## **LEADERSHIP NORTH CAROLINA**

Charlotte, North Carolina February 9, 2023 Goldie S. Byrd PhD Class XV







## **GOAL – Brian and Kelly**

...share with the group your philosophy of leadership, how you have developed your own leadership skills, the role leadership plays in your professional and community interactions, your reflections on leading through uncertainty, and the multiple connections throughout your career to supporting and enhancing health and well-being across North Carolina.

The group will be interested in hearing about your personal and professional journey, what drives you, what challenges you have overcome along the way, and the role your LNC experience has played.





"Beneath the skin, beyond the differing features and into the true heart of being, fundamentally, we are more alike, my friend, than we are unalike." -Maya Angelou

## Racial and Ethnic Health Disparities

#### MATERNAL AND CHILD HEALTH

		White	African American		American Indian		Hispanic/Latinx		Other	
Maternal/Child Health Indicators	%/Rate	%/Rate	%/Rate	Disparity Ratio	%/Rate	Disparity Ratio	%/Rate	Disparity Ratio	%/Rate	Disparity Ratio
Infant Death Rate (per 1,000 live births), 2012-16 10	7.2	5.4	13.0	2.4	9.0	1.7	5.1	0.9	5.3	1.0
Low Birth Weight (<=2500 grams) Births (%), 2014-1611	9.1	7.5	14.1	1.9	12.0	1.6	7.0	0.9	8.6	1.1
Late or No Prenatal Care (%), 2014-16 <sup>11</sup>	30.6%	23.9%	39.1%	1.6	35.9%	1.5	41.1%	1.7	32.6%	1.4
Maternal Smoking During Pregnancy (%), 2014-1611	9.4%	11.9%	9.0%	0.8	23.1%	1.9	1.7%	0.1	1.6%	0.1

- Green indicates a group is faring better than the referent group
- Red indicates a group is faring worse than the referent group
- ☐ White indicates there is no significant difference between the referent and comparison group

## Racial and Ethnic Health Disparities

#### **MORTALITY RATES**

Mortality Rates, 2012-2016 <sup>20</sup>		Total	White	African	American	America	American Indian		Hispanic/Latinx		Other	
		Rate	Rate	Rate	Disparity Ratio	Rate	Disparity Ratio	Rate	Disparity Ratio	Rate	Disparity Ratio	
Heart Diseas	e	161.3	159.0	187.1	1.2	182.0	1.1	56.6	0.4	76.0	0.5	
Stroke		43.1	40.6	56.0	1.4	39.5	1.0	21.7	0.5	36.4	0.9	
Diabetes		23.0	18.8	44.0	2.3	45.0	2.4	11.3	0.6	14.3	0.8	
Chronic Lowe	er Respiratory Disease	45.6	50.7	27.6	0.5	43.8	0.9	8.6	0.2	12.5	0.2	
Kidney Disea	ase	16.4	13.4	31.0	2.3	19.6	1.5	8.2	0.6	10.5	0.8	
HIV Disease		2.2	0.8	7.5	9.4	1.6*	•	1.1	1.4	+	+	
	Total	166.5	165.0	190.7	1.2	158.7	1.0	72.9	0.4	104.4	0.6	
	Colorectal	14.0	13.3	18.9	1.4	13.1	1.0	5.0	0.4	8.0	0.6	
Cancer	Lung	47.5	49.1	46.3	0.9	51.2	1.0	13.1	0.3	23.5	0.5	
	Breast	20.9	19.4	28.3	1.5	20.2	1.0	9.9	0.5	13.2	0.7	
	Prostate	20.1	17.2	39.1	2.3	28.5	1.7	6.8	0.4	6.5	0.4	

Green indicates a group is faring better than the referent group

<sup>☐</sup> White indicates there is no significant difference between the referent and comparison group

Red indicates a group is faring worse than the referent group

Symbol indicates reliable rates could not be calculated

<sup>\*</sup> Rates based on fewer than 20 cases may be statistically unstable and should be interpreted with caution. Rates based on fewer than five cases are suppressed in this report.

