

“We Only Hire the Best”

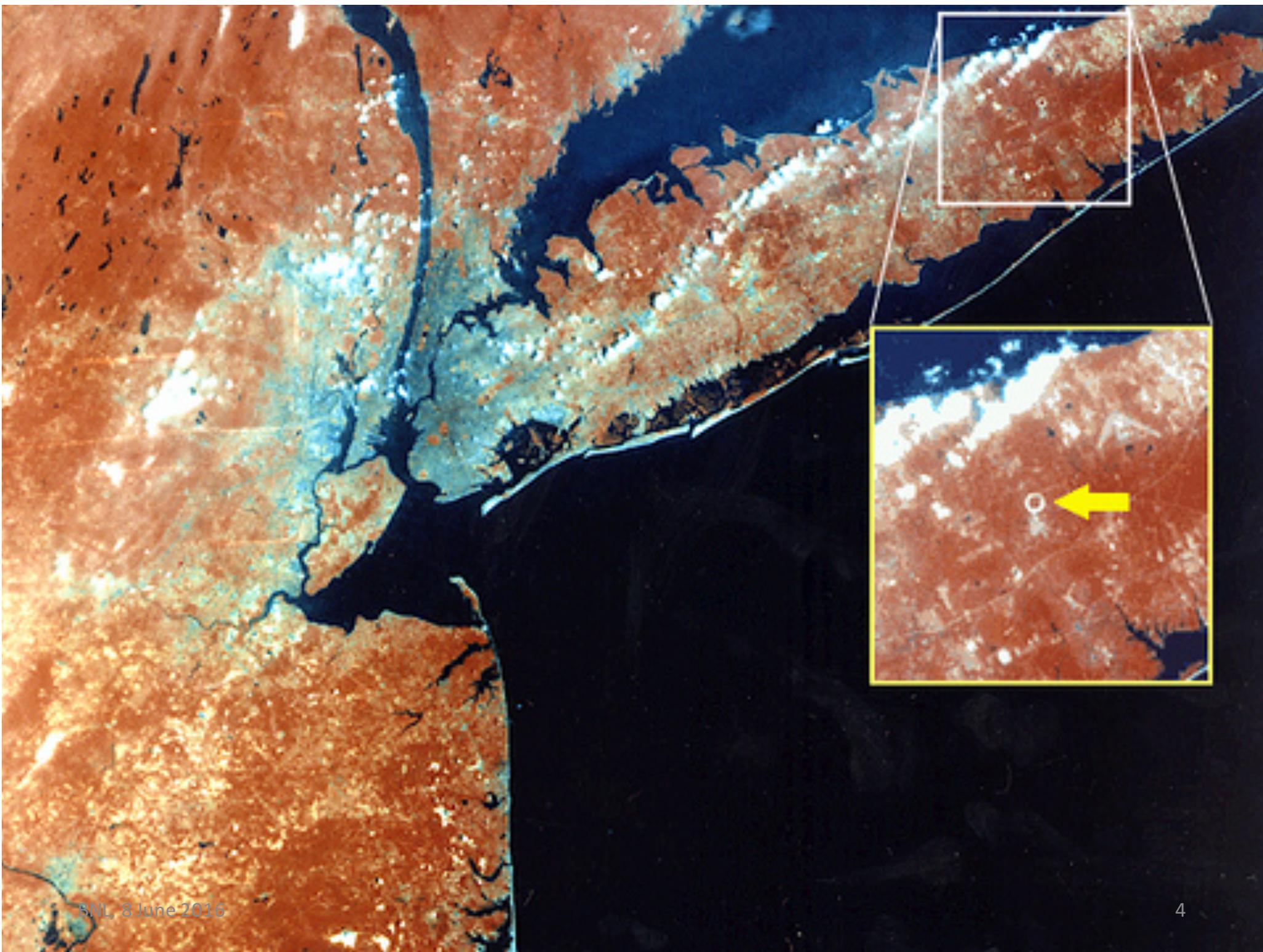
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Why Am I Here?

