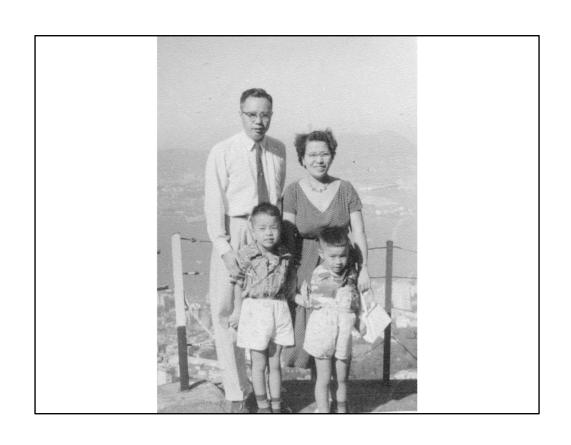
Health Research Alliance March 31,2016

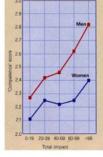
Moses V. Chao Skirball Institute of Biomolecular Medicine NYU Langone School of Medicine



The statistics have not changed

- Drop off in number of women after graduate and postdoctoral training from 54-56% of trainees to 29% who are tenure track
- Women represent only 23% of Full professors and 19% of Chairs and has not changed since 2000.

Women are promoted less, paid less, win fewer grants and receive fewer invitations to speak



Also, corporations have few female executives and just under 5% have a woman who is chief executive (Peterson Institute)

Why Women Quit Science

Women's enrollment in graduate education in the US has been greater that men in the last 30 years (UNESCO study)

In physical sciences, MS and PhD degrees are awarded to men 2:1 compared to women (Center for Education Statistics)

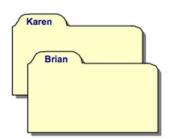
No difference in GPA of women who remained or left STEM programs

Isolation and intimidation are cited as barriers that block academic path early in career

Unconscious Bias

Evaluation of identical CVs

• When evaluating identical application packages, male and female University psychology professors preferred 2:1 to hire "Brian" over "Karen" as an assistant professor



• When evaluating a more experienced record (at the point of promotion to tenure), reservations were expressed four times more often when the name was female.

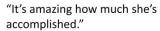
Steinpreis et al (1999) Sex Roles 41, 509

Letters of recommendation differ

Differences

- Letters for men:
 - Longer
 - More references to:
 - CV
 - Publications
 - Patients
 - Colleagues

- Letters for Woman
 - More references to personal life
 - More "doubt raisers" (hedges, faint praise, and irrelevancies)



"It appears her health is stable."
"She is close to my wife."





The impact of "blind" auditions on female musicians

- Audition data from 14,000 individuals show the use of a screen increases the probability that a woman will advance from preliminary rounds by 50%.
- Data from 11 major orchestras show a switch to blind auditions accounts for a 30% increase in the proportion of women among new hires.



Goldin and Rouse, American Economic Review, 2000

How to promote and ensure gender equality in STEM areas?

- A report card for each institution documenting female representation at each level
- Requirement for grant-giving organizations to base funding opportunities upon gender equality
- Achieve gender balance in review and speaker committees
- A supportive environment
- Monitor for unconscious bias

Science's Gender Problem

or Why should we bother?

- Scientific problems are difficult and not immediately tractable. Requires diversity with different viewpoints and multi-disciplinary approaches
- Groups with diversity are more effective in solving problems and being creative than a homogeneous group.
- An all white male jury is likely to render difference decisions than a diverse group
- Women in corporate offices is correlated with increased profitability

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