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# Examining African Americans Risk Factors and Susceptibility for Alzheimer's Disease

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“Risk And Resilience to Alzheimer's Disease in African Americans at Rutgers University, Newark NJ

Thursday, June 22, 2023

**Knight**  
**ADRC**

*Alzheimer's Disease Research Center*  
WASHINGTON UNIVERSITY ST. LOUIS

# Disclosures

## Relevant Financial Relationships

- Salaried Associate Professor at Washington University
- Honorarium for speaking engagements
- Funding from the National Institutes of Health
  - Eunice Kennedy Shriver National Institute of Child Health & Human Development, NCATS, NIA& NIA Standing Study Section Member
- Funding from CDC
- Member of Community & Patient Advisory Committees at different academic medical centers
- Health Equity Research Consultant
- Research collaborator with Genentech/Roche

## Relevant Non-Financial Relationships

- Visiting Professorship with the University of Puerto Rico
- Research Collaborator with Mayo Clinic
- Board President for Health Literacy Media
- Reviewer for multiple biomedical research journals

# Learning Objectives



**Now**  
Review the epidemiology of  
ADRD



**Opportunity**  
Discussion of social  
determinants of health  
experienced by African  
Americans at Risk for ADRD



**Willingness**  
Determining actionable steps  
to increase health equity

A blue-tinted background image showing two hands clasped together in a supportive grip. The hands are positioned diagonally across the frame, with one hand resting on top of the other. The lighting is soft, highlighting the texture of the skin.

***“In our world, divide and conquer must become define and empower.***

— Audre Lorde



**Now**

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Review the epidemiology of ADRD





# Race in the US



# Race & Ethnicity As We Know It

## Current Races

- **American Indian or Alaska Native**
- **Asian**
- **Black or African American**  
(includes all those who self-identify across the African diaspora)
- **Native Hawaiian or Other Pacific Islander**
- **White**

## Current Ethnicity

- **Hispanic or Latin/a/o/x**





A true understanding of disease risk requires a thorough examination of root causes. 'Race' and 'ethnicity' are poorly defined terms that serve as flawed surrogates for multiple environmental and genetic factors in disease causation including ancestral geographic origins, socioeconomic status, education, and access to health care. Research must move beyond these weak and imperfect proxy relationships to define the more proximate factors that influence health.

Francis Collins, MD, PhD statement in 2004





# **The Epidemiology of ADRD in African Americans**



“My humanity is bound to yours, for we can only be human together.”

— Desmond Tutu

2.

## Opportunity

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Discussion of social determinants of health experienced by African Americans Risk for ADRD

# Timeline of Racism in Science

1700s

First descriptions  
of races of man

1800s

Theory of  
craniometry

1900s

Eugenics

2000s

Argument for race-  
based science



# Racialization

Human Genome Project recognized that genetics characterize only geographic origins of ancestors – this is not race