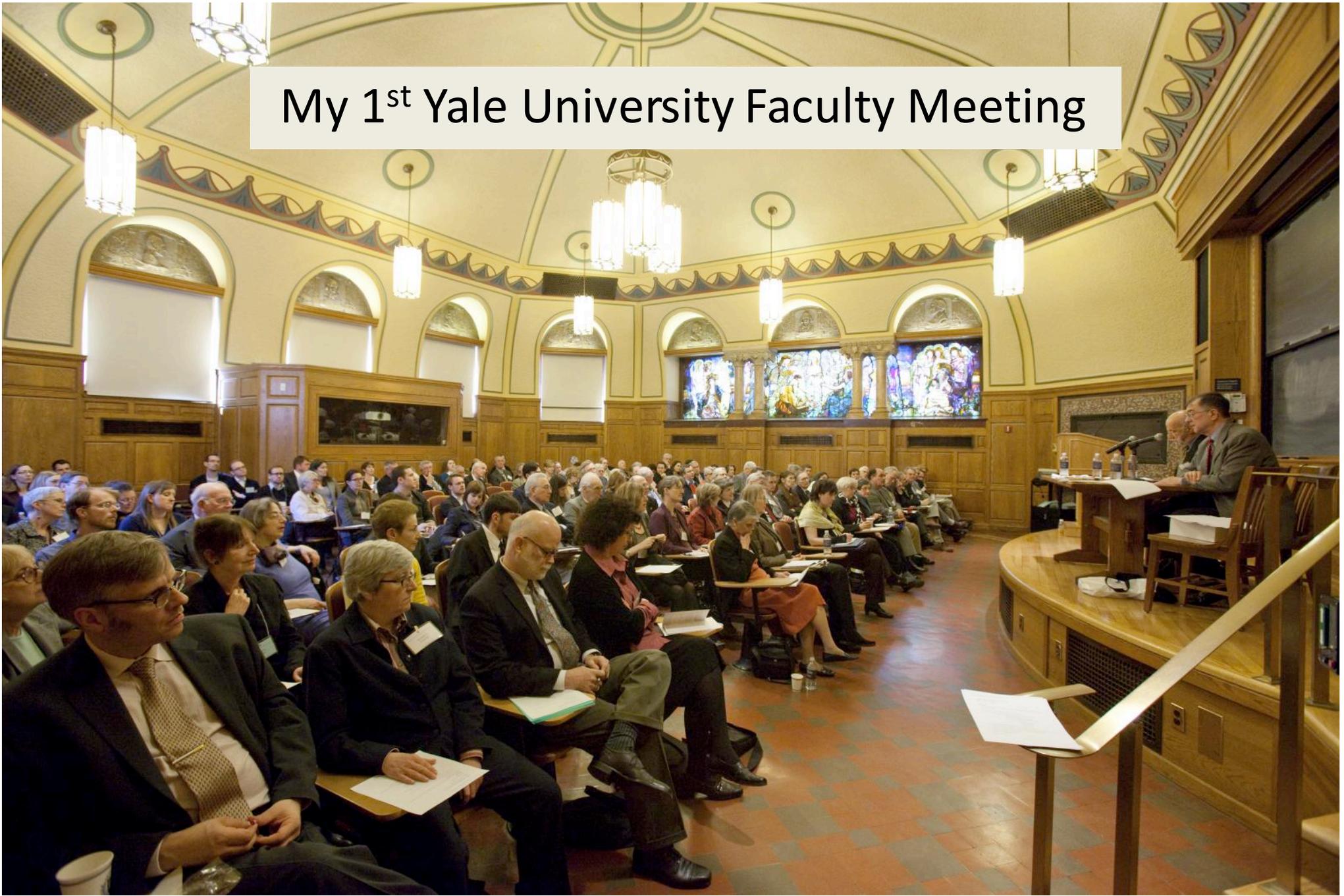


You are here.



BNL, 8 June 2016

My 1st Yale University Faculty Meeting



“We Hire and Promote the Best Scientists”

- What do you think? **Is science a meritocracy?**
(People succeed because of the merits of their work & talents they bring to it?)
 - Clearly we strive to be! But not perfect!
- Most people feel that science is a meritocracy!
- Most scientists believe that the best person gets the job – this is the driving force behind getting the job!
 - Search committees “We hire on quality and nothing else”
 - Driving force behind all hires – “The best person gets the job!”
- **But, this is not the best policy & sets up a false dichotomy between quality and the hiring of women and minorities.**



Another Perspective

Yale Faculty Senate Report on “Diversity & Inclusivity”