#### SOCIAL AND ECONOMIC WELL-BEING

	Total	wnite	White African American		American Indian		Hispanic/Latinx		Other	
Subcategory	%/Rate	%/Rate	%/Rate	Disparity Ratio	%/Rate	Disparity Ratio	%/Rate	Disparity Ratio	%/Rate	Disparity Ratio
High School Graduation Rate, 2016-2017 <sup>6</sup>	86.5	89.2	83.8	1.1	84.3	1.1	80.5	1.1	93.6	1.0
Adults 25+ with High School Diploma or GED, 2016 <sup>7</sup>	87.3	89.3	84.7	1.1	75.7	1.2	59.5	1.5	87.0	1.0
Adults 25+ with Bachelor's Degree, 2016 7	30.4	33.2	20.3	1.6	13.9	2.4	14.8	2.2	57.1	0.6
Jnemployed, 2016 <sup>7</sup>	3.8	3.0	6.1	2.0	5.4	1.8	4.4	1.5	3.7	1.2
Median Household Income, 2016 <sup>7</sup>	\$50,584	\$55,656	\$36,014	1.5	\$38,002	1.5	\$39,388	1.4	\$80,381	0.7
All Ages	15.4	12.0	23.5	2.0	25.5	2.1	27.3	2.3	11.9	1.0
Children <18 Years, 2016 <sup>7</sup>	21.7	15.8	33.8	2.1	33.4	2.1	35.8	2.3	10.9	0.7
Elderly 65+ Years, 2016 7	9.4	7.7	16.6	2.2	16.9	2.2	21.4	2.8	6.6	0.9
iving in a Home They Own, 2016 <sup>7</sup>	64.2	71.2	43.9	1.6	63.5	1.1	43.0	1.7	61.1	1.2
Disability, 2016 <sup>7</sup>	13.8	14.0	15.4	1.1	16.5	1.2	6.8	0.5	5.1	0.4
HI AND	igh School Graduation Rate, 2016-2017 <sup>6</sup> dults 25+ with High School Diploma or GED, 2016 <sup>7</sup> dults 25+ with Bachelor's Degree, 2016 <sup>7</sup> memployed, 2016 <sup>7</sup> dedian Household Income, 2016 <sup>7</sup> Il Ages hildren <18 Years, 2016 <sup>7</sup> derly 65+ Years, 2016 <sup>7</sup> lying in a Home They Own, 2016 <sup>7</sup>	igh School Graduation Rate, 2016-2017 6       86.5         dults 25+ with High School Diploma or GED, 2016 7       87.3         dults 25+ with Bachelor's Degree, 2016 7       30.4         nemployed, 2016 7       3.8         dedian Household Income, 2016 7       \$50,584         II Ages       15.4         hildren <18 Years, 2016 7	%/Rate   %/Rate	%/Rate   %/Rate   %/Rate   %/Rate   igh School Graduation Rate, 2016-20176   86.5   89.2   83.8     dults 25+ with High School Diploma or GED, 20167   87.3   89.3   84.7     dults 25+ with Bachelor's Degree, 20167   30.4   33.2   20.3     inemployed, 20167   3.8   3.0   6.1     dedian Household Income, 20167   \$50,584   \$55,656   \$36,014     Il Ages   15.4   12.0   23.5     hildren <18 Years, 20167   21.7   15.8   33.8     derly 65+ Years, 20167   9.4   7.7   16.6     iving in a Home They Own, 20167   64.2   71.2   43.9     isability, 20167   13.8   14.0   15.4	%/Rate       %/Rate       %/Rate       misparity Ratio         ligh School Graduation Rate, 2016-20176       86.5       89.2       83.8       1.1         dults 25+ with High School Diploma or GED, 20167       87.3       89.3       84.7       1.1         dults 25+ with Bachelor's Degree, 20167       30.4       33.2       20.3       1.6         nemployed, 20167       3.8       3.0       6.1       2.0         ledian Household Income, 20167       \$50,584       \$55,656       \$36,014       1.5         Il Ages       15.4       12.0       23.5       2.0         hildren <18 Years, 20167	%/Rate   %	%/Rate       %/Rate       %/Rate       misparity Ratio       %/Rate       misparity Ratio         igh School Graduation Rate, 2016-20176       86.5       89.2       83.8       1.1       84.3       1.1         dults 25+ with High School Diploma or GED, 20167       87.3       89.3       84.7       1.1       75.7       1.2         dults 25+ with Bachelor's Degree, 20167       30.4       33.2       20.3       1.6       13.9       2.4         nemployed, 20167       3.8       3.0       6.1       2.0       5.4       1.8         ledian Household Income, 20167       \$50,584       \$55,656       \$36,014       1.5       \$38,002       1.5         Il Ages       15.4       12.0       23.5       2.0       25.5       2.1         hildren <18 Years, 20167	%/Rate       %/Rate       %/Rate       misparity Ratio       %/Ratio       %/Ratio       %/Ratio       %/Ratio       %/Ratio       misparity Ratio       %/Ratio	%/Rate         %/Rate         %/Rate         %/Rate         %/Rate         Matio         %/Rate         Matio         %/Rate         Matio         %/Rate         Matio         Ratio         Matio         Mation         Mation	%/Rate         %         %         %         %         %         %         %         %         %         %

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# Black newborns more likely to die when looked after by White doctors



# Physician—patient racial concordance and disparities i birthing mortality for newborns

Brad N. Greenwood<sup>a,1,2</sup>, Rachel R. Hardeman<sup>b,1</sup>, Laura Huang<sup>c,1</sup>, and Aaron Sojourner<sup>d,1</sup>

