Prejudices about Women in Science and Engineering and the Evidence that rebuts them

- Women are not so good in mathematics
- Changing underrepresentation on faculties is only a matter of time
- Women are not so competitive
- Behavioral research is quantitative
- Affirmative action favors women
- Academe is a meritocracy
- Changing the rules means that standards will drop
- Women faculty are less productive than men
- Women are more interested in family than careers
- Women take more time off because of childbearing so are a bad investment
- The current system works so why change it?

From Beyond Bias and Barriers, NAS, 2006 www.nap.edu

Why is it important to have more Women on Committees?

Appointments *Gender and Excellence, NL, 2006, van den Brink M and Brouns M*
Looked at appointment procedures for 900 professors in the NL between 1999 and 2005
36% appointed through open advertisement, 64% in a closed procedure (in 63% of these there was only one candidate)
In appointment commissions without women (>50%) 7% appointees were women.
In appointment commission with one woman 14% appointees were women
In appointment commissions with two or more women 22%were women

Funding *NIH Pioneer Awards, US,*
2004:all awards given to men in middle to late career
2005: self nomination not allowed and % of jury members that were female increased from 4 to 44% Result; 6/13 recipients were female, all at the start of their careers

A correlation between number of women on organizing committee for ***meetings*** *and number of* ***women speakers****?*

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CONCLUSIONS: US Report: Beyond Bias and Barriers: Fulfilling the potential of Women in Academic Science and Medicine (NAS,NAEng, 09.2006)

- Women have the ability and drive to succeed in science and engineering
- Women interested in science and engineering careers are lost at every educational transition
- The problem is not simply the pipeline
- Women are very likely to face discrimination in every field of science and engineering
- A substantial body of evidence establishes that most people- men and women- hold implicit biases
- Evaluation criteria contain arbitrary and subjective components that discourage women
- Academic organizational structures and rules contribute significantly to the underuse of women in academic science and engineering
- The consequences of not acting will be detrimental to the nations competitiveness

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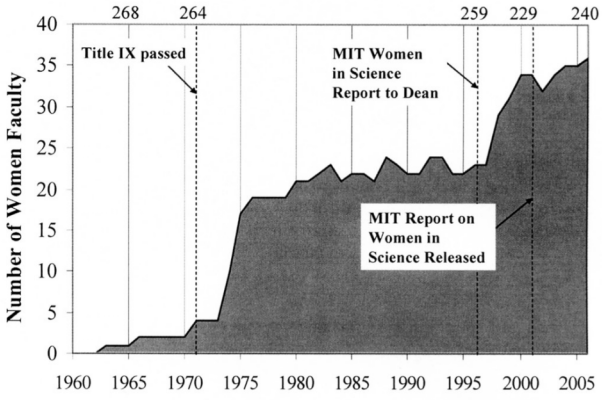
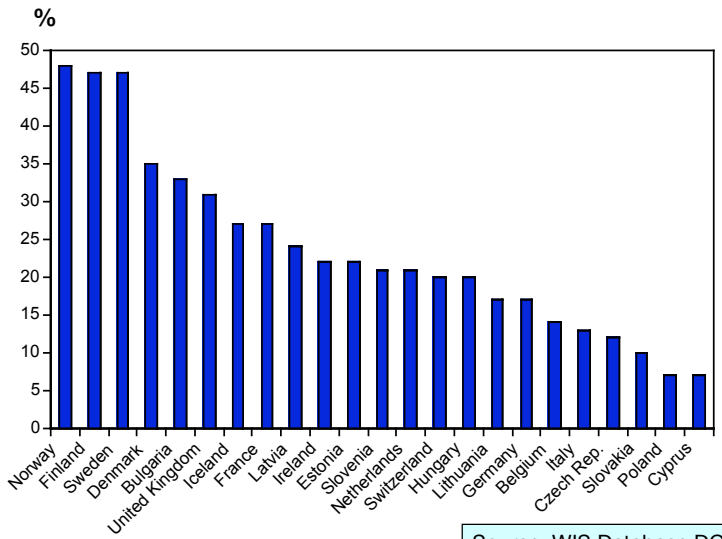
Institutions respond to pressure ..... MIT



The increases in the representation of women and minorities don`t just "happen" but result from specific pressures, policies and positive initiatives designed to increase the hiring of women or minorities: and that when these pressures abate or expire hiring progress stops or even reverses.

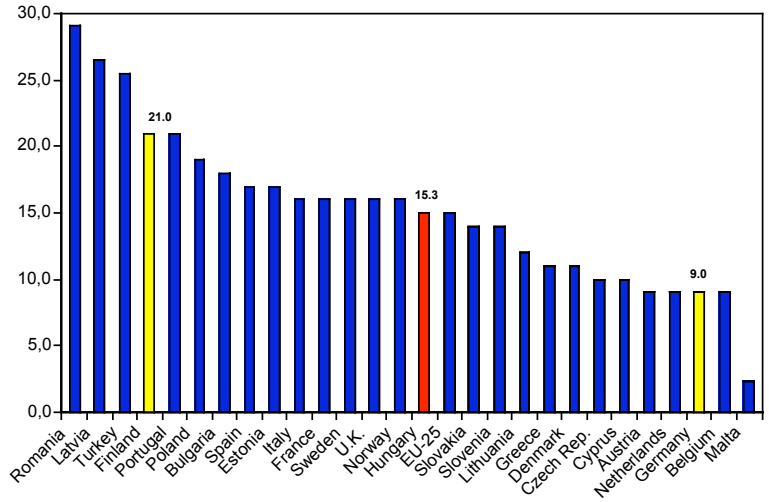
Nancy Hopkins MIT Faculty Bulletin 2006

Proportion of Women on Scientific Boards, 2004



Source: WIS Database DG Research

Percentage of A Positions (Full Professor) occupied by Women in EU Member States, 2004



USA 20%, Australia 19%, Canada 18%, New Zealand 14% (all 2003), Israel 11%

Source: She Figures 2006