Limiting Bias
Promising Practices For Searches

CONTENTS

UCSF Office of Diversity and Outreach

UNIVERSITY OF CALIFORNIA DIVERSITY STATEMENT

Endorsed as Amended by the President of the University of California
August 17, 2010   http://www.universityofcalifornia.edu/diversity/diversity.html

Diversity refers to the variety of personal experiences, values and worldviews that arise from differences of culture and circumstance. Such differences include race, ethnicity, gender, age, religion, language, abilities/disabilities, sexual orientation, gender identity, socioeconomic status, and geographic region, and more.

AT UCSF WE ARE COMMITTED TO THE BEST
Our vision: to be the world's preeminent health sciences innovator

I. Excellence Requires Diversity

People who are different from one another bring unique information and experiences

- Diverse groups are more innovative and creative [1,2]

- Papers written by diverse groups have more citations and higher impact factors [3]

- Diverse groups share more information with others in the group [4]

Employee engagement is a validated predictor of organizational performance

Diverse workplaces with culturally competent workforces have the highest employee engagement [5,6]

US CENSUS   **ACADEMIC MEDICINE**

US CENSUS				ACADEMIC MEDICINE
African American	13.4%	- - - - - - - - -	3.6%	African American
Hispanic/Latinx	18.5%	- - - - - - - - -	3.2%	Hispanic/Latinx
Asian	5.9%	- - - - - - - - -	19.2%	Asian
White	60.1%	- - - - - - - - -	63.9%	White

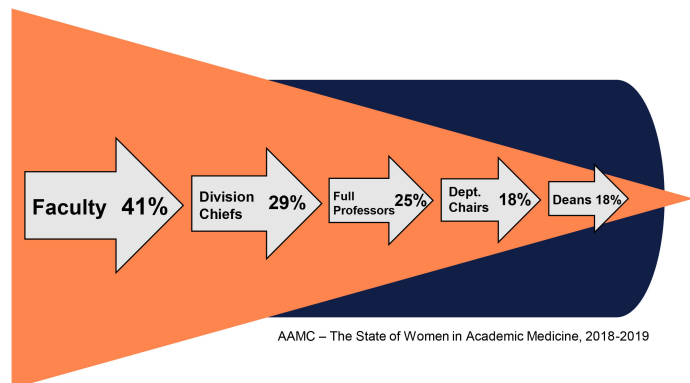AAMC Faculty Roster, 2018

Representation in Academic Medicine

National representation of women in academic medicine

Faculty 41% → Division Chiefs 29% → Full Professors 25% → Dept. Chairs 18% → Deans 18%

AAMC – The State of Women in Academic Medicine, 2018-2019

National representation of medical school faculty by percent underrepresented minority (URM[1]) status

- American Indian or Alaska Native, 0.2
- Other, 0.8
- Native Hawaiian or Other Pacific Islander, 0.1
- Multiple race, Non-Hispanic, 1.9
- Multiple race, Hispanic, 2.3
- Hispanic, Latino, or of Spanish origin, 3.2
- Black or African American, 3.6
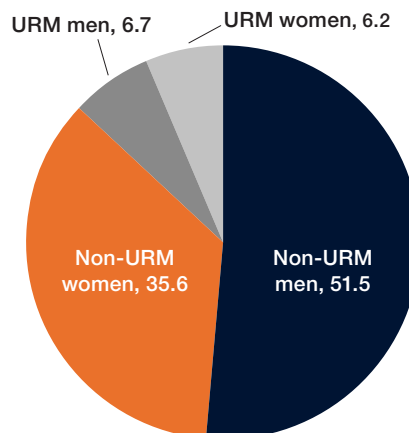- Unknown, 4.8
- Asian, 19.2
- White, 63.9
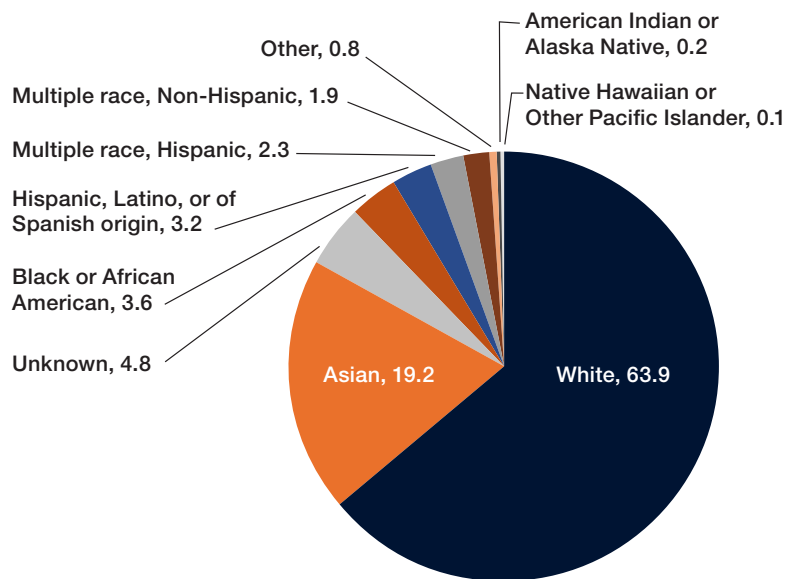
[1]UCSF Definition of URM: Someone whose racial or ethnic makeup is from one of the following: African American / Black; Asian: Filipino, Hmong, or Vietnamese; Hispanic / Latinx; Native American / Alaskan Native; Native Hawaiian / Other Pacific Islander; or Two or more races when one or more are from the preceding racial and ethnic categories in this list.