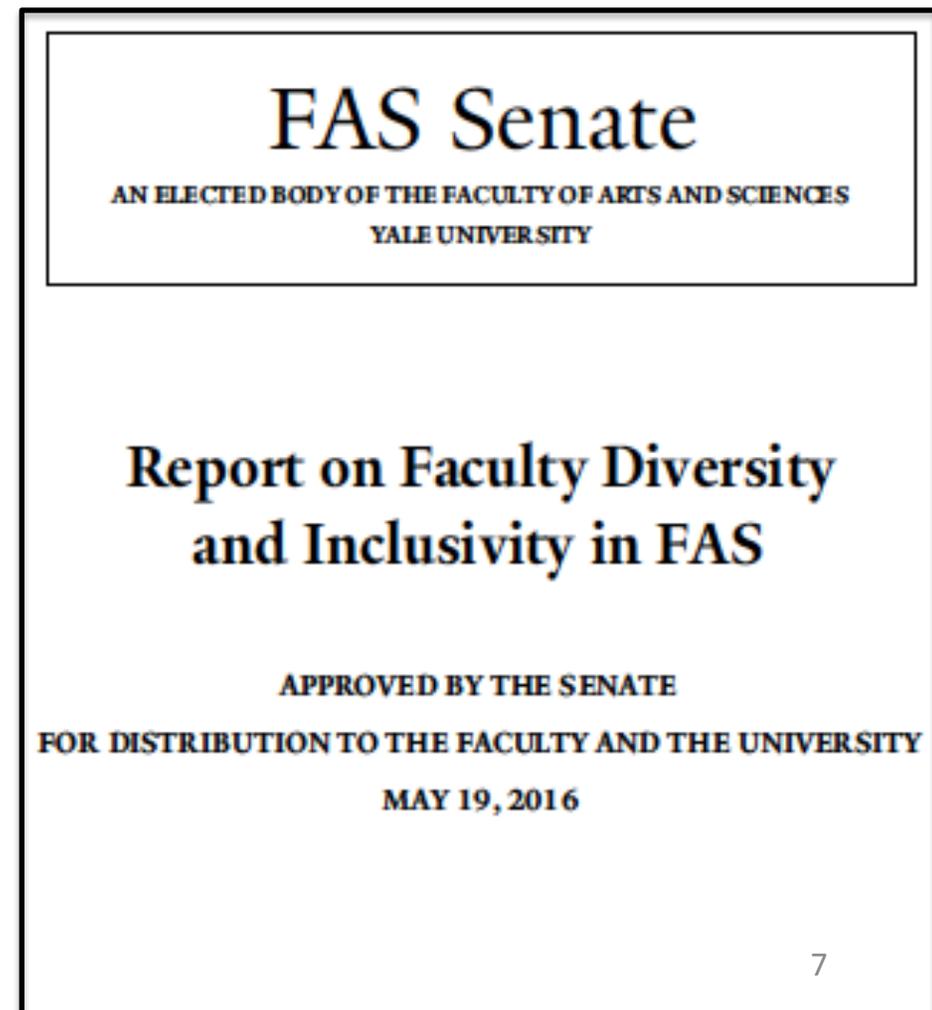
<http://fassenate.yale.edu/sites/default/files/files/Reports/FAS%20Senate%20-%202016-05-19%20-%20Diversity%20and%20InclusivityFINAL%20copy%202.pdf>

Begs the question!

What does it mean to be the best?

19 recommendations!

“We are not the best we can be!”





1st Five High-level Recommendations

Yale (University, administration, leaders) must:

1. **Become an acknowledged leader among its peers in fostering diversity in curriculum and faculty composition** to make our university community a **model of inclusion**.
2. **Establish specific numerical goals** for hiring of URM faculty and women faculty where underrepresented **Allocate funds** to meet these goals.
3. Articulate a cogent **vision for the intellectual value of diversity & inclusivity** and a clear **plan of action**.
4. **Recognize that inclusivity and climate, curricular diversity, creating a pipeline of diverse scholars, faculty recruitment, and faculty retention are all interrelated,** policies to improve diversity and inclusivity should **take a syncretic approach**.
5. Organize a **regular review of diversity & inclusivity** to **monitor progress** made on stated goals.



Additional Recommendations

Include the following:

- **Strive toward a truly inclusive diversity strategy**, which recognizes that faculty diversity takes many different forms.
- **Broaden strategies for discussing challenges of diversity & inclusivity** recognizing that implicit / unconscious bias are key aspects of any diversity strategy.
- Leaders **strive for retention of URM, minority, women, and other underrepresented faculty** and to **fostering a more inclusive climate as much as is paid to recruitment**.
- Leadership should take seriously the shortcomings in **parental policies** identified in the recent Yale Faculty Senate report (March 2016).
- **Selection criteria for leaders** should also include a **track-record of fostering diversity and a more inclusive climate**, and **excellent record of mentoring scholars**.
- **Promotion & tenure decisions** should be composed with a **view to intellectual diversity**.
- Create **prestigious, competitive, named postdoctoral fellowships** to increase the pipeline of women, URM, and minority scholars and **foster even greater intellectual diversity**.

