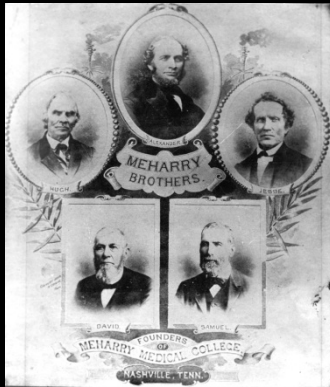
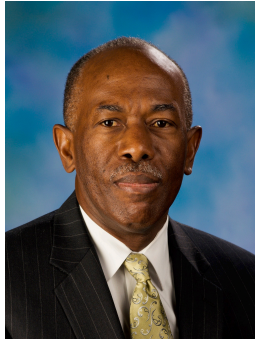


# Our Legend and Legacy



Since  
1876





Dr. James E.K. Hildreth Sr  
President and CEO  
Meharry Medical College

## **Biography Highlights**

### **Education**

B.A. Chemistry, Harvard University  
PhD Immunology, Oxford University  
MD, Johns Hopkins School of Medicine

### **Honors**

Rhodes Scholar  
Johns Hopkins University Society of Scholars  
National Academy of Medicine  
Arkansas Black Hall of Fames  
Honorary degrees  
NIH Pioneer Award

### **Professional**

Internationally recognized HIV researcher  
Tenured professor, Johns Hopkins School of Medicine  
Dean, College of Biological Sciences, UC Davis  
More than 120 peer reviewed publications  
11 patents

## ***COVID-19 Related Appointments/Professional Activity***

President Biden's COVID-19 Health Equity Task Force  
FDA Vaccine and Related Biological Products Advisory Committee  
Multiple appearances in national media; COVID-19 advisor to NFL