<sup>a</sup>School of Business, George Mason University, Fairfax, VA 22030; <sup>b</sup>School of Public Health, University of Minnesota–Twin Cities, Minneapolis, MN 55455 <sup>c</sup>Harvard Business School, Harvard University, Boston, MA 02163; and <sup>d</sup>Carlson School of Management, University of Minnesota–Twin Cities, Minneapoli MN 55455

Edited by Christopher W. Kuzawa, Northwestern University, Evanston, IL, and approved July 16, 2020 (received for review August 2, 2019)

Recent work has emphasized the benefits of patient–physician concordance on clinical care outcomes for underrepresented minorities, arguing it can ameliorate outgroup biases, boost communication, and increase trust. We explore concordance in a setting where racial disparities are particularly severe: childbirth. In the United States, Black newborns die at three times the rate of White newborns. Results examining 1.8 million hospital births in the state of Florida between 1992 and 2015 suggest that newborn–physician racial concordance is associated with a significant improvement in mortality for Black infants. Results further suggest that these benefits manifest during more challenging births and in hospitals that deliver more Black babies. We find no significant improvement in maternal mortality when birthing mothers share race with their physician.

approaches to address this pressing social issue. Furthermore, to extent that newborns cannot verbally communicate with their physician, we are able to observe the effects of concordance without tr or communication issues affecting the patient–physician relations! Inasmuch as prior research has struggled to disentangle the mechanism behind concordance's effect (10, 26), the setting allows us explore concordance in the absence of one invoked mechanism communication. Thus, if concordance effects manifest, we are able rule out communication as the exclusive mechanism.

Research posits that racial concordance between a newbord and their physician may mitigate disparities for at least to reasons. First, research suggests concordance is not only salid for adults. Indeed, a growing body of literature explores

Greenwood et al. PNAS 1913405117

## **OVER HALF OF BLACKS LIVE IN 27101, 27105 AND 27107**

### **JUST EAST OF HWY 52 (ONCE THE INDUSTRIAL HUB OF WINSTON SALEM)**

**Segregationists trends:** grocery stores hospitals, libraries, parks and recreation centers were built closer to white neighbor and disinvestment in Black neighborhoods

#### Results:

Lower median household income

Lower education

Greater poverty than the county and state

Inadequate access to essential goods and services such as childcare, grocery stores, schools and jobs

2 of 20 grocery stores

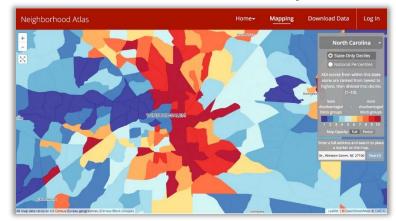
2 of 11 public libraries

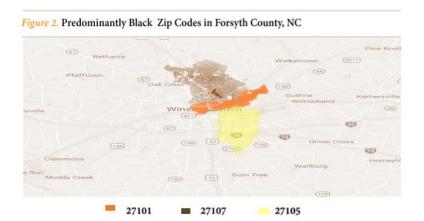
1 fully functioning medical clinic

2 of 43 elementary schools

2 of 17 highest schools

1 of 6 Colleges city-wide





Black Philanthropy Initiative of the Winston-Salem Foundation. Rethinking Philanthropy: An Exploration of Black Communities in Forsyth County. 2015





# Neighborhood Disadvantage is a Social Determinant of Health

 Alzheimer's disease and other chronic diseases disproportionately impact racial/ethnic minorities and the socioeconomically disadvantaged populations – populations often exposed to neighborhood disadvantage

Link and Phelan. J. Health Soc Behav, 1995.

- Neighborhood disadvantage influences many factors including health behaviors, access to food, toxic exposures and personal safety
- Living in a disadvantaged US neighborhood is strongly linked to increased mortality and disease

