Eliminating the Gender Leadership Gap in Academic Medicine: 50/50 by 2020

Hannah A. Valantine, MD, MRCP
Chief Officer for Scientific Workforce Diversity
National Institutes of Health

Successful Strategies for Women in Academic Medicine
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Eliminating the Gender Leadership Gap

Presentation Outline

• Relevance to NIH mission
• Drivers of work/life challenge
• Relevance to academic institutions
  – The “ideal-worker” culture
  – Recruitment, retention, burnout, turnover
• A multifaceted approach to culture change
• Faculty career flexibility
“Science in pursuit of fundamental knowledge about the nature and behavior of living systems and the application of that knowledge to extend healthy life and reduce the burdens of illness and disability.”
Diversity is Essential for Good Science

• Excellence, creativity and innovation*
• Broadening scope of inquiry - solutions to complex problems of health and disease
• Narrowing the health gap
• Ensuring fairness
  – Changing demographics
  – Leveraging the U.S. intellectual capital

* Scott E. Page - 2007: How the power of diversity creates better groups, firms & societies
Gender Gap in Academic Medicine 2013 – 2014

Adapted from: The state of women in academic medicine 2013-14: AAMC Report. Diana M. Lautenberger, et. al.

[Bar chart showing gender distribution across levels of academic medicine.

- Medical Student: 53% (237) Men, 47% (211) Women
- Assistant Prof.: 55% (222) Men, 45% (188) Women
- Assoc. Prof.: 61% (216) Men, 39% (135) Women
- Full Prof.: 78% (302) Men, 22% (82) Women
- Chairs/Chiefs: 88% (71) Men, 12% (10) Women]
Eliminating Gender Gap: Relevance to NIH Mission

- Workforce diversity
- Biomedical workforce issues and challenges
- Training the next generation of biomedical workforce
- Physician scientists
Average Age and Degree Type of First-Time Investigators on R01-Equivalent Grants

Average Age (Years)

- MD-PhD
- MD Only
- PhD Only

Av. starting salaries Assist. Prof. FY2011
- Biomedical - $68,000
- Chemistry - $69,000
- Clinical and health fields - $79,000
- Economists - > $100,000
“...runs in our family. My father and grandfather are also working as postdocs.”
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  – Intersection of work/life and diversity

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Drivers of Work/Life Challenge in U.S.

- Shrinking pool of skilled labor
- Changing family structures
- Increasing number of women: recent declines
- Changing expectations of men
- Evolving generational expectations
  - Gen X, Gen Y, Millennials
- Increasing impact of technology

The Washington Post

Millennials want a work-life balance. Their bosses just don’t get why.

By Brigid Schulte  May 5

NIH National Institutes of Health
Office of the Director
Scientific Workforce Diversity
... women falling out of the work force is a huge deal. It reduces family standards of living and puts a crimp in the economy.” USA is 20th!

“In most states infant care is more expensive than college tuition.”

“Japan guarantees that mothers get 58 weeks of maternity leave, about half of it paid.”
Most Families are ‘Non-Traditional’

Changing Family Structure 1950-2008

- **1950**:
  - Male Single Parents: 63%
  - Female Single Parents: 11%
  - Other Families: 20%
  - Dual-Worker Families: 4%
  - Traditional Families: 2%

- **2008**:
  - Male Single Parents: 17%
  - Female Single Parents: 13%
  - Other Families: 25%
  - Dual-Worker Families: 43%
  - Traditional Families: 2%

Sources: Catalyst and Bureau of Labor

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NIH
National Institutes of Health
Office of the Director
Scientific Workforce Diversity
Factors Affecting Retention of Women in STEM: Work/Life Issues

Despite employee incentives, women leave technology companies at twice the rate of men. A study that included over 1,000 women who worked in engineering and then left the field (mostly to other careers) cited the following top reasons for leaving engineering jobs.

- **Working Conditions:** no advancement, too many hours, low salary (30%)
- **Work-Life Integration:** wanted more time with family, conflict with family or too much travel (27%)
- **Didn’t Like Work:** lost interest or didn’t like daily tasks (22%)
- **Organizational Climate:** didn’t like culture, boss or coworkers (17%)

*Fouad NA et al. Stemming the Tide: Why Women Leave Engineering. 2011, University of Wisconsin, Milwaukee*
Drivers of Work/Life Challenge in Academic Medicine

• Physician shortage, aging faculty workforce, dual-career
  • (Families and Work Institute, 2007)

• Faculty careers not conducive to work-life fit turn students away (Quinn & Litzler, 2009; Rice, Sorcinelli, & Austin, 2000)
  • Work life: driving factor for specialty selection (2011 final year residents)
  • 68%: personal time most important (up from 28% ’08)

• Burnout affects patient care quality (Halbesleben, 2008)

• Attrition: work-life 2\textsuperscript{nd} cited reason for leaving (Sloan, 2012)
  • Greater for women; gender gap at Full Professor
  • Yearly replacement costs across faculty lines
Consequences of Work/Life Challenge

- Workplace culture has not kept pace with changing demographics of the workforce
- The “ideal-worker culture” persists
- Time pressure and overload*
- Direct impact on workforce diversity

*Overwhelmed - Work, Love, And Play When No One Has The Time by Brigid Schulte
Consequences of the Ideal Worker Culture

Academic Medicine

• Policies are necessary but not sufficient
• Less use of policies due to the culture
• Gender gap in academic leadership positions*
  – Similar for business, law, politics, science
  – Seen as something wrong with the women
  – Lacking ambition
• Lack of diversity in biomedical workforce