# Health Disparities and Minority Participation in Clinical Research

**April 28, 2021**

**James E.K. Hildreth, PhD, MD**

President and CEO

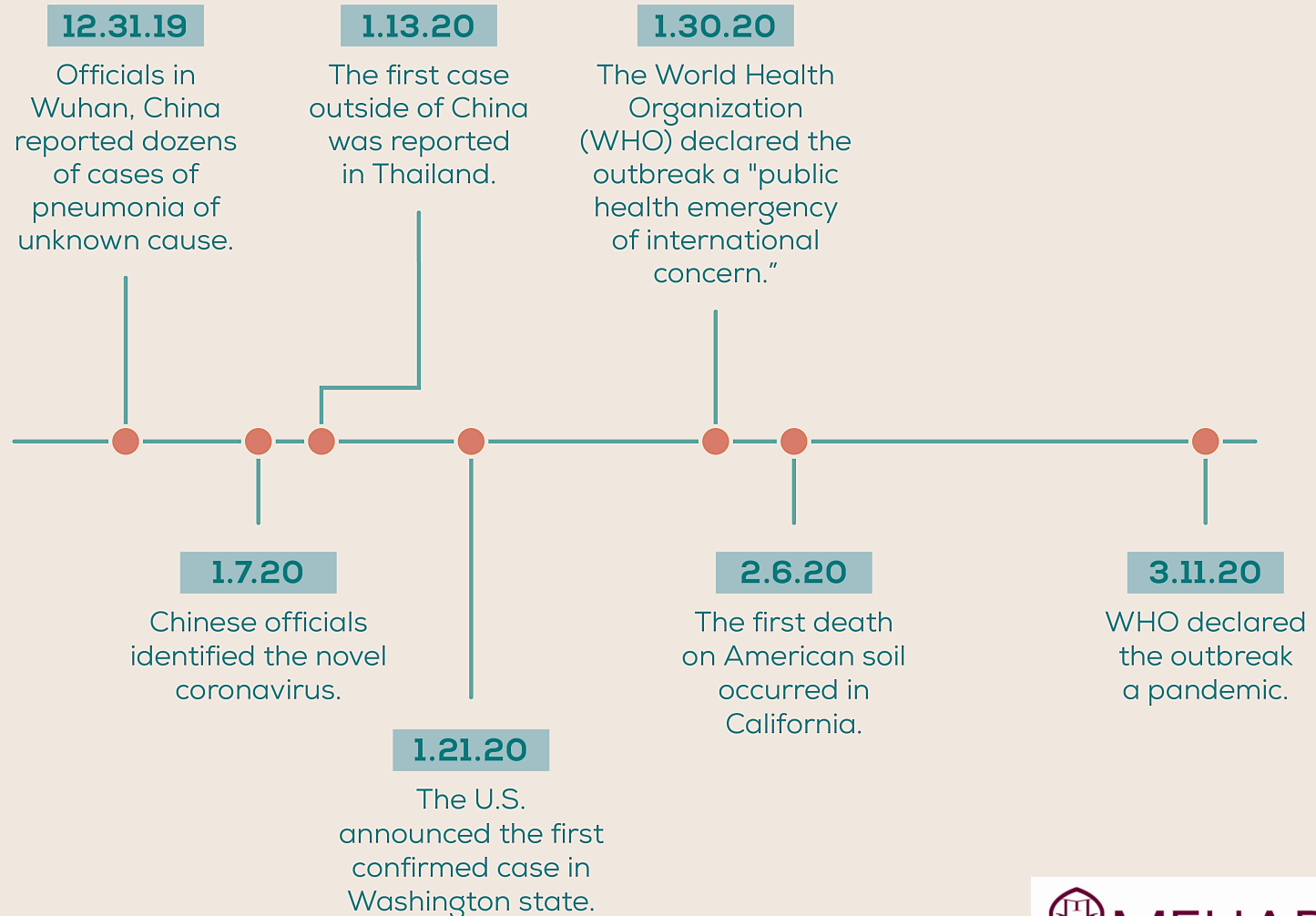
Professor, Internal Medicine

Meharry Medical College

@JamesEKHildreth



# COVID-19 Timeline





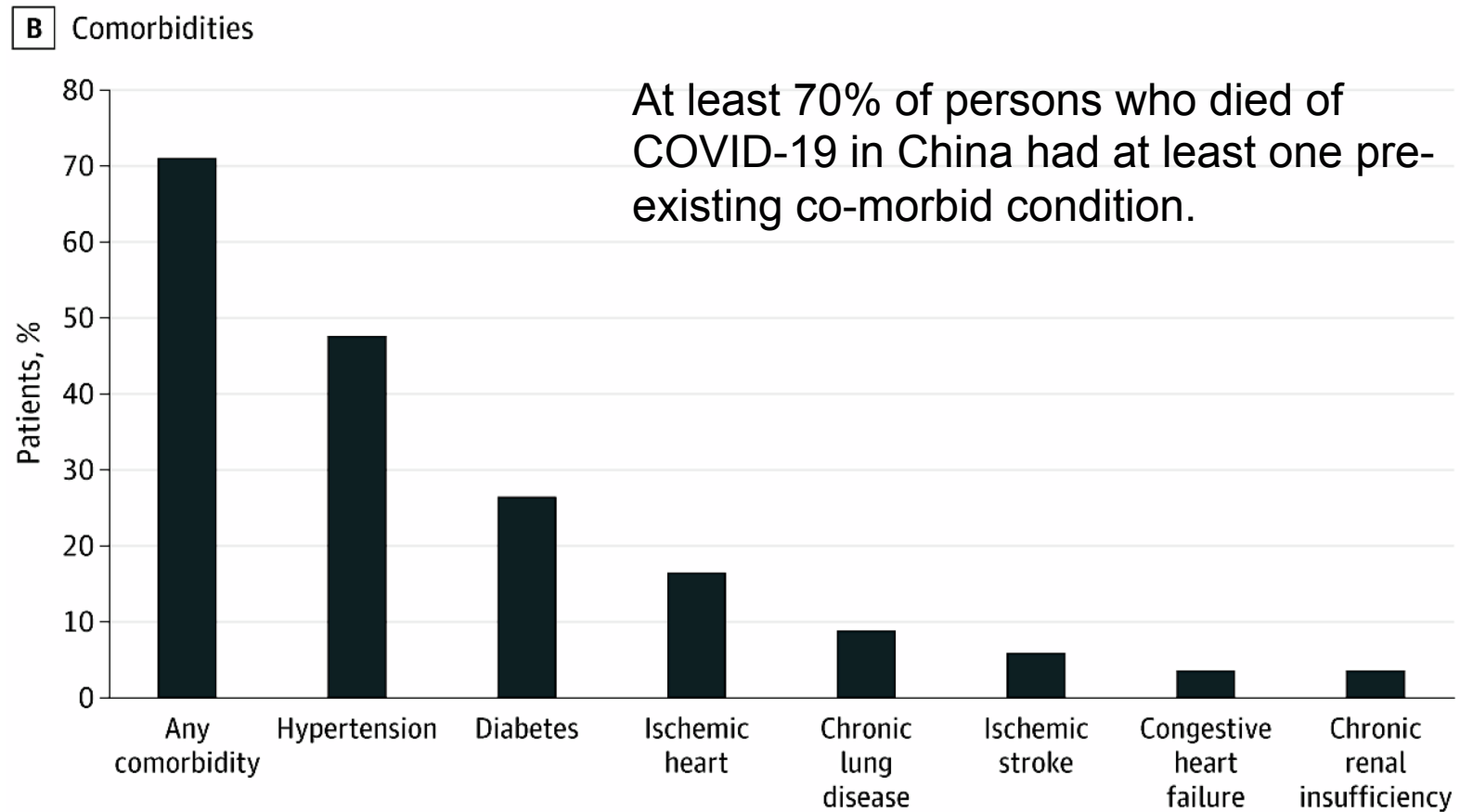
# The Pandemic

To date globally more than 148 million people have been infected with SARS-CoV2 and more than 3 million have died.

Even though it represents only ~5% of global population, U.S. accounts for more than 20% of cases and deaths.

The COVID-19 pandemic now ranks in scope with the 1918 influenza pandemic.

From: **Clinical Characteristics of Patients Who Died of Coronavirus Disease 2019 in China**



# HEALTH DISPARITIES IN CHRONIC DISEASES

**50%** of **AFRICAN AMERICANS** have some form of **CARDIOVASCULAR DISEASE**



48% AFRICAN AMERICAN WOMEN

46% AFRICAN AMERICAN MEN

**33%** OVERALL U.S. POPULATION SUFFERS FROM **HYPERTENSION**  
8% projected increase from 2016 - 2030



33%

WHITE

30%

46%

AFRICAN AMERICAN

45%

30%

HISPANIC

30%



**34.3% HISPANIC**  
& **37% AFRICAN**  
**AMERICAN MEN**

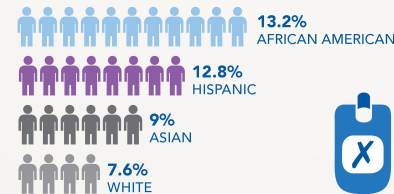
ARE CONSIDERED OBESE



**43% HISPANIC**  
& **56.7% AFRICAN**  
**AMERICAN WOMEN**

ARE CONSIDERED OBESE

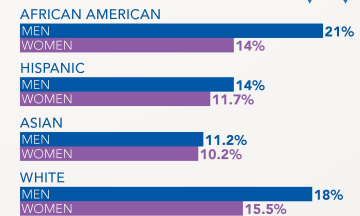
## DIABETES: TYPE 2



9% Overall Diagnosed 35% Overall Undiagnosed

## CANCER\*

2008 - 2012  
\*ALL TYPES OF CANCER



**African Americans and Hispanic populations have a higher rate of *all* major chronic health conditions. And this had led to a disproportionate burden of severe COVID-19 disease and death among minorities.**