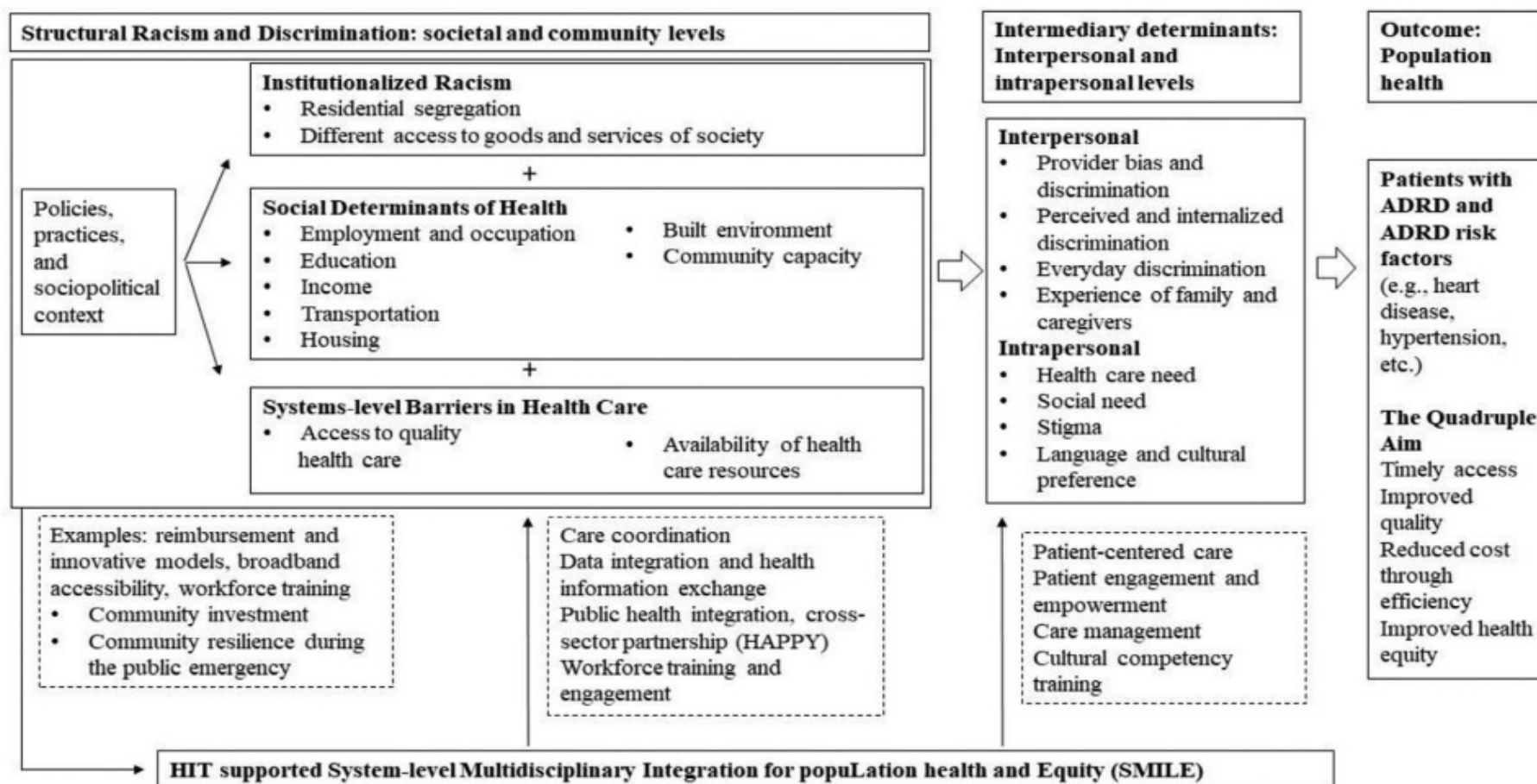
But there is a predisposition for many groups based on the social construct of race to experience more disparities in health

For instance, we are often categorized by how we look, our hair texture, facial features, or our skin tone

Racialized groups have different experiences and transgenerational histories of slavery, immigration, genocide, and acculturation with population-level health outcomes being altered across generations because of racialization