In addition: Women in traditionally male dominated specialties; Males in traditionally female dominated specialties; and Historically marginalized individuals: LGBT, individuals with disabilities
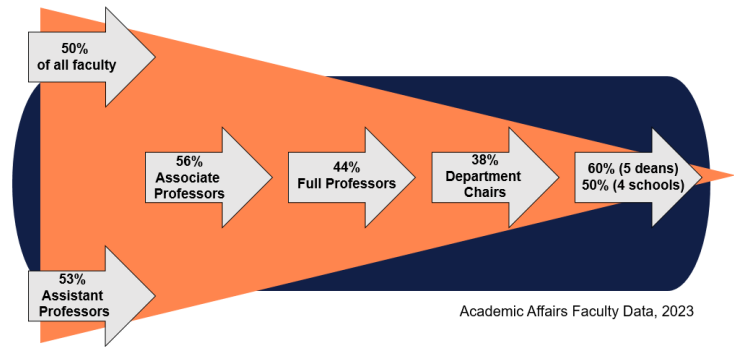
AAMC Faculty Roster, 2018

National representation of medical school faculty by percent gender/URM status
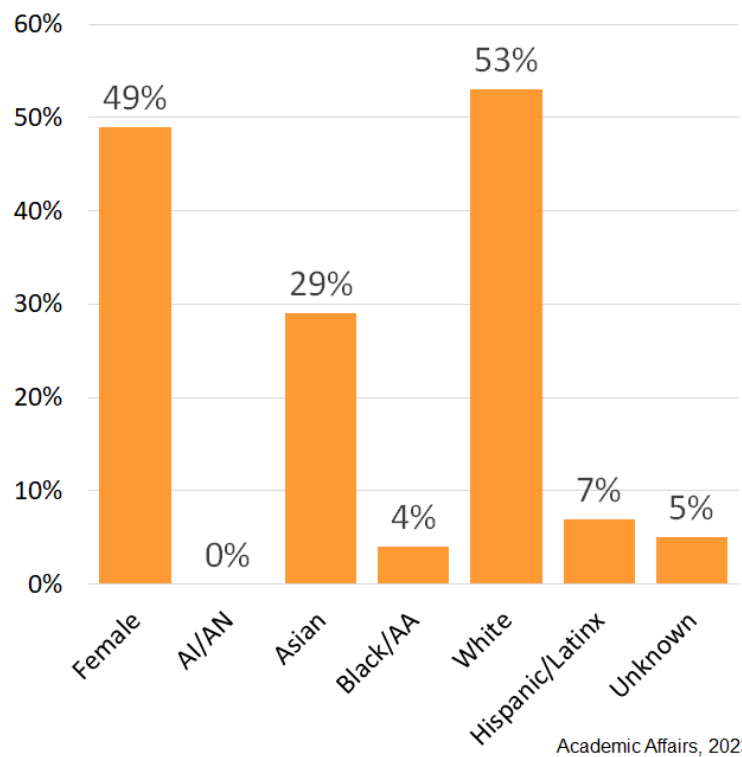

- URM men, 6.7
- URM women, 6.2
- Non-URM women, 35.6
- Non-URM men, 51.5

AAMC Faculty Roster Snapshot, December 2019

Representation at UCSF

Female faculty pipeline, UCSF

50% of all faculty
56% Associate Professors
44% Full Professors
38% Department Chairs
60% (5 deans) 50% (4 schools)
53% Assistant Professors