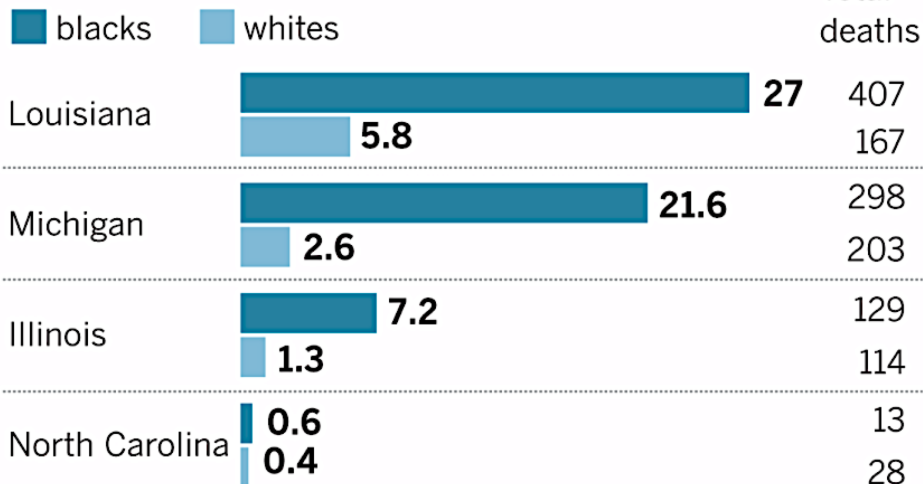
# COVID-19 Disparities

**Some U.S. states and cities have reported extreme disparities between African Americans and Caucasians for COVID-19 deaths.**

## Coronavirus deaths and race

COVID-19 is disproportionately killing black Americans, according to data released by several states.

### Deaths per 100,000



Death totals as of Tuesday afternoon.

State governments, U.S. Census Bureau

Lorena Elebee / Los Angeles Times

# **SARS-CoV2 and Health Disparities in U.S.**

- **Failed national leadership because of politics and prejudice resulted in delayed and ineffective national responses to COVID-19.**
- **COVID-19 revealed chasm in health status between African Americans/Hispanics and Caucasians in U.S.**
- **Long-standing disparities in chronic diseases is a major contributor to disproportionate impact of COVID-19 on minority and disadvantaged communities.**
- **Inequities in COVID-19 are best understood in context of Social Determinants of Health.**