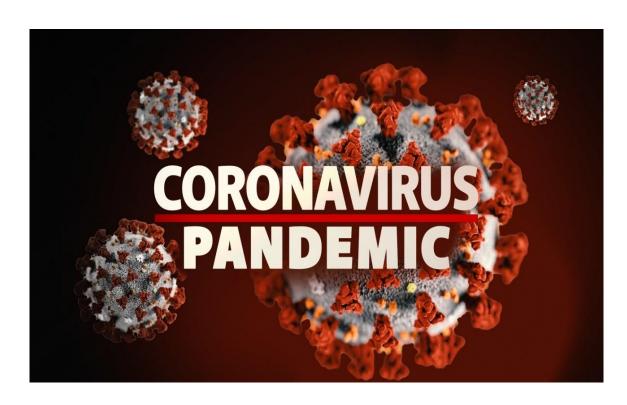
  Confidential information

Kind et al, Annals of Int Med, 2014



Wake Forest Baptist

# The Covid-19 Pandemic Illuminated Longstanding Disparities and Inequities in Communities of Color.





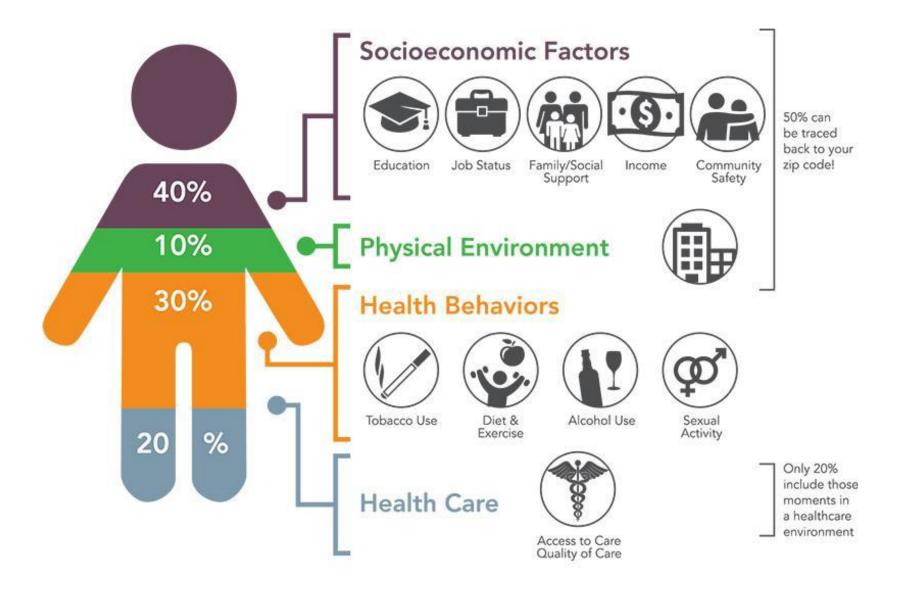
Very Difficult for Alzheimer's Patients and Families



## Covid-19 illuminated disparities and inequities

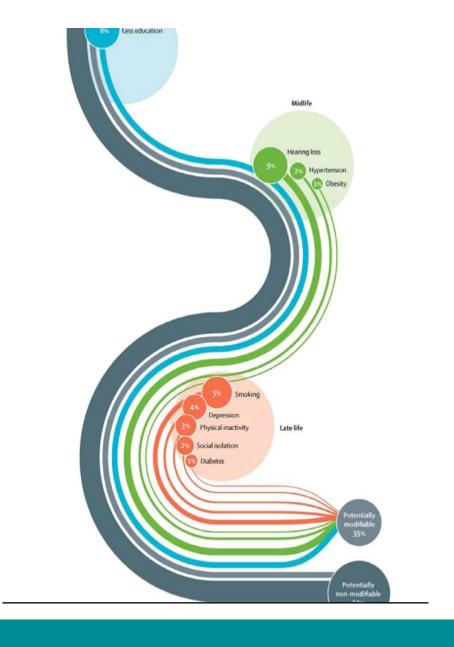
- Infections
- Hospitalizations
- Deaths
- Literacy
- Vaccinations
- Hesitancy/Access





Source: Institute for Clinical Systems Improvement, Going Beyond Clinical Walls; Solving Complex Problems (October 2014)

# There is <u>Good Potential</u> for Dementia Prevention!



Slide Credit: Amy Kind

Lisa L. Barnes Rush Alzheimer's Disease Center, Rush University Medical Center, Chicago, IL, USA. e- mail: Lisa\_L\_Barnes@rush.edu https://doi.org/10.1038/s41582-021-00589-3

#### Alzheimer disease in African American individuals: increased incidence or not enough data?

Lisa L. Barnes

Abstract | Research on racial differences in Alzheimer disease (AD) dementia has increased in recent years. Older African American individuals bear a disproportionate burden of AD and cognitive impairment compared with non-Latino white individuals. Tremendous progress has been made over the past two decades in our understanding of the neurobiological substrates of AD. However, owing to well-documented challenges of study participant recruitment and a persistent lack of biological data in the African American population, knowledge of the drivers of these racial disparities has lagged behind. Therapeutic targets and effective interventions for AD are increasingly sought, but without a better understanding of the disease in African American individuals, any identified treatments and/or cures will evade this rapidly growing at-risk population. In this Perspective, I introduce three key obstacles to progress in understanding racial differences in AD: uncertainty about diagnostic criteria, disparate cross-sectional and longitudinal findings; and a dearth of neuropathological data. I also highlight evidence-informed strategies to move the field forward.

and use the term African American to refer to individuals who would be grouped by the US Census into the Black or African American category.

The ageing and dementia research community has identified a number of genetic, medical, and lifestyle factors that are associated with the risk of dementia. Although this knowledge, largely gathered from study cohorts that are overwhelmingly white, is generally assumed to characterize risk in all populations, we know very little about the drivers of disease in African American individuals. The preponderance of data from one population can lead to the false and potentially dangerous conclusion that that group represents some type of scientific norm that all other groups should be compared to. However, research on the drivers of AD in minoritized populations that is, populations that have been systematically marginalized in society - is as important as research of drivers in the majority population, and should be the focus of studies, even if it does not explicitly inform us about racial differences.

