selfish
Energetic	Frivolous
	Passive
Organized	Scattered
	Opportunistic
	Gossip
	Excitable
	Vain
	Panicky
	Temperamental
	Indecisive

POSITIVE      NEGATIVE

SOURCE AN ANALYSIS OF 81,000 PERFORMANCE EVALUATIONS, DAVID G. SMITH ET AL., 2018

© HBR.ORG

Harvard Business Review May 25, 2018

## Results

### This advert is masculine-coded

This job ad uses more words that are subtly coded as masculine than words that are subtly coded as feminine (according to the research). It risks putting women off applying, but will probably encourage men to apply.

Of course, there are plenty of other factors that affect the diversity of applicants for this role, and of the people who end up being hired. These include the company's reputation for inclusiveness, its culture, and the behaviour and prejudices (both conscious and unconscious) of the interviewers.

### Masculine-coded words in this ad

- individual
- analysis
- analyses

<http://gender-decoder.katmatfield.com>

[See the full list of masculine-coded words](#)

### Feminine-coded words in this ad

- support

# Search Practices

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- Policies and procedures
- Committee membership
  - Diversity in many dimensions
  - Not just 1 underrepresented member
  - Attention to diversity tax
- Unconscious bias training
- Care in advertisement language
- Outreach focused on female candidates
- Objective selection criteria
- Diverse pool and short list

# Leadership Training

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- OFA Leadership Training
- National Training
  - AAMC
    - Early Career Leadership Seminar (EWIMS)
      - Instructors/Assistants at least 1-2 years on faculty
    - Mid-Career Leadership Seminar (mid-WIMS)
      - Associate Professors eligible
    - Executive Leadership in Academic Medicine (ELAM)
      - Associate or full Professor
- Professional Societies

# When Harvard established the JCSW in 1973

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- 2 of 136 ad hoc committee members women
- 94% of the voting faculty were men
- <20 % of Instructors were women; now >50%
  
- Interval accomplishments include:
  - Ombuds office
  - Lactation rooms
  - Family leave policies
  - Tenure clock extensions
  - Child care summit
  - Dean's award for women's leadership

# Current vision statement

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To facilitate and promote leadership, career development, professional advancement, community building, and work life integration for women faculty, trainees (fellows and residents), students (graduate, medical and dental) and staff at Harvard Medical School (HMS) and Harvard School of Dental Medicine (HSDM).

# Statement of purpose

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This inclusive committee exists to:

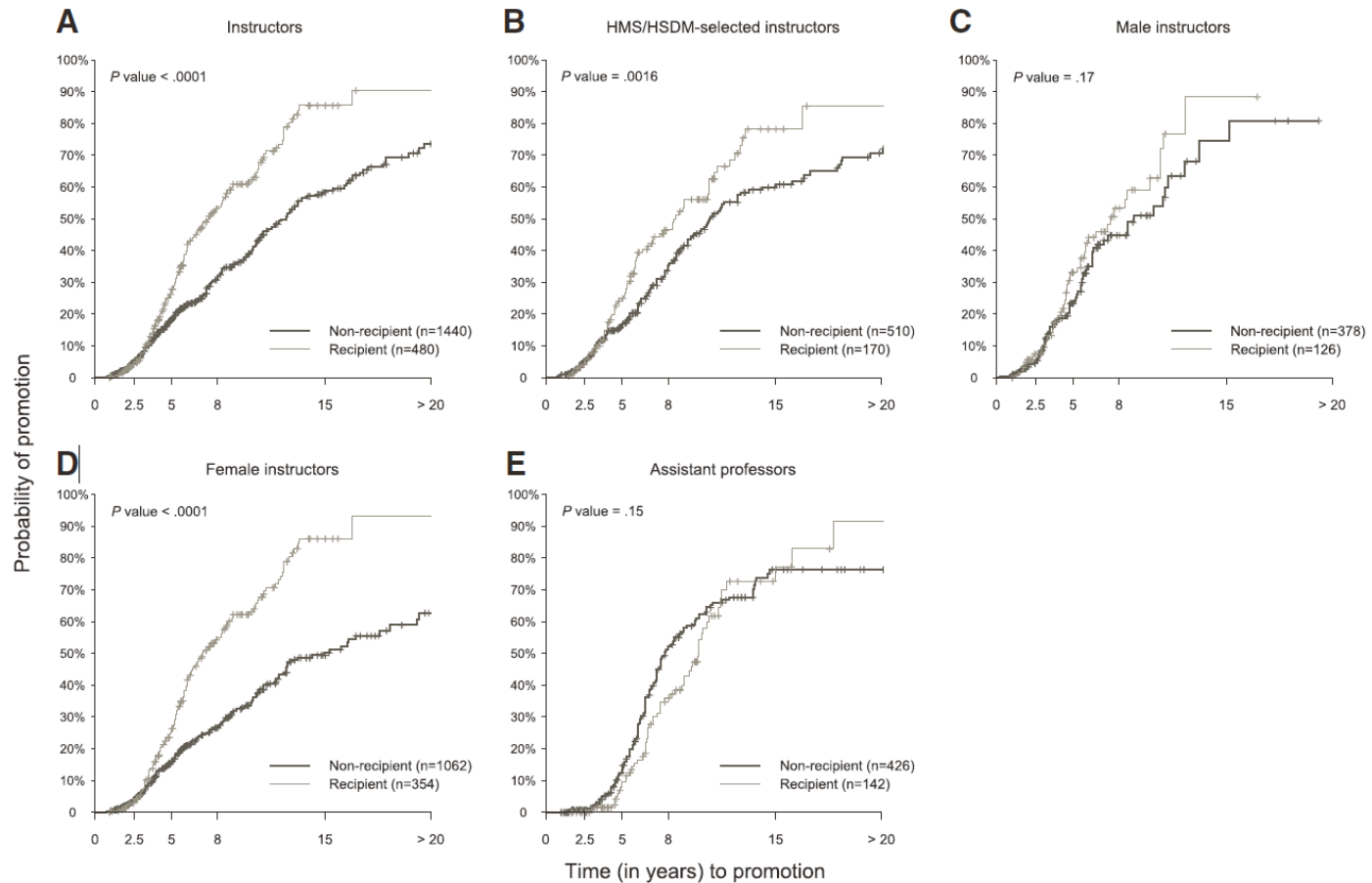
- Promote professional equity and inclusion
- Cultivate leadership and personal advocacy skills
- Facilitate mentorship for women staff, trainees, students and faculty
- Provide community and enhance networking opportunities within the JCSW
- Influence policies that advance women
- Support work-life integration
- Facilitate community outreach to help empower women
- Identify issues, barriers and challenges within the HMS and HSDM community
- Offer resolutions and recommendations to the Dean's Office and administration

# Eleanor and Miles Shore 50th Anniversary Fellowship Program for Scholars in Medicine

- Established 1996
- ~ 75 fellowships each year of \$30,000
  - Some awarded by central committee
    - 2/3 score scientific merit; 1/3 “personal need”
    - departmental programs may consider personal need



# HMS Shore Fellowship Program



Connelly MT et. al. Acad Med 2016; doi: 10.1097/ACM.0000000000001541

# AAMC Efforts

# AAMC GWIMS accomplishments

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- Academic medicine position papers
- Awards for advancement of women
- Many tool kits
  - Building WIMS programs
  - Negotiation
  - Successful award nominations
  - Women of color
  - Preparing for your first job in academic medicine
  - Caretaking in academic medicine
  - Equity in promotion
- Advocacy partnership
  - Salary equity
  - Awards for women

# GWIMS Toolkit Volumes and Chapters:

## Volume 1: Leveraging Your Career

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Chapter 1: Managing through Teamwork for Maximum Performance (Judy Weber) [PDF](#)

Chapter 2: Crafting a Fundable Grant (Emina Huang) [PDF](#)

Chapter 3: Workshop Preparation and Presentation (Carla Spagnoletti, Rachel Bonnema, Melissa McNeil, Abby Spencer, & Megan McNamara) [PDF](#)