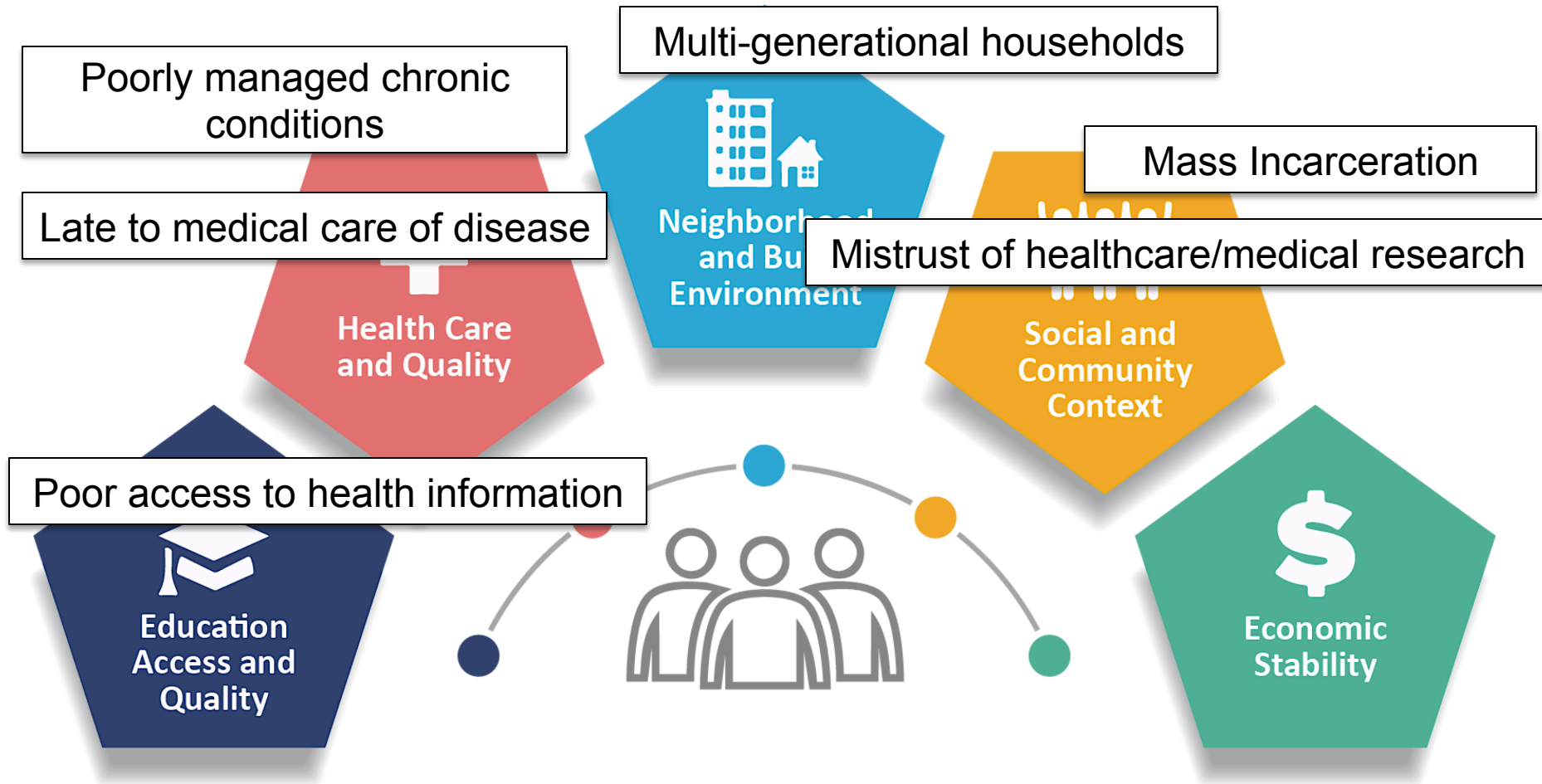


# Social Determinants of Health

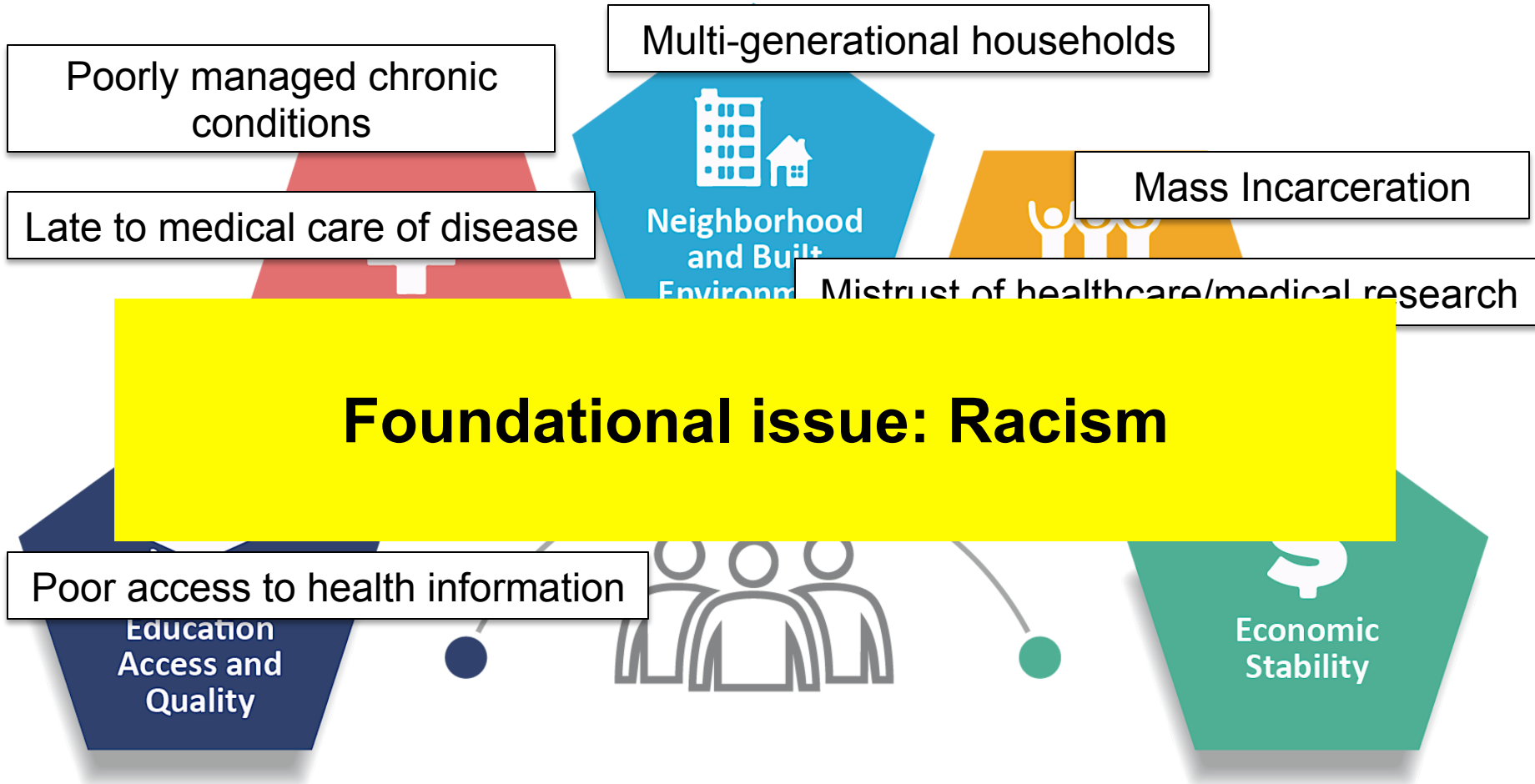
**Social determinants of health (SDOH) are defined as the conditions in which people are born, grow, live, work, and age. SDOH are shaped by the distribution of money, power, and resources throughout local communities, nations, and the world.**