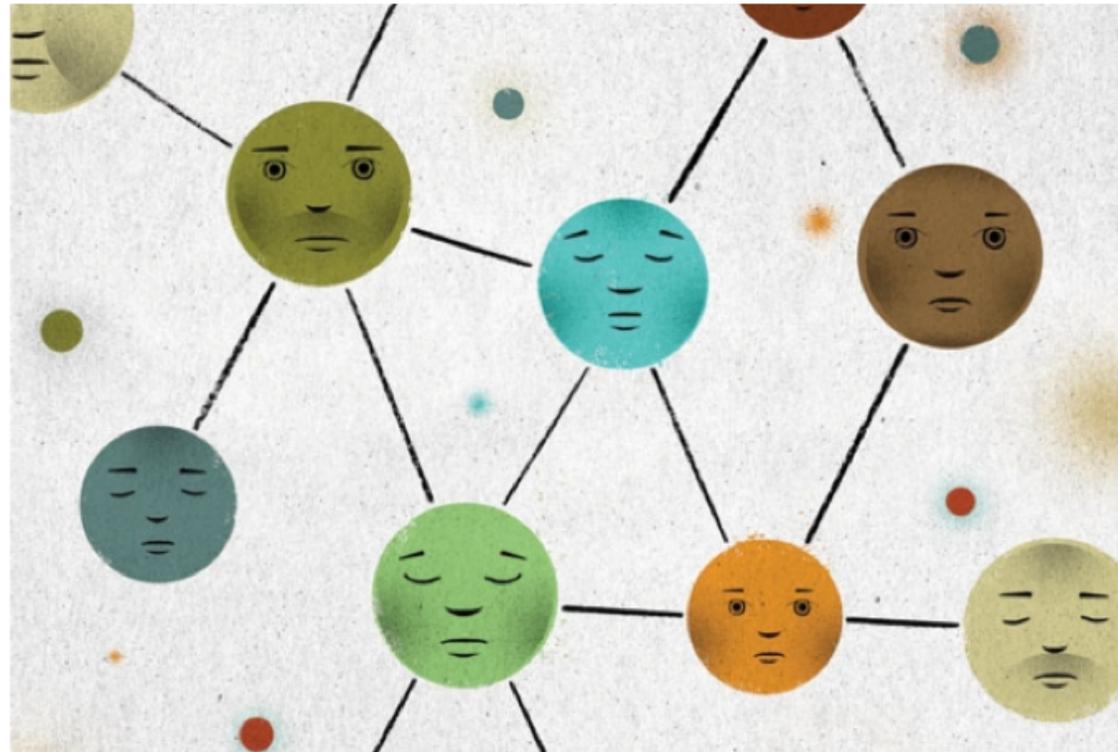


Why Care about Social Diversity?

Diversity of Gender, Color, Ethnicity, Sexual Orientation

Downsides:

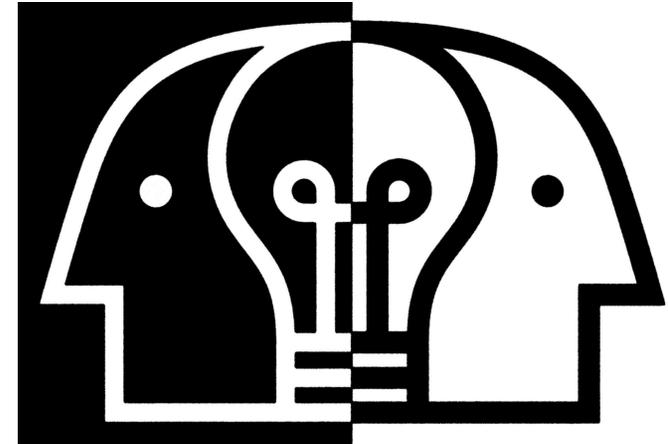
- Can be difficult to make progress and complicated to accomplish
- Can lead initially to anxieties, friction, conflict, lack of trust, or cohesion



Why Care about Social Diversity?



- Scientific integrity and fairness imperative!
- Diversity improves the quality of a group, team, experiment, department, institution!
 - Extends candidate **selection pool**
 - Brings together **differing views** – opinions, experiences, information, approaches
 - **Enhances creativity** (encourages new views, different approaches)
 - **Quality of education / training** correlated with diversity of group
 - Provides students / young scientists with **role models** they work with and can aspire to



Courtesy NY Times

Why Care about Social Diversity?