The current evidence for higher rates

Table 2 | Studies of Alzheimer disease biomarkers in Black or African American individuals and white individuals

Study	Biomarker(s)	Number of Black or African American participants	Number of white participants	Biomarker levels in Black or African American participants compared with white participants
Gottesman et al. (2016) <sup>69</sup>	ΑβΡΕΤ	141	188	Higher
Howell et al. (2017) <sup>62</sup>	CSF p-tau <sub>181</sub> and t-tau	65	70	Lower
Garrett et al. (2019) <sup>63</sup>	CSF p-tau <sub>181</sub> and t-tau	152	210	Lower
Morris et al. (2019) <sup>64</sup>	CSF p-tau <sub>181</sub> and t-tau	97	816	Lower
Kumar et al. (2020) <sup>65</sup>	CSF p-tau <sub>181</sub> and t-tau	30	50	Lower
Meeker et al. (2020) <sup>66</sup>	$A\beta$ PET, tau PET and structural and functional MRI	70	434	No difference in tau PET, $\mbox{A}\beta$ PET, or functional MRI; lower brain volume
Brickman et al. (2021) <sup>67</sup>	Plasma $A\beta_{1-40}$ , $A\beta_{1-42}$ , t-tau, p-tau <sub>181</sub> , p-tau <sub>217</sub> and NfL; $A\beta$ PET <sup>a</sup>	98	99	No difference in any biomarker
Rajan et al. (2021) <sup>68</sup>	Serum t-tau, NfL and GFAP	811	516	No difference in any biomarker

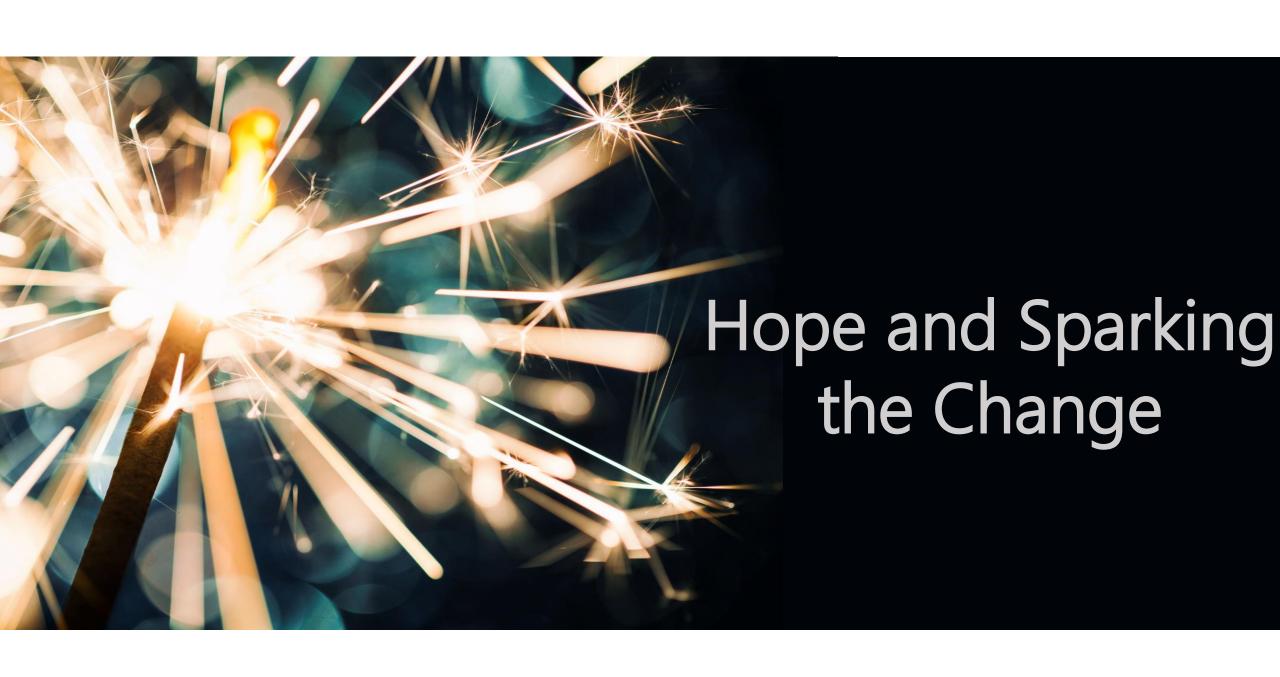
Aß, amyloid-ß, t-tau, total tau; p-tau, phosphorylated tau; NfL, neurofilament light chain; GFAP, glial fibrillary acidic protein. alncluded 100 Hispanic participants.

www.nature.com/nrneurol

Changing the narrative by increasing the number of studies that include AA participants, integrating risk factors that reflect the lived experience and acquiring the biological data that allows us to comprehensively examine the underlying mechanisms of disease, we will continue to have an incomplete of racial differences in AD. We will come nowhere near developing therateutics, at best a cure, that will be effective in this population.