WHO Definition

# Social Determinants of Health



# Social Determinants of Health

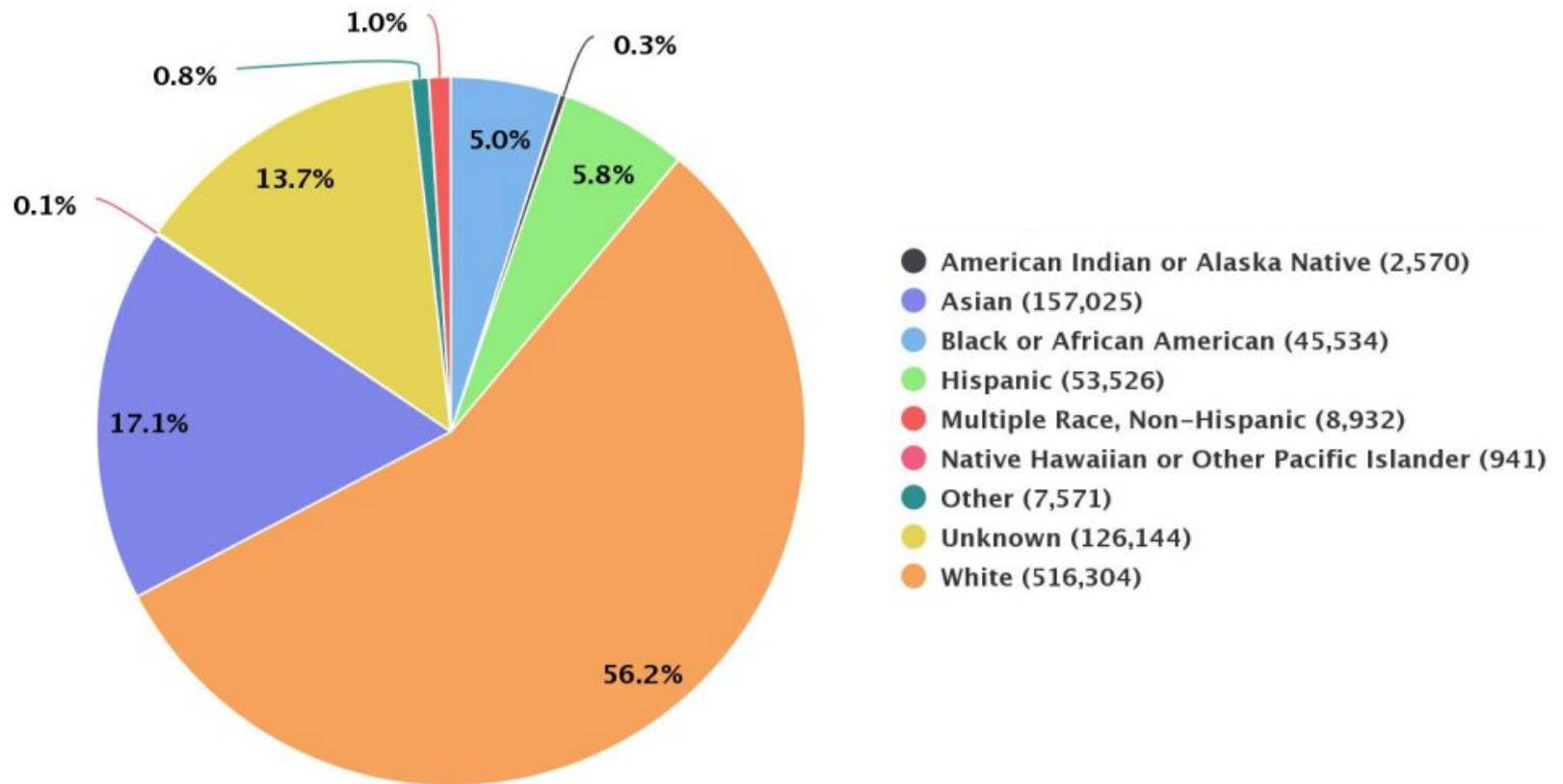


# Racism and Discrimination

- **Interpersonal**: Most work done, good measures developed, associations established, most common
- **Structural**: History, culture, institutions, and codified practices that perpetuate inequity; research or systems construct?
- **Internalized**: How discrimination (as above) effects individuals who are not aware or subliminate; accept cultural or biological inferiority