# Framework of structural racism and discrimination in ADRD: HAPPY + HIT

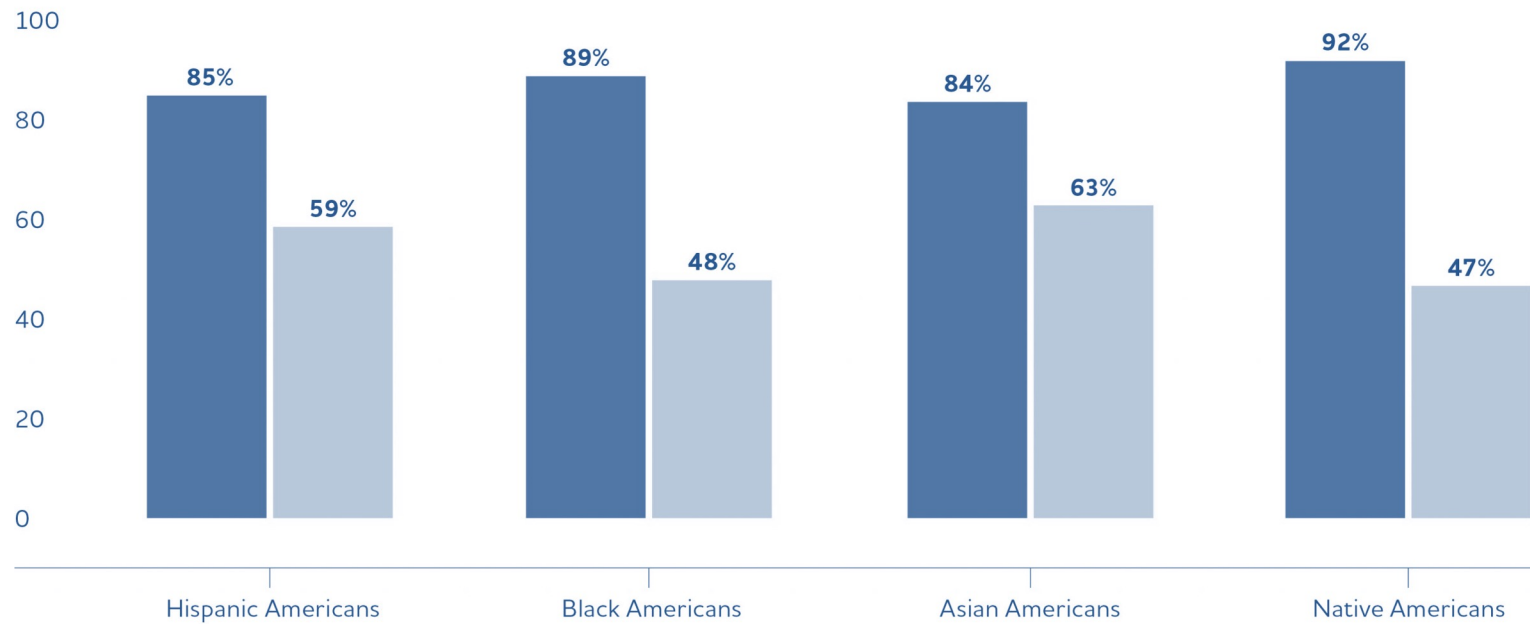


**FIGURE 19**

### Access to Health Care Providers Who Understand Racial and Ethnic Backgrounds Among U.S. Adults

■ Important for Alzheimer's or dementia health care providers to understand a (race/ethnicity) person's ethnic or racial background      ■ Confident that (race/ethnicity) patients currently have access to providers who understand their ethnic or racial background

Percentage



Source: Alzheimer's Association 2021 Alzheimer's Disease Facts and Figures.



# Interpersonal & Institutional Racism Was Associated With Lower Memory Scores Among Multiracial Groups

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## Multiple Studies

- Evaluated experiences with interpersonal and institutional racism

## Structural Racism

- Blacks noted more experiences
- Yet, all groups reported lower episodic memory

## Lifetime experiences with Racism

- Persons 90+ lower semantic memory



## What about St. Louis?

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**Diagnosis**

Delayed diagnosis

**Usage**

Lower usage

**Level**

More advanced disease





**“Prejudice is the burden that confuses the past, threatens the future, and renders the present inaccessible”**

— Maya Angelou

3.