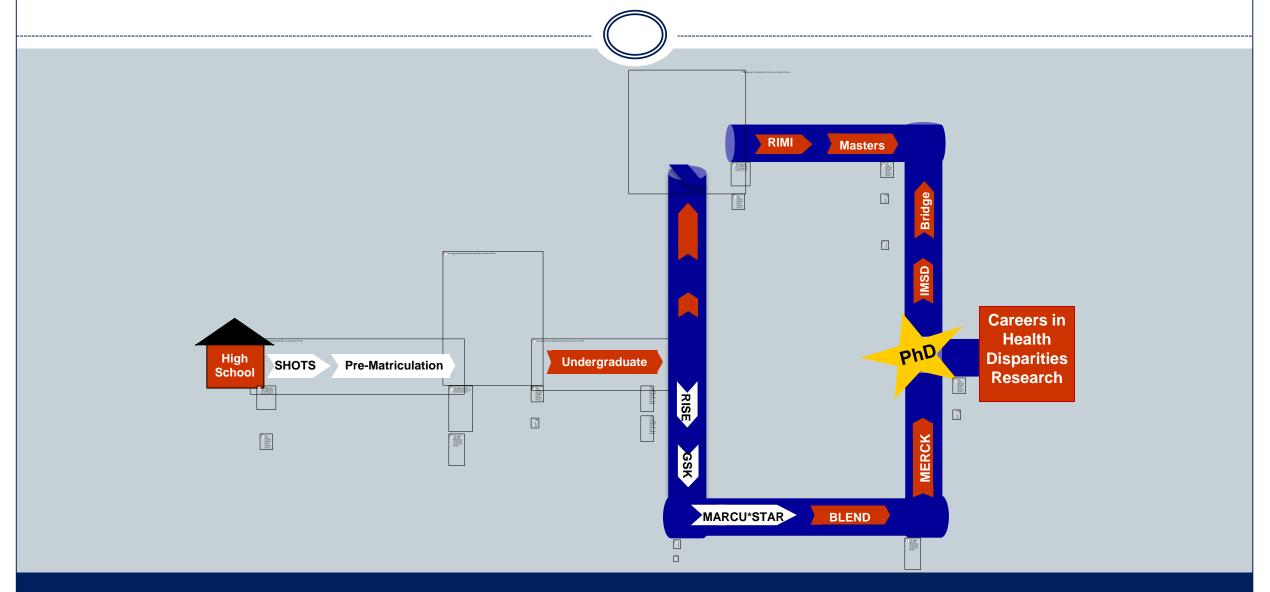








## Student Pipeline at NC A&T SU in STEM

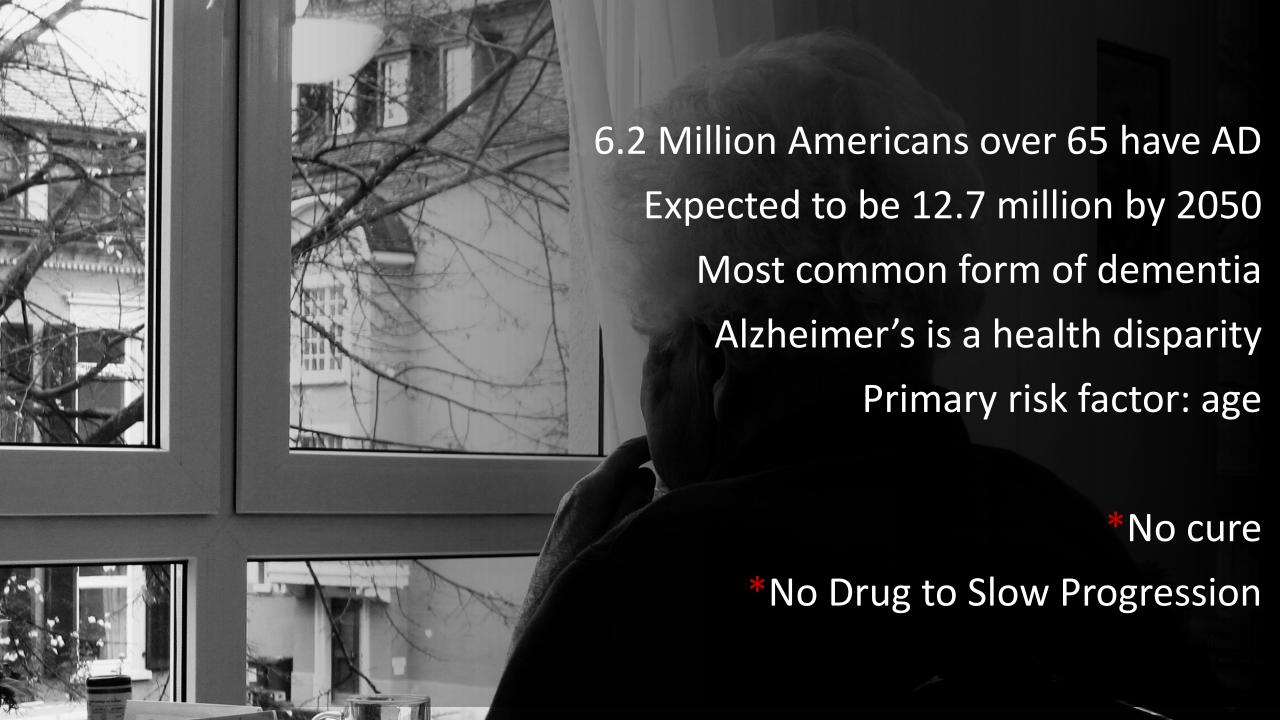


## In Spite of 1993 NIH Revitalization Act

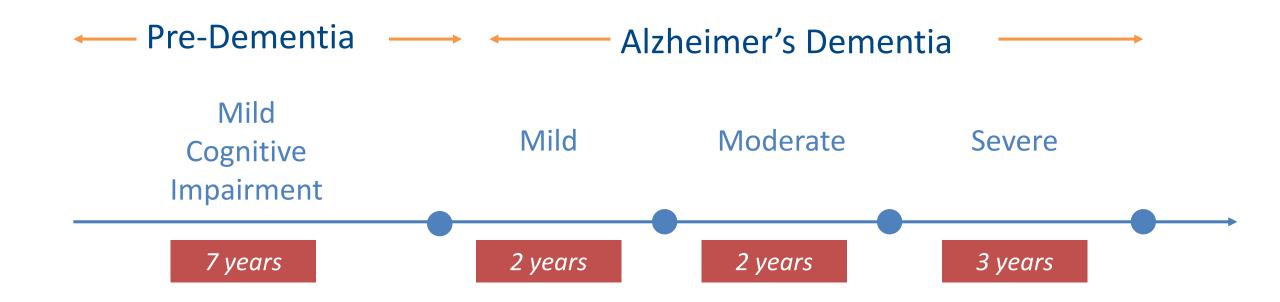
Denied 'life-extending opportunities':
 Black patients are being left out of
 clinical trials amid wave of new
 therapies

 African Americans make up less than 5% Clinical Trials

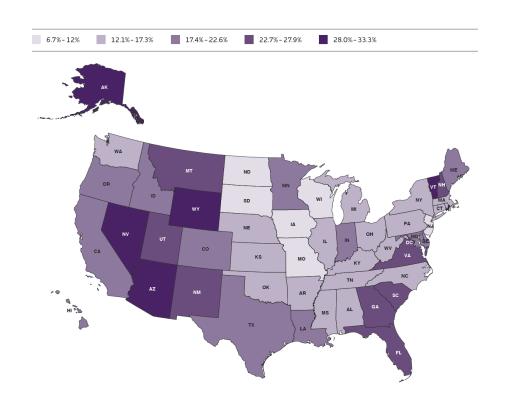