# Social Determinants of Health: Poor Diversity of Physicians

Percentage of active physicians by race/ethnicity, 2018

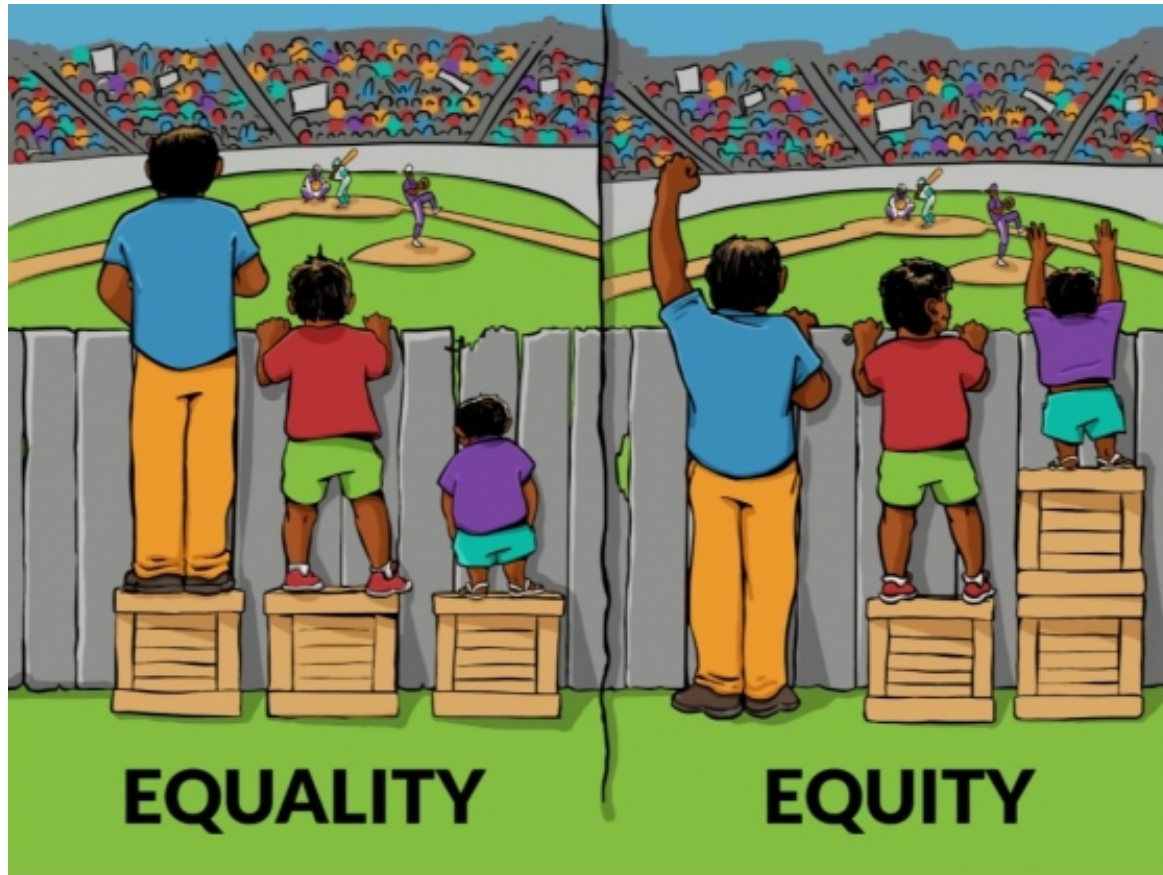




# Transition from Health Disparities to Health Equity

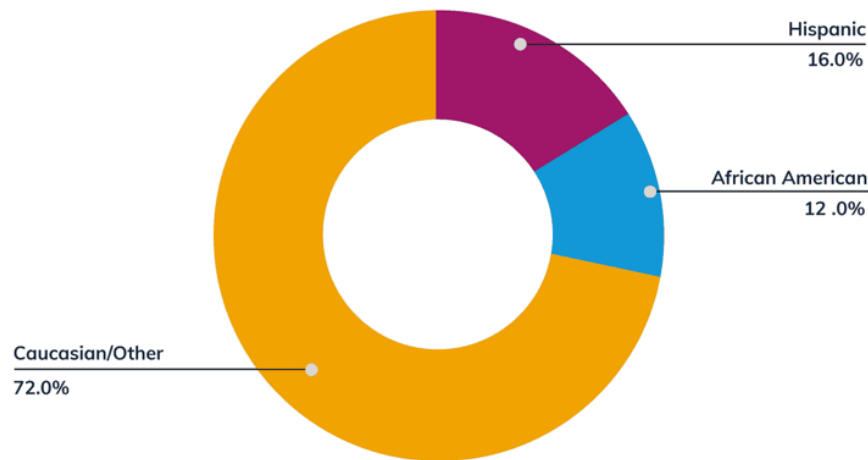
- **COVID-19 reveals a wide gap in the health status of minorities compared Caucasians in U.S.**
- **The gap is long standing and is best understood in the context of social determinants of health.**
- **The goal should be for each person to achieve their personal best health and wellness.**
- **Achieving health equity means recognizing and meeting individual and community needs – same approach cannot be assumed to work for all.**
- **Closing the health gap revealed by COVID-19 will require a coordinated effort across a range of organizations, businesses and agencies.**