- Exposure to diversity provokes personal & group thinking
 - Comments/criticism from others who do not look like us are taken more seriously!
 - Improved problem-solving performance for heterogeneous (experience, age, gender, race) vs homogeneous groups
 - In a group with different perspectives
 - people recognize there are other views
 - changes group behavior & expectations
 - understand each other's views & reach consensus sooner
 - So, people work harder in diverse groups both socially (more information flow) and cognitively – critical thinking, teamwork
 - These improve overall quality of education, training, & science

Improves creativity, problem solving, ability to defend decisions

Why Do We Need Diversity?



- **Nationally**
 - Maintain excellence and competitiveness
 - For competitiveness: Access to best scientists & large candidate pool, rather than a limited one.
(White males make up only 38% of faculties in US, while they dominate faculties & scientists.)
 - Equity, equal opportunity, fairness, Title 7 and 9 (it's the law!)
 - Pool narrows at the top! Many & complex reasons, glass ceilings!
- **A problem if we do not take advantage of abilities & training of all to improve quality of science in the US!**

What Can We Do to Improve Diversity?

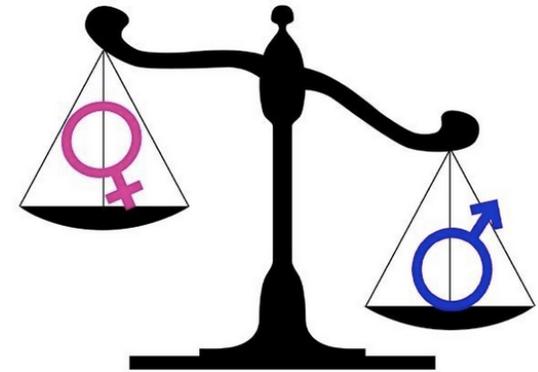


- So if we train more women/URMs, resolve the issue?
 - Training alone does not solve lack of diversity problem
 - Increase in STEM students started 20 years ago
 - Lose them at higher levels
 - Example now 50% of biology PhDs are female, but leadership/grants still predominantly white males
- Women & URMs have a choice,
 - often leave science after PhD
 - Of course, choice is good!
 - Except partly discrimination, implicit bias, partly not

What Can We Do to Improve Gender Diversity?

- **Choice – Female Scientists**

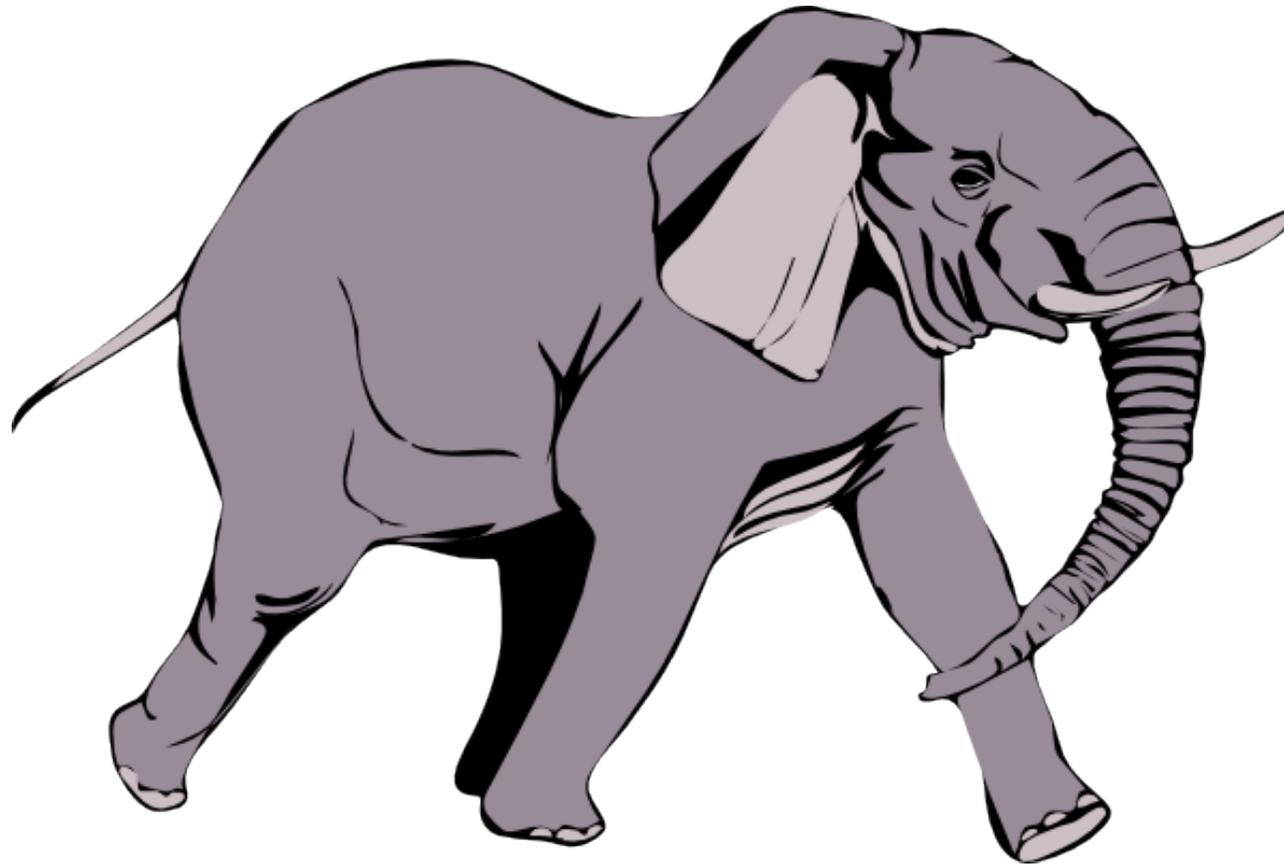
- Have fewer roles models
- Have fewer partners with less demanding jobs
 - typically married to male scientists
- Primary caregivers in family (children & elderly parents)
- Can/may bear and nurse babies.....Fact – Men cannot / do not
- Hiring expectations – women not expected to work & have kids
- Anxieties about
 - being pregnant, considered as serious scientist
 - having to achieve tenure in same amount of time as colleagues without kids (changing at universities)
 - missing kids events, like most moms
 - missing scientific conferences not giving talk while being a mother