# Projected Increases Between 2020 and 2025 in AD Prevalence by State

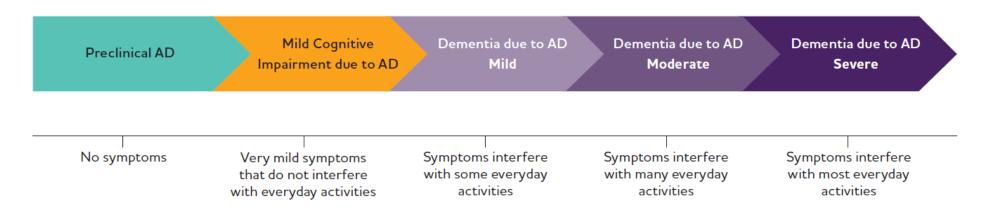


Projected Nur	nber with <i>i</i>	AD	% Increase
North Carolina	180,000	210,000	16.7%



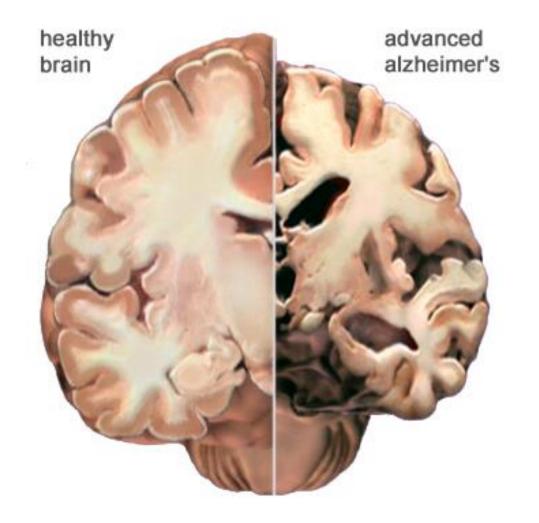
## Stages of Alzheimer's Disease

Alzheimer's Disease (AD) Continuum\*



<sup>\*</sup>Although these arrows are of equal size, the components of the AD continuum are not equal in duration.