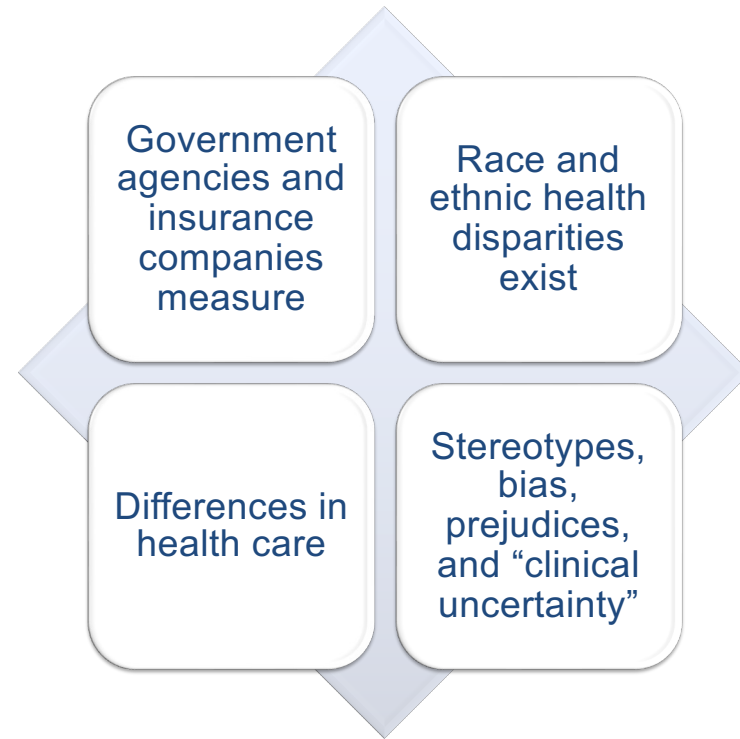
## Willing

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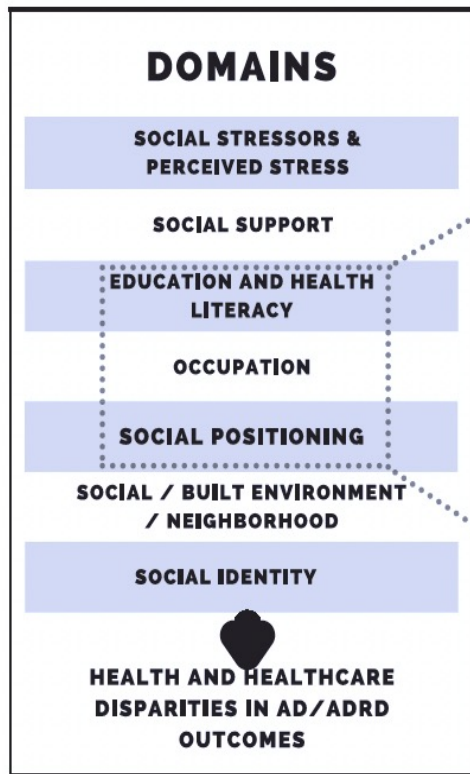
Determining actionable steps to increase health equity



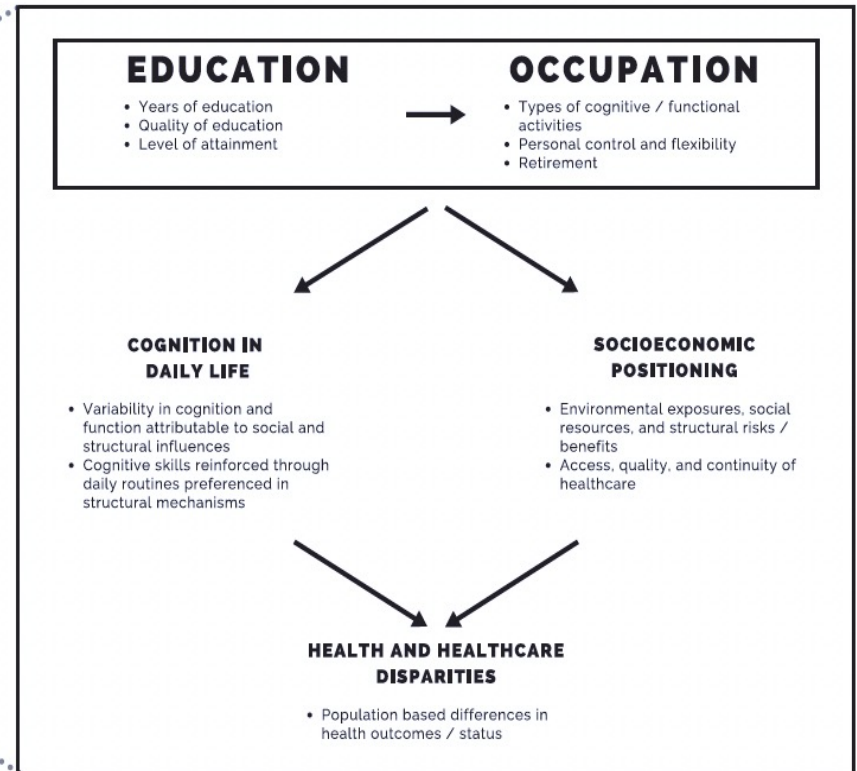
# Why measure race factors?



# Intersection of Identify & Health



An example of domain interaction leading to health and healthcare disparities in AD / ADRD outcomes



## Diversity in Healthcare

Participants of color often prefer health care providers who relate to their lived experience as people of color

<https://www.cdc.gov/aging/publications/features/barriers-to-equity-in-alzheimers-dementia-care/index.html>