- **Women are not given the same choices as men!**

What Can We Do to Improve Diversity?

“The Elephant in the Room!”



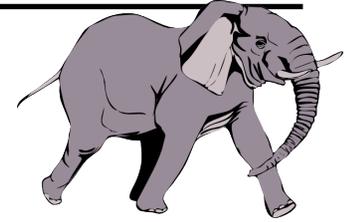
Affirmative Action

Affirmative Action – “the Elephant in the Room!”



Next Supreme Court Action this summer (Fischer vs U. Texas)

Affirmative Action “the Elephant in the Room!”



Difficult subject, stirs emotions

- Constitutional paradox

(do something unequal to create equality)

- Supreme Court has

- upheld use in admissions, when race is a factor but not the primary factor, as long as not part of a quota system

- Some Arguments For

- Strives for diversity in schools and workplace
- Helps (racially) disadvantaged

- Some Arguments Against

- Reverse discrimination
- Reinforces stereotypes

Does not apply to
economically disadvantaged!



Implicit Bias



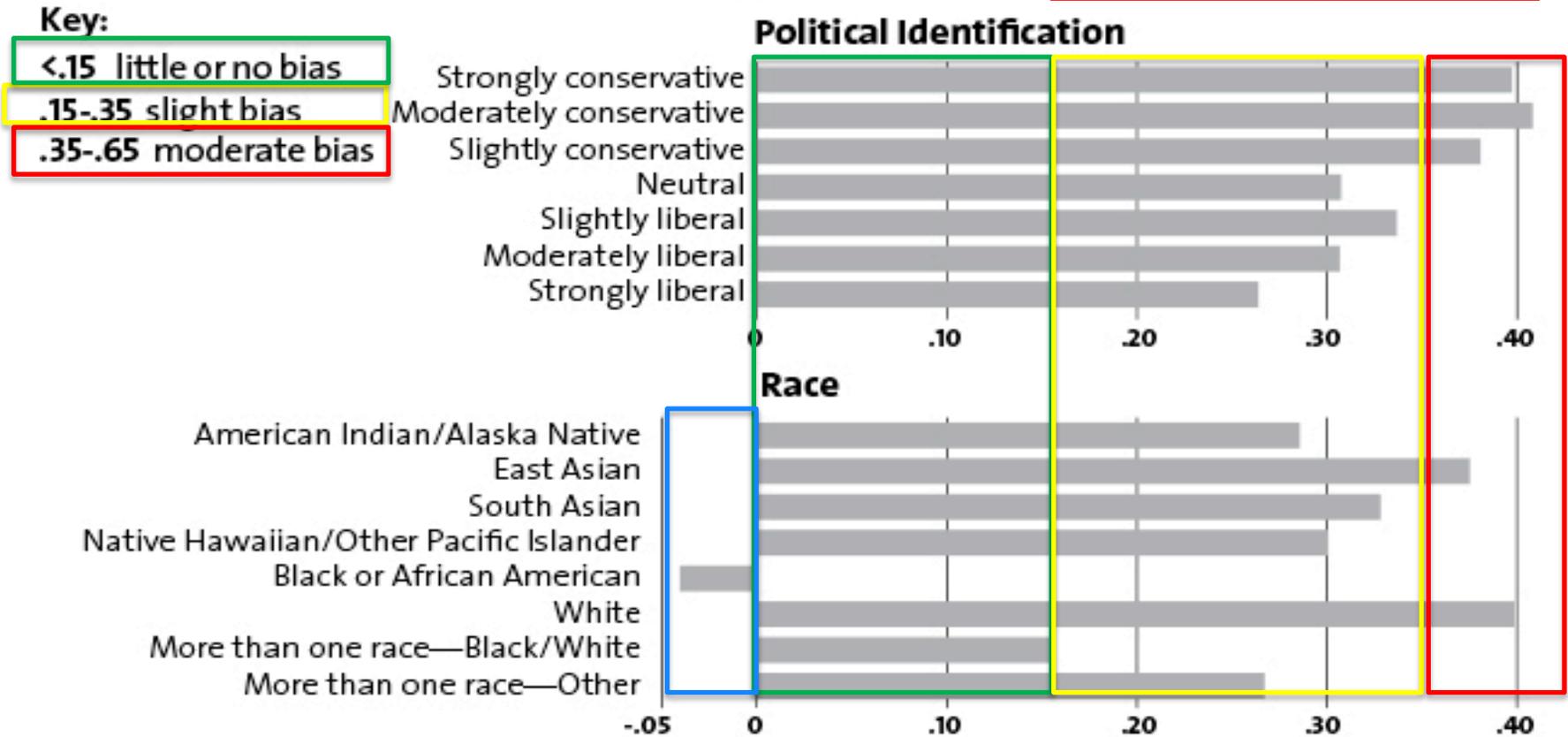
- Have heard these words a lot
 - “I am not biased!” May not feel we’re biased, but we all have **built-in prejudices!**
 - Depends on **upbringing**: family, experiences, environment, social contacts
 - **What is the impact?**
 - Decisions may be irrational, leading to **unfair consequences** (hiring, promotions, inclusivity, speakers, ...)
 - Boys and girls **treated differently in subtle ways**
 - **What to do?**
 - **Awareness helps!**
 - **Take Implicit Association Tests (IATs)** (e.g. <http://ow.ly/WF9J9>)

Implicit Bias



- Results from racial prejudice using IATs online

Bias favoring Caucasians



Source: Data from the Race Implicit Association Test on the Project Implicit Demonstration website. Race categories are those used on the test.

Mother Jones