# Transition from Health Disparities to Health Equity

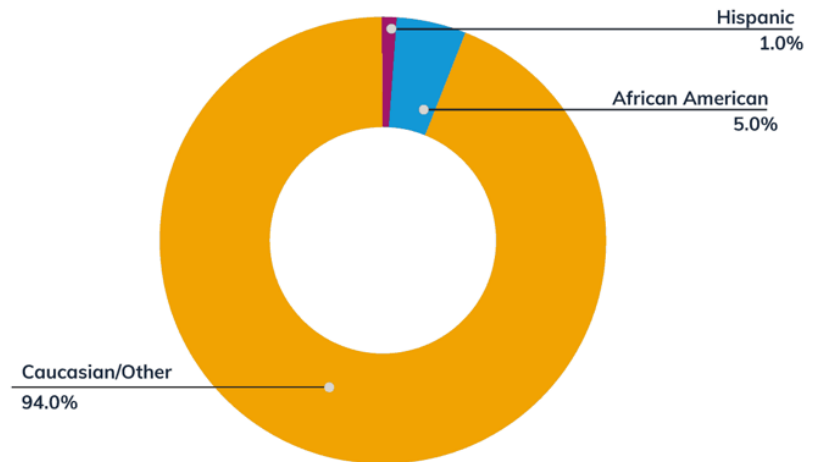


# Underrepresentation in Clinical Trials

United States Population

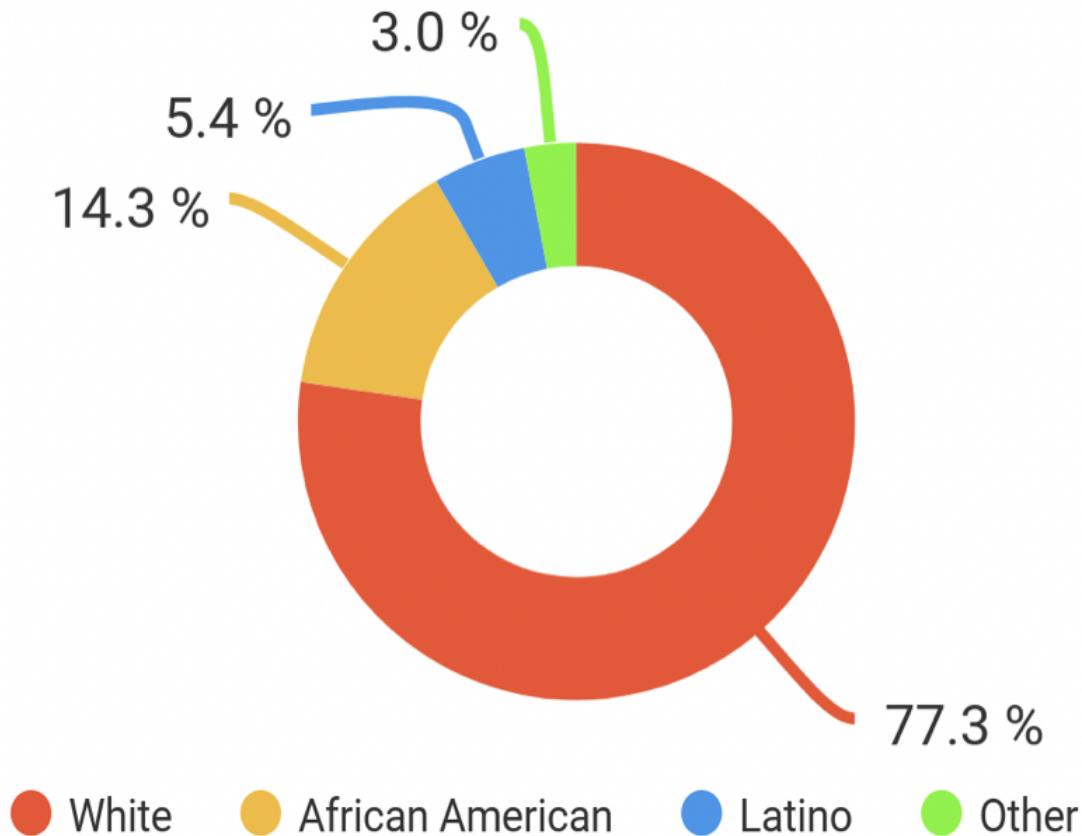


Clinical Trial Participants



*\*Sourced from <https://www.sciencedirect.com/science/article/pii/S0146280618301889>*

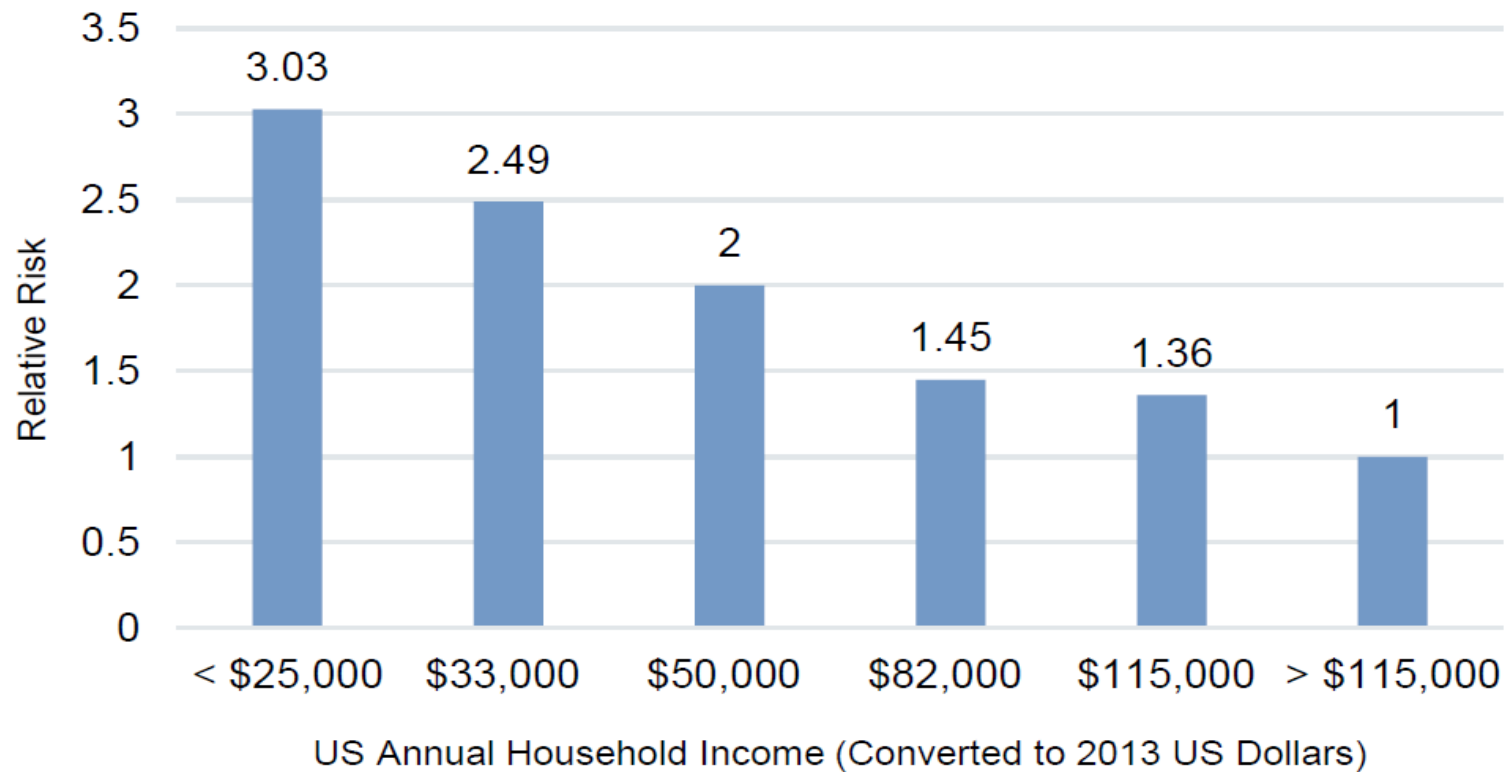
# Enrollment in NIH-funded Alzheimer's Disease Research



