

# Enhancing Gender Balance in University of Massachusetts Medical School Faculty

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# Rationale

The future of Academic Medical Center research and education, and the healthcare we provide is dependent upon the recruitment, retention and development of a *diverse faculty* of experts.

# UMMS Women's Leadership Group

- ❖ Monthly meetings
- ❖ Assess existing national models
- ❖ Assess UMMS needs
- ❖ Review UMMS/UMMHC data
  - Rank/Tenure report
  - Leadership positions
    - Research leaders
    - Program leaders
    - Organizational leaders
  - Focus group findings

# National: NAS/IOM Report

- ❖ Academic organizational structures and policies contribute significantly to the under-use of women in academic science
- ❖ Effective programs have three key components:
  - commitment to take action,
  - analysis and use of data for organizational change, and
  - campus framework for monitoring progress.

**Beyond Bias and Barriers: *Fulfilling the Potential of Women in Academic Science and Engineering; National Academy of Sciences, Institute of Medicine, National Academy of Engineering (2006)***

# Reviewed National Models

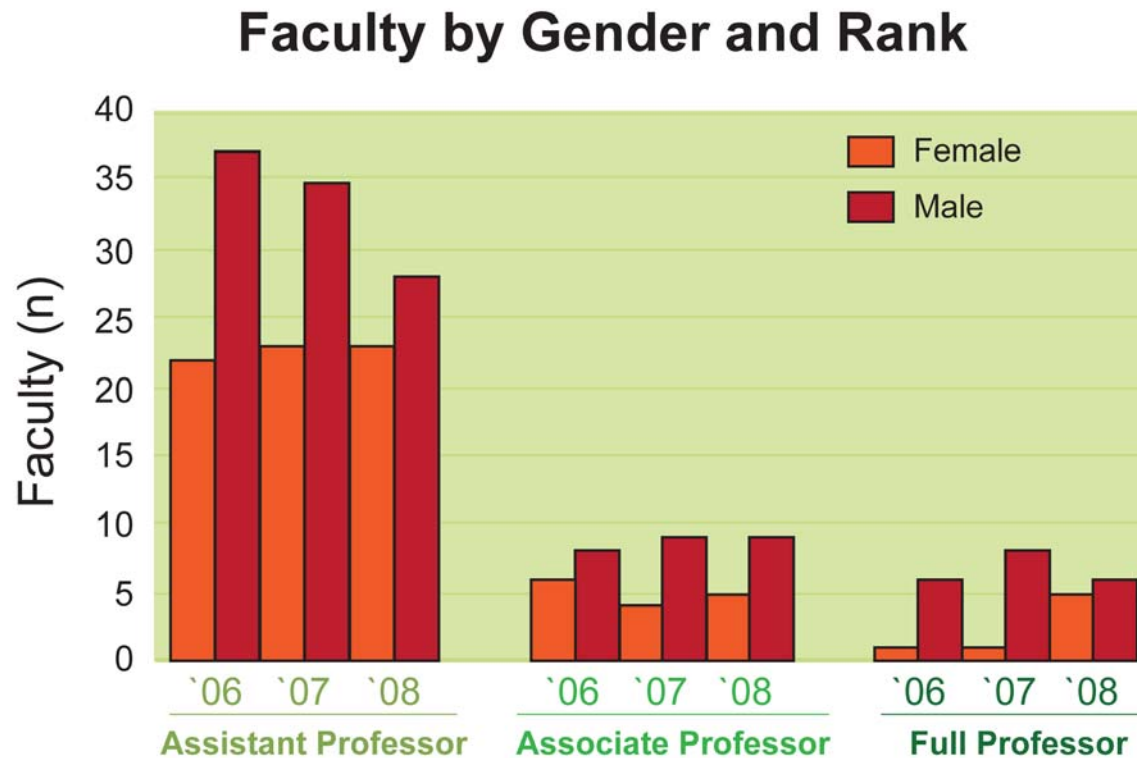
- ❖ AAMC perspective
- ❖ Centers of Excellence in Women's Health
  - ELAM
- ❖ Literature
  - Chairs of Pediatrics
  - Centers of Excellence in Women's Health
  - NAS/IOM Report
  - Hewlett and Buck Luce, Center for Work-Life Policy
  - Association of Women in Science Report

# Women are under-represented among faculty

- ❖ Academic Faculty Report: Analysis of Gender Equity in Rank and Salary
  - > 50% of MD and PhD degrees are awarded to women (AAMC)
  - 33% of UMMS faculty are women; moderate increase over last 10 years\*
  - 22% of Tenure/Tenure Track positions are women
- ❖ Goal: Be a leader in Gender Equity