Most groups' average fall between "slight" and "moderate" bias.

How Might We Change Our Implicit Biases?

- **Increase exposure** to people who counter the standard stereotypes & build associations
- **Engage in education** about implicit bias
- Develop a sense of **accountability**, this can decrease influence of bias
i.e. implicit or explicit expectation that you may be called on to justify your beliefs, feelings or actions to others!
- Take the **perspective of others**
- Engage in **deliberative processing**



Research on Implicit Bias



- **Blind randomized trials**
 - Over years prejudices have not changed much
 - Many studies of gender and URM (seen already today)
 - Biases about cognitive abilities, athletic abilities, physical characteristics, writing abilities, creativity, ...
 - Blind studies showboth men & women have these biases
 - both bring same unconscious cultural bias
- **Real life studies**
 - Studies show that far more likely to hire a man than a woman
 - For women more cautionary comments (must see talk, teaching evaluations, evidence of individual incentive and roles, other concerns and reluctance about contribution)

2 Notable Real Life Studies on Implicit Bias

1.) Gender of 5 big symphony orchestras

(Goldin & Rouse, 1997, in US)

- In early 1980's orchestras started using a **screen between the candidate and the judges** so could not see who was auditioning, carpeting on stage also. Started as a nepotism issue for auditioner.
- Found **dramatic increase in women in non-traditional female instruments over the last 20 years** due to **gender-blind auditions** (60% increase in women selected in orchestras)