\*National Institute on Aging

*African Americans 2 -3 times more likely to contract AD.*

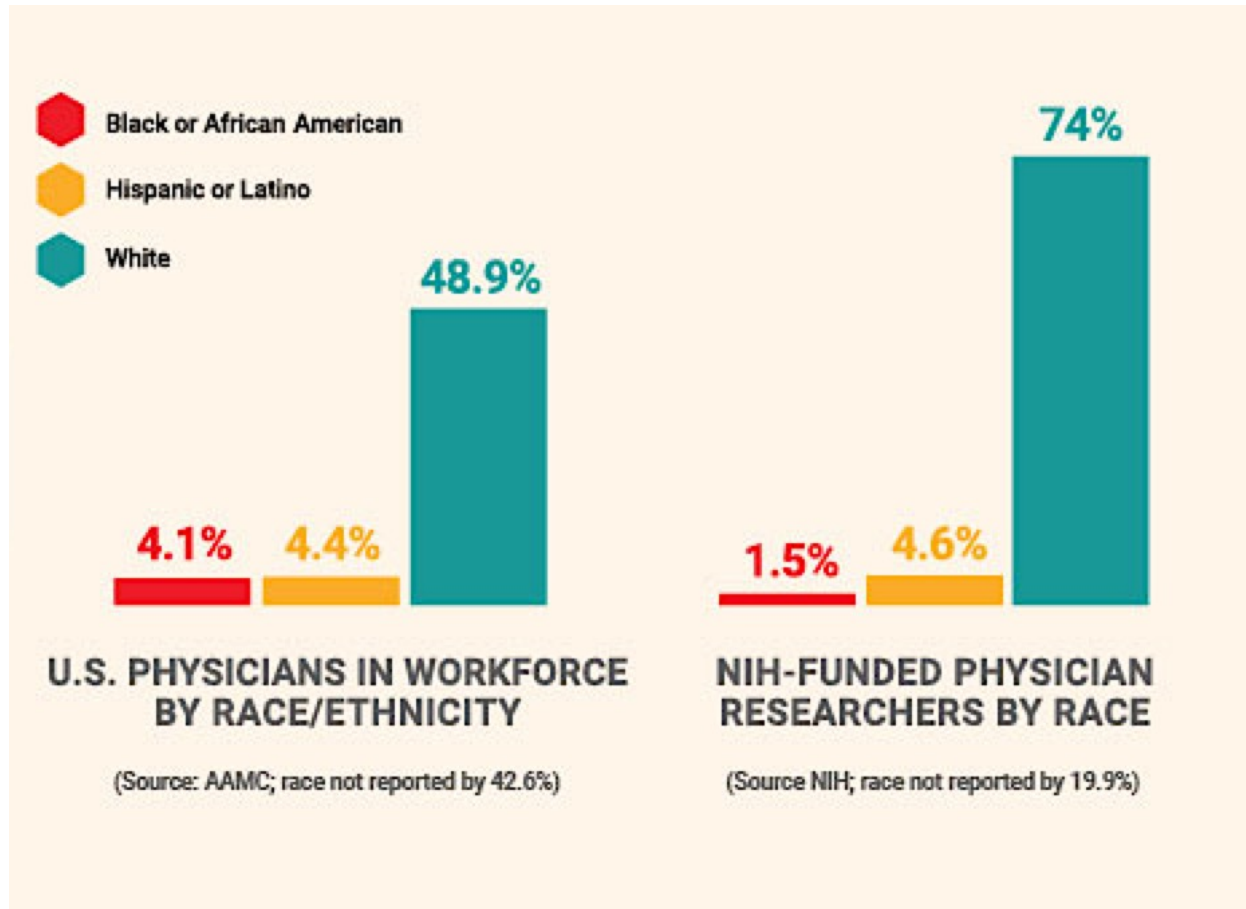
# Relative risk of All-Cause Mortality by US Annual Household Income Level



**Likelihood of participating in clinical trials correlates with household income.**



# U.S. Physician Workforce Is Not Diverse



# Race/Ethnicity of PIs of NIMHD And NIH grants (FY 2017)

	NIMHD	NIH
African American/Black	15%	2%
AI/AN, NH/OPI	3%	0%
Asian	12%	19%
White	56%	68%
More Than One Race	3%	1%
Unknown or Withheld	13%	9%
Hispanic or Latino	13%	5%

Clear racial exists in awarding of NIH grants even after correcting for credentials, experience, institutions.



## **Minorities Have to be at The Table**

- **Yes, it is harder to recruit minorities and it usually takes more resources and different skills**
- **More face time and personal messages**
- **Minority scientists are generally better at it**
- **We need greater sponsor and PI accountability**
- **End myth that barriers are insurmountable**

# 5 Critical Barriers to Minority Participation in Clinical Trials

- 1 Mistrust
- 2 Lack of comfort with the clinical trial process
- 3 Lack of information about clinical trials
- 4 Time and resource constraints associated with clinical trial participation
- 5 Lack of clinical trial awareness

# **Meharry Initiatives and Programs**

- **Center for Social Determinants of Health Research**
- **Clinical and Translational Research Center**
- **School of Applied Computational Sciences**
- **Community Engagement Core**
- **COVID-19 response: test centers; vaccine trial; vaccination program; VRBPAC; Biden Health Equity Task Force**





# Thank You!

**@JamesEKHildreth**

