

Ritika Manik, BS<sup>1</sup>; Gelareh Sadigh, MD<sup>2</sup>

<sup>1</sup>Emory University, College of Arts and Sciences

<sup>2</sup>Emory University, School of Medicine, Department of Radiology and Imaging Sciences

## BACKGROUND

### What is diversity?

Range of human differences including but not limited to: race, ethnicity, gender, gender identity, sexual orientation, age, physical ability, religion, political beliefs, etc.

### Benefits of diversity in medicine:<sup>1,2</sup>

- Enhanced communication
- Improved risk assessment
- Decreased implicit bias & prejudice
- Increased financial efficiency of care & lower long-term costs
- More accurate diagnoses
- Higher patient satisfaction and trust
- Greater compliance
- Increased access to care for underserved communities

According to a 2009 study, the cost of health disparities was >\$1.2 trillion. Diverse providers can work to reduce disparities → better patient outcomes & reduced economic burden.<sup>3</sup>

## AIMS

1. Summarize gaps in diversity in medical education, research, and leadership (especially in the field of radiology)
2. Discuss methods for closing the gaps

## CURRENT GAPS

### Medical Education

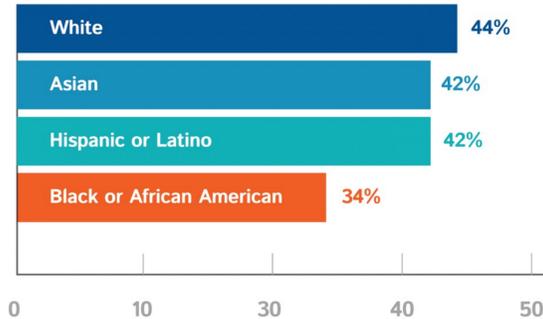


Figure 1. Medical school acceptance rates  
Source: AAMC 2016 Facts & Figures Report.<sup>4</sup>

### Research

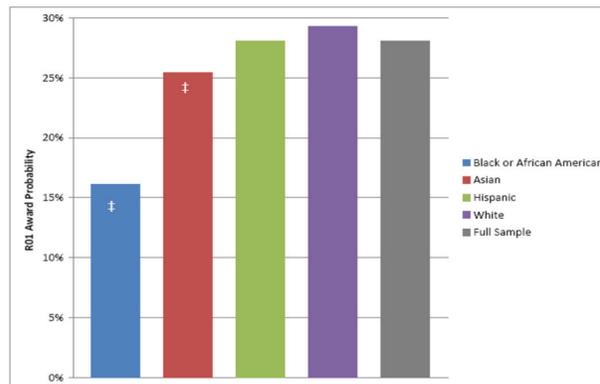


Figure 2. Probability of NIH R01 award by race and ethnicity, 2000-2006. †,  $P < .001$   
Source: Ginther et al. (2011)

### Leadership

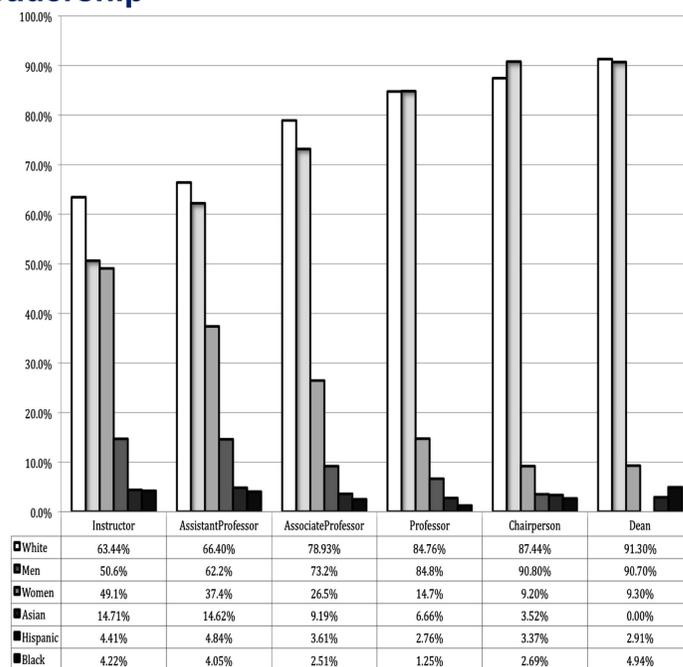


Figure 3. Racial and gender representation in academic medicine: 12-year averages.  
Source: Yu et al. (2013)

- Black applicants are less likely to be accepted to medical school<sup>4</sup>
- 15.3% of US medical graduates vs. 35% of US population were racial/ethnic URM (in 2010)<sup>5</sup>
- URM students more likely to: be dismissed (6x), withdraw (3x), be enrolled for 6<sup>th</sup> year (3x)<sup>6</sup>
- Among 20 largest residency specialties, radiology:
  - 17<sup>th</sup> in representation of women<sup>5</sup>
  - 20<sup>th</sup> in representation of URM<sup>5</sup>

- Black or African-American applicants for NIH R01 grants are 10% less likely to be awarded funding than a white applicant<sup>7</sup>
- 31.6% of 1<sup>st</sup> authors & 19.3% of last authors in radiology journals were female<sup>8</sup>
- Impact of COVID-19 pandemic: women with young children experience 17% greater decrease in research productivity than male counterparts<sup>9</sup>
- These data are particularly concerning because research productivity is important in academic medicine & often factored into promotions to leadership

- Majority of chairpersons (across all specialties) and deans are white and/or men
  - 50-60% of medical school graduates are white<sup>4</sup> but over 90% of deans in one study were white<sup>10</sup>
- Radiology:
  - <10% of chairs are Black, Hispanic, or multiple-race<sup>11</sup>
  - 79% of female radiologists report having a direct supervisor who is male<sup>12</sup>
  - 52% of female radiologists report having no leadership role<sup>12</sup>

## CLOSING THE GAPS

### Flattening Hierarchies in Academia<sup>6</sup>



Source: Whitelaw et al. (2020)

- Collaborative leadership → platforms for new ideas and voices to come forth
- Enables input from people of all demographic backgrounds
- Adopted by companies such as Novartis → higher employee satisfaction & performance

### Inclusion Is Important Too<sup>14</sup>

- Diversity is more effective when inclusivity is also emphasized
- Often difficult to represent the full spectrum of diverse identities in any setting
- Emphasizing inclusivity → avenues for people of different identities to freely participate in our systems/institutions as they choose, even if we cannot represent all diverse identities at once

### Other Steps

- Mentorship of URM students & women
- Directed financial support, research opportunities, career counseling for underrepresented groups
- Working to decrease unconscious biases
- Decreasing gender & race pay gaps

## REFERENCES