2 Notable Real Life Studies on Implicit Bias

2.) Linguistic content of letters of recommendation

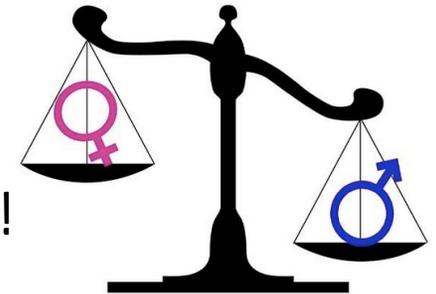
(Trix & Psenka, 2003)

- Substantial differences in 300 letters for successful candidates for faculty positions at a major medical school.
- Men more often referred to as “researchers” and “colleagues”
- Women as “teachers” and “students”
- Women 4x more references to personal lives
- Women received more doubt raising phrases
 - Don’t really know impact of these statements, all women got the jobs!
 - Maybe these comments actually helped? Since studies show that people are less comfortable with women in leadership roles!



How Can We Reduce the Impact of Bias?

- Become **self-aware** of biases
- Be **accountable** (group, department, community)
 - **Same standards** for men and women (ask in every case)!
 - Adopt a **fair process**
 - Set **criteria for evaluation** beforehand
 - Often posthoc justification for hiring white male
 - Uhlmann & Cohen (2005) – with criteria stated beforehand, less discrimination
 - **Spend time** reviewing candidates (gender bias greater for busier reviewer)
 - Appears that more **balanced committees** (URMs and women) provide more balanced outcome
 - **Review decisions** to be made (people will be aware before decisions)
 - **Impact of info** and images on implicit bias education have short lifetime (days, weeks, a month). **Review frequently.**
 - Study says that if you **tell people not to be prejudiced**, they will be less prejudiced (think deliberately & reflectively about unconscious bias)

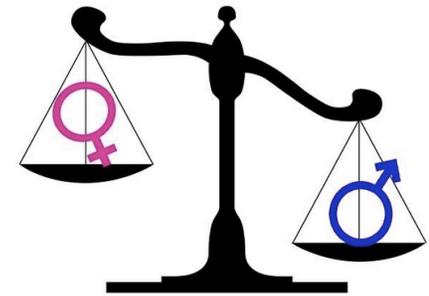


To Reduce the Impact of Gender Bias?

- **Institutional change**

- **Policies, programs** to encourage academic & research careers of female scientists

- Parental leave, childcare on campus, nursing / lactation rooms in buildings
- Meetings must not last past 5 PM
- Tenure clock and promotion extensions
- Climate training for every member of faculty / group leader (especially department chairs / leaders)



- **Individual change**

- **Discuss role models & choices** for women at all stages (student, graduate, student, postdoc, faculty) in various forums
- **Reduce impact of unconscious bias**, ensure leaders have bought into this (including funding agencies!)

Science is NOT a perfect meritocracy!

What Can Be Done to Reduce Biases at Institutions?

- **Transform institutions** to accommodate the biological and social realities of women's lives
- **Readdress academic expectations**, rules and structures formed around male lives – are these necessary?
- See **recent Changes in Policy** at other laboratories (institutions)
 - Fermi Lab
 - SLAC
 - (also concerned universities)

Procedural Changes in Fermi Lab Hiring

- Covers all scientific searches and hiring (2015)
- Key features of these procedures include
 - A **focus on increasing the diversity and quality** of the lab's scientific workforce
 - **Accountability** of the search committee, search committee chair, division head and lab senior management for the appropriate conduct of the process. A main feature of this accountability is the summarizing letter written by the search committee chair to the relevant division head or lab director.
 - Maximizing the **size, quality, and diversity of the applicant pool**
 - Makeup of **search and hiring committee**
- Provides why, how to, guides, reading, suggestions

Recent Procedural Changes at SLAC

- **Redefining Approach**
 - Evidence based change - Research, best practices
 - Using science to inform science - the roots of bias
 - Understanding implications of bias on our culture / decisions
- **Redefined search and selection process**
 - Decision makers trained in awareness and practice
 - Expanded pools on targeted searches
 - Focused development plans for diverse pipeline candidates
- **Outcomes so far**
 - Twice the number of female scientists hired year to date
 - Six women named into senior leader positions
 - Fully committed senior leadership team

Conclusion

- Be self-aware
- Educate yourself about biases in your environment
- Do what you can to be fair and maintain integrity
- Call out unfair practices

(individually & institutionally)