\*full-time academically salaried

# Majority of women faculty are at junior academic ranks



# Categories of Leaders

## *Organizational Leadership Roles*

- ❖ appointed and paid positions to lead professionals and services in the school and clinical system
  - **Group 1:** Strategic decisions for organization  
(Officers, Department Chairs, Deans)
  - **Group 2:** Lead professionals in divisions or programs  
(Clinical service, Division, Program or Center grants, HHMI, Endowed Chairs)

## *Additional Scientific Leadership Roles*

- **Group 3:** Lead research teams producing new knowledge  
(PI on RO)

# Women are under-represented in leadership roles

## Women faculty represent:

❖ 16% (n= 6/38 )

Group 1: UMMS/UMMHC strategic leaders

❖ 34% (n= 38/112)

Group 2: Clinical and Research programs;  
Division leaders

Clinical: 34/96 (35%)

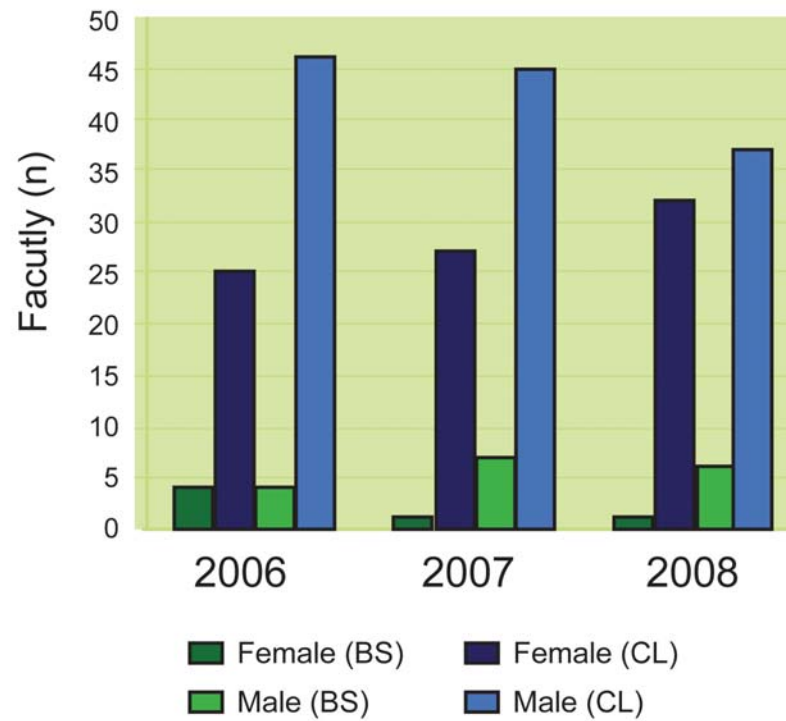
Research: 5/16 (31%)

❖ 24% (n= 36/151)

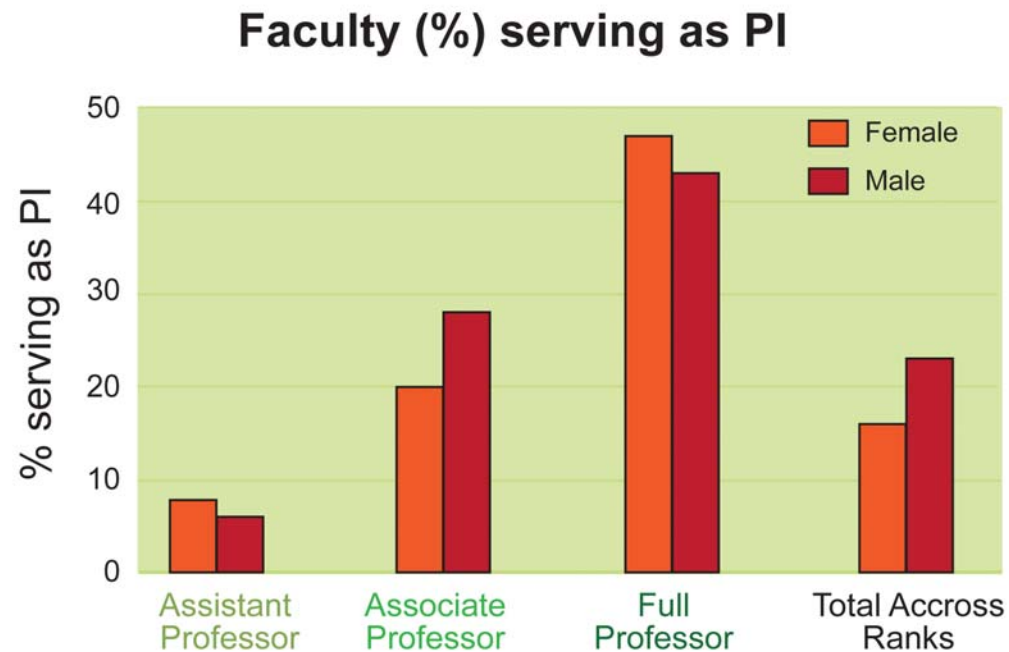
Group 3: PIs on active RO1

# Faculty Turnover

Annual Turnover Counts



# Research Funding



N (total across ranks) = 476 (male), 275 (female); 2007 data.