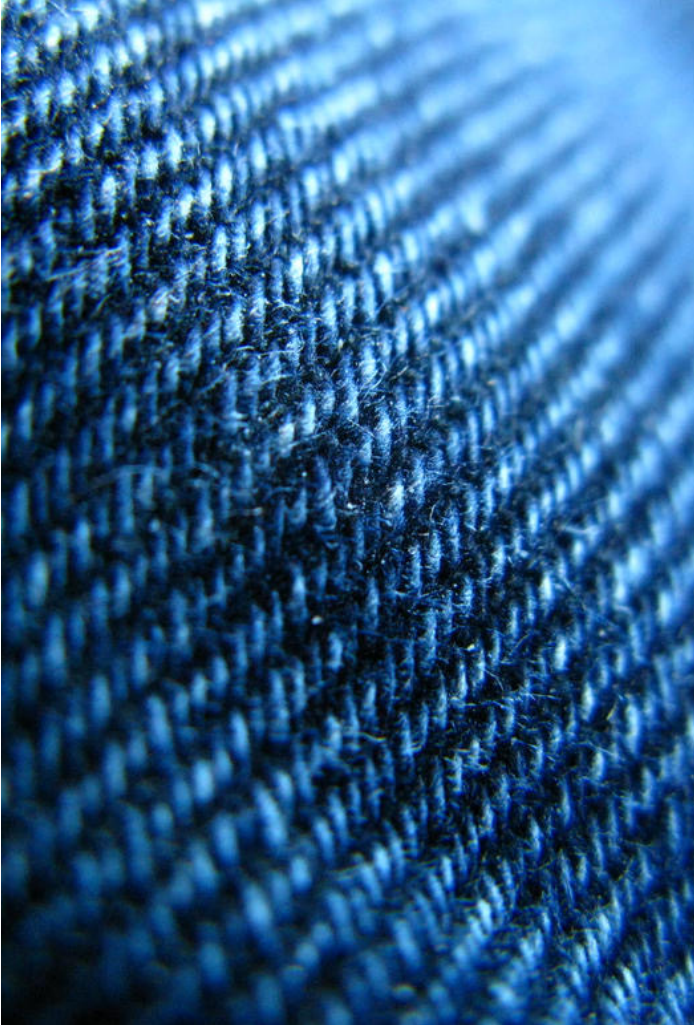


## Action

Created a Health Disparities and Equity Core

Developed a plan to increase workforce diversity

Secured funding from NIH/NIA to increase diversity in ADRC research




# **The COEQUAL Registry: Creating Opportunities to Increase Health Equity and Equality (COEQUAL) for Persons at Risk for Alzheimer Disease and Related Dementias**

PI: Balls-Berry 5R24AG074915

- “I’m always drawn to participating in some way because Black people don’t participate in disproportionate rates due to previous events in history that broke trust. I always like to be a part of it because I want to help give back to the Black community. They don’t have as much data on us since we don’t participate as much.”
- “Due to past experiments that took advantage of Black people, people are weary of participating in research”



## Diversity in Research



## COEQUAL Brain Aging Café Quotes



***“Confronting the impact of racism will not be easy...”***

— Rochelle P. Walensky, MD, MPH  
Director, CDC, and Administrator, ATSDR



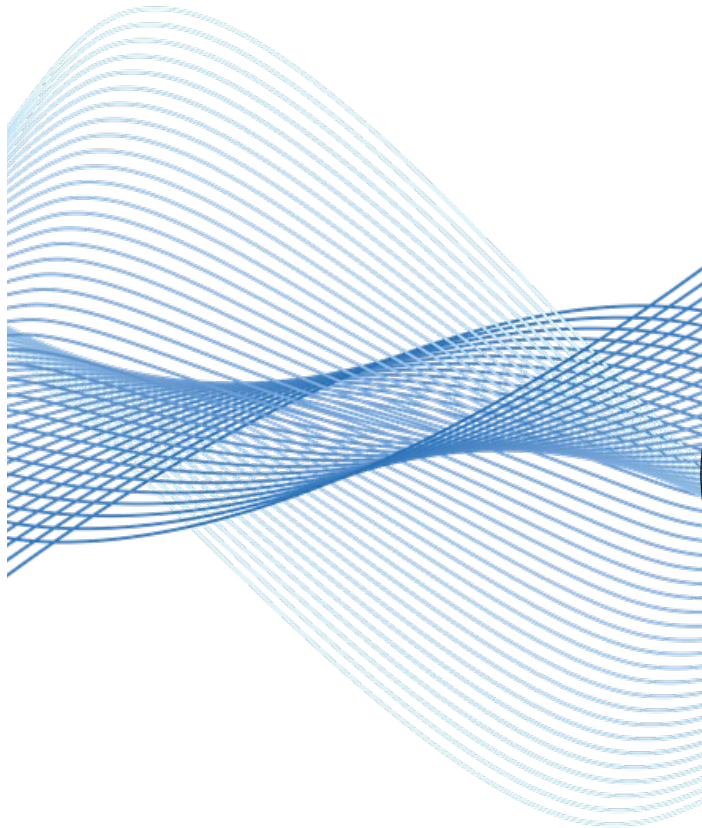
## Conclusion

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Final Thoughts



# The time is now!



**Acknowledge  
that disparities  
exists**

**No fear in  
discussing the  
historical  
underpinnings  
of science that  
marginalized  
Black people**

**Consider data  
analysis and  
interpretation  
in health care  
in context of  
racism**

**Determine  
ways your  
program can  
increase health  
equity**



# Thank you!

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Being seen, heard, believed, plus acknowledging racism helps us to build bridges to repair the pain that many of us of experienced related to our identities and truths

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