Chapter 4: Crafting Successful Award Nominations

- The Art of Successful Nominations (Jocelyn Chertoff)
- Preparing Successful Award Nominations (Elizabeth Travis) [PDF](#)

Chapter 5: Part-time Faculty in Academic Medicine, Individual and Institutional Advantages (Linda Chaudron, Susan Pollart & Aimee Grover) [PDF](#)

Chapter 6: Writing an Effective Executive Summary (Roberta Sonnino) [PDF](#)

Chapter 7: Mentoring Women- A Guide for Mentors (Mary Lou Voytko & Joan Lakoski) [PDF](#)

Chapter 8: Mentoring Women- A Guide for Mentees (Mary Lou Voytko & Joan Lakoski) [PDF](#)

Chapter 9: Strategies for Cultivating Career Satisfaction and Success through Negotiation (Reshma Jagsi, Martha Gulati, & Rochelle DeCastro Jones) [PDF](#)

Chapter 10: A Case Study: Creative Faculty Development through your GWIMS Office (Catherine Lynch) [PDF](#)

[Chapter 11: Transitioning to a New Role: Practical Tips on Navigating From One Chapter to the Next \(Archana Chatterjee, Meenakshi Singh, Roberta Sonnino\)](#) [PDF](#)

Chapter 12: Strategies for Advancing the Careers of Women of Color in Academic Medicine- Individual Strategies (Archana Chatterjee, Chiquita Collins, Linda Chaudron, Barbara Fivush, Laura Castillo-Page, Diana Lautenberger, Ashleigh Moses) [PDF](#)

Chapter 13: A Guide to Prepare for Your First Job in Academic Medicine (Marin Gillis, Lori Wagner, Catherine Dayton, Allison Quick, Gwen McIntosh, Julie Lockman, Julie Boiko, Nicole Redmond, Rebecca Ganetzky, Erin E Medlin, Michele Kutzler, Diann Krywko, Reena Bhatt, Kelly Quesnelle, Robyn Gray, Julie C. Servoss, Simone Thavaseelan & Cynthia Fuhrmann) [PDF](#)

Chapter 14: Caretaking in Academic Medicine: From pregnancy through early parenting (Allison W. Brindle, Delma-Jean Watts, Ilse Jenouri, Jamie Wooldridge, Jennifer L. Cook, Kelsey Logan, Lynn K Gordon, Mascha van 't Wout, Nancy Swords Jenny, Parul N. Barry, Rebecca Cherry & Shobha W. Stack) [PDF](#)

## Volume 2: Institutional Strategies for Advancing Women in Medicine

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Chapter 1: How to Start and Maintain a Robust WIMS Organization (Julie Wei & Paige Geiger) [PDF](#)

[Chapter 2: Equity: Defining, Exploring, and Sharing Best Practices for Gender Equity in Academic Medicine \(Diana Lautenberger & Ashleigh Moses\)](#) [PDF](#)

Chapter 3: Women's Leadership and the Impact of Gender (Toi Blakley Harris, Susan Pepin, & Amelia Grover) [PDF](#)

Chapter 4: Implementing an Intensive Career Development Program for Women Faculty (Tamara Nowling, Elizabeth Travis, Abby Mitchell, Mugé Simsek, Erin McClure) [PDF](#)

Chapter 5: Strategies for Advancing the Careers of Women of Color in Academic Medicine- Institutional Strategies (Archana Chatterjee, Chiquita Collins, Linda Chaudron, Barbara Fivush, Laura Castillo-Page, Diana Lautenberger, Ashleigh Moses) [PDF](#)

Chapter 6: Equity in Promotion (Toi Blakley Harris, Maria Baggstrom, Melissa Bauman, Camille Clare, Libby Ellinas, Magali Fassiotto, Elizabeth Gillespie, Kathy Griendling, Richelle Koopman, Linda Nelson, Jennifer Sasser & Nancy Spector) [PDF](#)

# Engaging with GWIMS

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- GWIMS conference with GFA July 2019 in Chicago
- Join the newly bi-directional listserve
- Volunteer to join task force