Academic Affairs Faculty Data, 2023

Gender/race/ethnicity UCSF School of Medicine faculty

Female	AI/AN	Asian	Black/AA	White	Hispanic/Latinx	Unknown
49%	0%	29%	4%	53%	7%	5%

Academic Affairs, 2023

URM pipeline, UCSF

Students 30%
Residents 30%
Postdocs 13.5%
Faculty 12%
Chairs 12%
Deans 40%
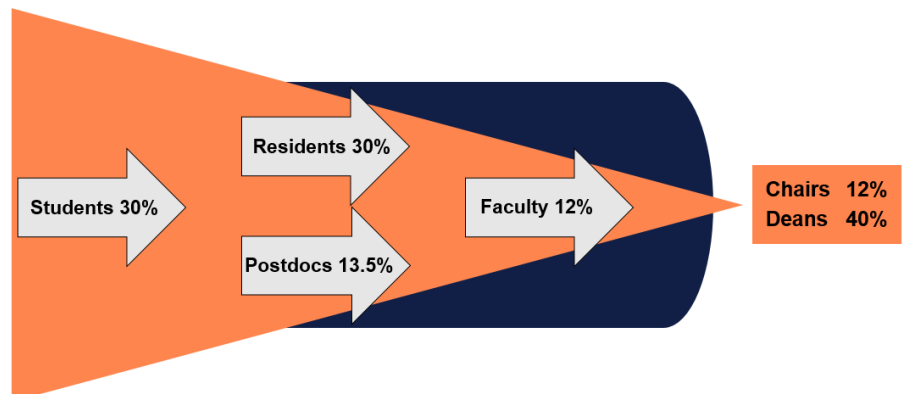
We recognize the connection between diversity and innovation.
Our goal is to be the workplace of choice for diverse, top-tier talent.

–UCSF'S 2014-2015 PLAN

II. Unconscious Bias May Impede Selecting The Best

"The greatest barrier to achieving gender equity in STEMM is systematic bias, frequently unconscious"
- **National Academy of Sciences"**

Social stereotypes that individuals form outside of conscious awareness
- All of us hold unconscious beliefs about various social and identity groups
- Stems from our tendency to organize social worlds by categorizing
- Often incompatible with conscious values

We all have biases

Data we receive from others may be biased

Certain scenarios can activate unconscious stereotypes and attitudes

- Project Implicit: 75% of people have implicit biases or associations
- Unconscious biases tend to map to existing social hierarchies [7]
  - Favor men, Whites, youth, heterosexuals, and physically able
- Men = Science; Women = Liberal Arts
  - E.g., Biases about rating of males and females on a math lab task was related to IAT sex-related beliefs [8]
- Asian = Feminine; Black = Masculine
  - On the IAT, participants primed with the word Asian responded most quickly to words they had rated as more feminine whereas participants primed with the word Black responded most quickly to words they had rated as more masculine.[9]
- Unconscious biases are more likely to emerge in certain situations, such as when multi-tasking or under time pressure (i.e., "high cognitive load") [8,10]

Seminal studies and contemporary research have shown that unconscious bias influences hiring, evaluation, and selection and perception of leaders

Evaluation of CVs

- Selection of "Brian over Karen" 2x as often [11]
- 50% higher call back rate if named "Emily and Gregg" vs "Lakisha and Jamal" [12]
  - The finding that Black applicants are contacted less often than white applicants has been replicated as recently as 2024 [13]
  - Adewale and Ngochi (Black Africans) also seen as more employable than "Lakisha and Jamal" [14]
- Whites & Hispanics benefit from quality resume; Blacks evaluated negatively even with quality resume
  - Occupational stereotypes: Asians high status regardless of resume, Blacks and Hispanics lower status [15]
- "Whitened Resumes": racial minorities' attempts to downplay ethnic/racial cues
  - Less resume whitening if employer specifies valuing diversity [16]

Motherhood Penalty

- Mothers perceived as less competent; offered lower starting salaries [17,18] and less likely to be hired & promoted compared to fathers & employees without children [19]
- Fathers not penalized; at times, there is a "fatherhood premium" [20]
  - Fathers less likely to be laid off during Covid-19 than all other groups, including mothers and people without children[20]

Evaluation of reference letters

- More "standout" adjectives for males [21]
- Women's letters shorter, contained more "doubt raisers" & focus on teaching; men as researchers [22]
- More "communal" adjectives for women and "agentic" adjectives for men [23]

Bias into academic pathways

- Faculty more likely to respond to research inquiry requests from fictional White male doctoral students than any other group [24]
- When reviewing identical student resumes, research faculty rated men as more competent than women, with higher starting salaries [25]