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Strategies to Expand Diversity - Faculty

• **Recruitment**
  - Active and early engagement with search committees
  - Committee composition, applicant pools
  - Recruiting resource - expanded outreach and pool

• **Retention and advancement**
  - Research awards
  - Mentoring programs
  - Women’s networking; childcare
  - Leadership/professional development

Valantine; Grewal et. al. Acad. Med. April 2014
Women Faculty (%) Prior to and after ODL Interventions

*Acad. Med.* April, 2014

**Full Professor**

- Stanford: 28 y
- Peers: 40 y
- National: 48 y

Time to 50% women full professors:
- Stanford: 28 y
- Peers: 40 y
- National: 48 y
Approaches to Accelerate the Pace

*Changing the Culture*

- Intervention for Implicit bias – CTSA Funded
- Stereotype threat - Comparative intervention study: NIH Director’s Pathfinder Award
- Faculty career flexibility: Alfred P. Sloan Award
- Sponsorship: Beyond Mentoring
Who is a “Scientist”?


- K-2nd grade (n=235): 58%
- 3-5th grade (n=649): 73%
- 6-8th grade (n=620): 75%

Evaluations in Academic Science

A nationwide sample of biology, chemistry, and physics professors (n=127) evaluated application materials of an undergraduate science student (female or male) for a lab manager position.

1. Both male and female faculty participants rated the female student as less competent and less hireable, and offered the female student a lower salary and less mentoring.

2. Unintentional bias toward women – as measured by the Modern Sexism Scale – significantly predicted the lower competence and hireability ratings given to the female student.

Implicit Attitudes about Gender and Leadership
Modulated by Raising Awareness and Tools to Improve Decision-Making

Pre- and Post- Scores on the Implicit Association Test (IAT)

Significant effect of gender: **p=0.00; Significant effect of the intervention: * p=.02

Path to Developing Solutions
Data-driven Approach

• Focus groups with 105 faculty

• **Survey Data:**
  - Sloan Institutional Benchmarking; AAMC Faculty Satisfaction; Stanford Quality of Life

• **Ethnographic study** of 8 faculty members in 2010-2011
  - Partnership with design firm Jump Associates
  - Methods based on design thinking (Beckman & Barry, 2007; Brown, 2009).

• **Partnership with Deloitte:** Mass Career Customization
  - Integrate flexibility in career planning process
Reasons for not Requesting Tenure Clock/Promotion Extension (ACE Sloane Survey 2012)

- It might have made me look less committed to my career (66.7%)
- It might have hurt my promotion chances (53.2%)
- It might have hurt future promotions (45.9%)
- People discouraged me (44.5%)
- I was on grant funded research and couldn't stop (35.8%)
- It might have placed undue burden on my colleagues (33.3%)

Stanford vs All Schools
Academic Biomedical Career Customization

MISSION: Establish a culture that fosters work-life integration and development to recruit, retain, advance the most talented physicians and scientists in academic medicine

PRINCIPLES: Recognize diversity of needs; foster transparency; increase faculty collaboration

1 Customized Career Tracks
2 Flexible Support Mechanisms
1. Customized Career Tracks

- Needs assessment, in-depth interviews
- Division chief training
- Self-reflection guide
- Career planning discussion with ABCC Assoc. Director
- Structured career planning discussion with division chief
- Access to professional life coach
Not just WORK-LIFE conflict ...
also WORK-WORK conflict

Banking System for Recognizing Faculty Service
Dr. Valantine said the findings had led her to scrap the idea that people should strive for “work-life balance” and instead think in terms of “work-life integration.”
Banking System Preliminary Results: Support Services

Use of Home and Work Support Services by Pilot Participants

- Improved work-life fit: 84%
- Proportion of faculty reporting postponing/avoiding taking vacation: 64% → 39%.
- Proportion of faculty volunteering to fill a clinical service on short notice to help a colleague: 44% → 83%.
- Proportion of faculty reporting adequate time to discuss science with colleagues: 9% → 55%.
- Proportion who agree with the statement “Stanford School of medicine supports my career development”: 29% → 57%.

Survey Results Post-Evaluation
Hannah Valantine, a cardiologist who led the pilot at Stanford, said work-life struggles are still often seen as a side issue in medicine. “The whole idea of addressing work-life fit as an important business case for excellence has not been bought into yet,” she said. “And I would argue that it should be right up there.”
Reframe flexibility as **career-enhancing**, not career pausing

“We had a child, we had no money, my wife worked... I had to stay home. There was no telecommuting in those days, but... my colleagues were amazing and supported my telecommuting. I would be in the lab 3 hours in the morning when we had a babysitter, typed punched cards furiously, and then would go home. And they got used to it, because I would show up the next day having done something.”

- Prof. Michael Levitt, Nobel Prize Laureate, Oct 9, 2013

*Men need to be part of the solution*
Eliminating the Gender Leadership Gap: 50/50 by 2020
Four Pillars for Retention and Advancement of Faculty

Women Full Professors: 50%

- Unconscious Bias
- Stereotype Threat
- Career Flexibility
- Sponsorship

Structural Support: Academic Skills Building; Team Effectiveness; Mentoring; Leadership Development; Child/eldercare
GREAT MINDS THINK DIFFERENTLY
NIH...

Turning Discovery Into Health

hannah.valantine@nih.gov