# UMMS Faculty Focus Groups

- ❖ 4 meetings with tenure/tenure track women faculty
- ❖ Recommendations:
  - Transparency in standards, i.e., salary, promotion, lab resources
  - Family friendly environment, i.e., onsite childcare, dual career placement assistance
  - Incentives for Chairs to hire and support women  
i.e. new facilities for established productive labs, endowed chairs, institutional attention to post-docs, instructors, and research assistant professors

# Women's Leadership Working Group

- ❖ Recommend policies and programs that enhance recruitment, retention, and development of all faculty
- ❖ Improve diversity among leaders across organization

# Three focus areas

1. Accept accountability for attracting, retaining, and developing women and minorities.
2. Create the opportunity for *discrete periods of part time* employment supported by a fiscally sound institutional mechanism.
3. Develop faculty leadership skills at all levels to foster efficient, effective management of people and resources.

# [ Focus 1 ]

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- ❖ Accept accountability for attracting, retaining, and developing women and minorities.
  - Dean/Chair expectations
  - Annual goals

## Focus 2

- ❖ Create the opportunity for *discrete periods of part time employment* to contribute to teaching, research, or clinical practice through a fiscally sound institutional mechanism that complements existing promotion and tenure policies.

# Focus 2

## Strategies Include:

- Pilot a Bridging Fund program to support part time positions annually
  - Self-nominated in collaboration with Chair (or their designee)
  - Resources: School and philanthropic funds?
    - Example: Harvard Medical School
- Lessen the pressures that make part-time necessary
  - Childcare, Elder-care, Corporate-Academic Partnership, Health club to support our maturing workforce

# [ Focus 3 ]

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- ❖ Develop faculty leadership skills at all levels to foster efficient, effective management of people and resources

# Focus 3

## Possible Strategy Includes:

- Annual internal program to develop faculty leadership skills while completing discrete projects that serve the organization (ELAM model)
  - Promising faculty with focused, manageable projects are nominated by Chairs, Deans, Officers

# UMMS Gender Equity Initiative

- ❖ In-depth analyses with goal to assure gender equity in:
  - Compensation
  - Advancement

# Faculty Analysis...*Data Preparation*

## ❖ Sources of data from UMMS

- Human Resources
- Office of Faculty Affairs
- Office of Medical Education
- Office of Research

## ❖ Sources of data from UMMHC

- Human Resources
- Compensation/Payroll Department
- UMass Memorial Medical Group

# Faculty Analysis... Variables

- Rank
- RVUs
- Percent effort
- Tenure status
- Administrative role
- Base salary
- Bonus
- Stipend
- Race/Ethnicity
- Date of Birth
- Clerkship Hours
- Salary at hire
- Salary at promotion
- Years of service at UMMS/UMMHC
- Date of promotion
- Productivity (grants, publications, citations)
- Education/Credentials
- Teaching Hours
- Specialty/Discipline

# Faculty Analysis... Methodology

## ❖ Compensation Analysis

The analysis uses longitudinal linear regression models<sup>1</sup> that include factors that should be associated with level of pay including:

*academic rank, time in rank, length of service, tenure status, track, percent effort, education/credentials, discipline and measures of productivity such as academic/scholarly activities (publications, citations), grant funding, and teaching activity.*

Next, factors which should not affect compensation such as **gender** are evaluated by comparing this model to a model which also includes those factors and determining if these factors significantly improve the model or if they interact with other factors.

<sup>1</sup> *General linear mixed model*

# Faculty Analysis... *Methodology*

## ❖ Advancement Analysis

The analysis of faculty advancement is performed by modeling the time until promotion to the next rank<sup>1</sup> as a function of the same factors and again determining if factors such as gender significantly improve the model or interact with the other factors.

<sup>1</sup> Cox proportionate hazards models

# Future Directions

- ❖ Goal: UMMS will be an academic leader in Gender Equity
- ❖ Commit to design, implement and evaluate innovative programs and policies to foster the promotion and retention of skilled faculty to senior ranks and leadership positions