Leadership

- Women often overlooked for leadership potential
  - Men more likely to be valued for leadership potential
  - Women valued for demonstrated leadership performance [26]
- Women in leadership penalized more often than men for displays of emotion, especially pride or anger.
  - However, women also penalized for being emotionally unexpressive e.g., not warm [27]

Evaluation of contributions

- Women less likely to get credit for joint efforts [28]
- Women who co-author more often less likely to receive tenure
  - Men receive tenure at similar rates regardless of solo or co-authorship [29]
- Research topics/approaches more likely to be undertaken by URM viewed as peripheral to academic fields and devalued in advancement [30]

NIH Review
- Black applicants 10% less likely than Whites to receive NIH investigator initiated research grants [31]

Part of the disparity due to topic choice [32]
- Black applicants more likely to be associated with topics like health disparities, disease prevention and intervention, socioeconomic factors, healthcare, lifestyle, psychosocial, adolescent, and risk
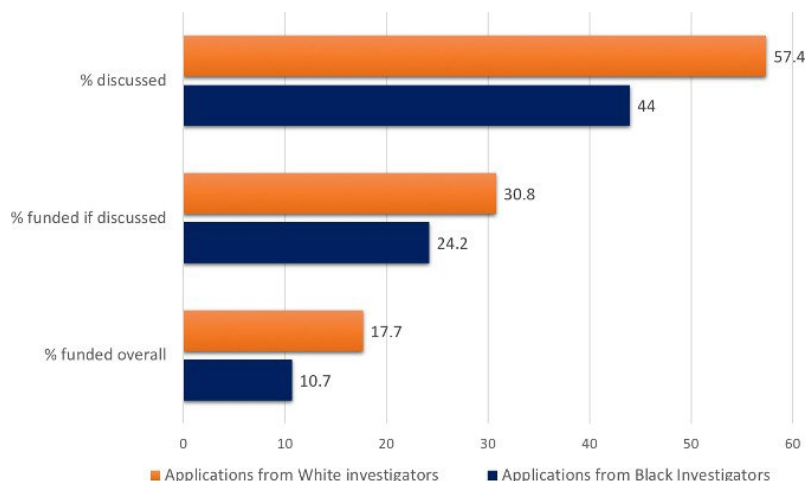
Funding gap between Black and White scientists at each stage of the R01 application and review process

III.   How to combat unconscious bias

On the individual level

Enhance internal motivation to reduce bias
- Recognize unconscious bias (IAT)

Implicit bias is changeable [33]
- Knowledge of bias can reduce its impacts
- New information can cause reinterpretation of scenario
- Priming has an effect: Can counter stereotypes
- Enhance perspective taking and communication skills
- Facilitated discussions with colleagues from diverse groups

On the institutional level

- Concrete, objective indicators & outcomes reduce standard stereotypes [34-36]
- Decreasing ambiguity about individual contributions to joint outcome reduces bias in performance evaluation [31]
- Use structured interviews and objective evaluation criteria [36,37]
- Commit to specific credentials before reviewing applications [38]
- Allow sufficient time as bias stronger when under time pressure [33,37,39]
- Accountability for decision makers [40,41]
- Provide training workshops [39]

Key Links and Additional Resources

Office of Diversity and Outreach
https://diversity.ucsf.edu/

UCSF Faculty Equity Advisors
https://diversity.ucsf.edu/faculty-equity-advisor

UCSF Leadership Equity Advances Diversity (LEAD) Advancing Faculty Diversity Grant
https://diversity.ucsf.edu/advancing-faculty-diversity-grant-lead

University of California Coro Project: Leading with Diversity: Strategies for Recruitment and Retention
https://www.ucop.edu/human-resources/coro/uc-coro-cohort-projects.html

University of California: Guidelines for Addressing Race and Gender Equity in Academic Programs in Compliance with Proposition 209
https://www.ucop.edu/uc-legal/files/guidelines-equity.pdf

University of California Diversity Reports, Key Resources and Initiatives, and Data
https://www.ucop.edu/faculty-diversity/index.html

AAMC Unconscious Bias Resources for Health Professionals
https://www.aamc.org/what-we-do/diversity-inclusion/unconscious-bias-training

AAMC E-learning seminar: The Science of Unconscious Bias
https://www.aamc.org/initiatives/leadership/recruitment/178420/unconscious_bias.html

NIH Scientific Workforce Diversity Toolkit
https://diversity.nih.gov/sites/coswd/files/images/SWD_Toolkit_Interactive-updated_508.pdf

Implicit Association Test:
https://implicit.harvard.edu/implicit/

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