### Addressing a Social Determinant of Health and Study Participation

- 5 Food Giveaways (> 6,000 persons)
- Bags with Study/Vaccine Information
- 300 Interest Sheets
- Pastor-led (average 6-10/event)



# Enhancing Trustworthiness with Communities and Community Influencers Triad Pastors Network



#### Triad Pastors Network Conceptual Framework **Ecclesiastical** Health Congregational Assessments Advisory Ministries Health Council **Ambassadors Network of Faith Leaders Create New or Expand Existing Health Ministries** Health Access to MACHE Assets Communicate through a Net Work Portal Professional Development for Ambassadors and Leaders **Expanding Diverse Opportunities to Improve Health Trusted Partnerships**

### **TPN LEADERS-LEADING-LEADERS 92,725 ATTENDEES**



TRENT RIVER OAKEY SROVEMB ASSOCIATION

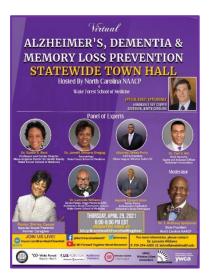
**GUEST PANELIST** 

f LIVE





















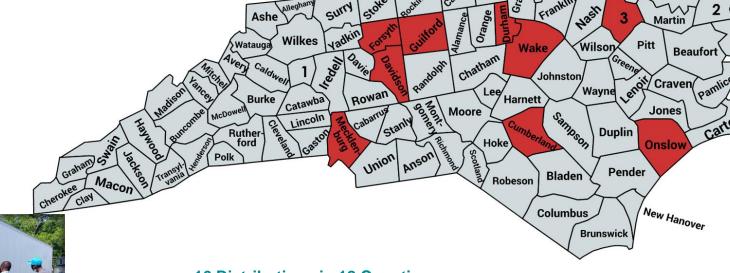




North Carolina Statewide Farm-Px Food Distribution and Health Promotion Tour

#### **County Distributions**

- 1. Alexander
- 2 Washington
- 3 Edgecombe
- 4 Northampton
- Hertford
- Camden
- Currituck
- Chowan
- 9 Perguimans
- 10 Pasquotank
- 11. Forsyth
- 12. Guilford





- 704,000 Pounds of Food (40-lb boxes
- 1905 Participants Interested in COVID or AD
- Over 14,000 Recipients of Food
- 704,000 Pounds of Food (Value of \$880,000)



**Bertie** 

Beaufort

Hyde

Martin

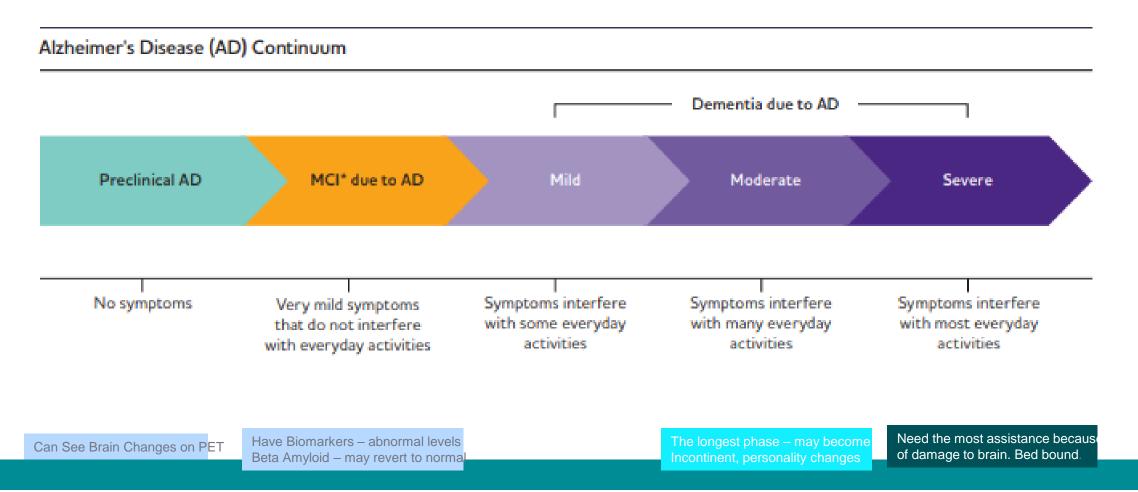
Jones

/ New Hanover





## Alzheimer's Doesn't Just Begin with a Diagnosis





## **OBJECTIVES OF MACHE**

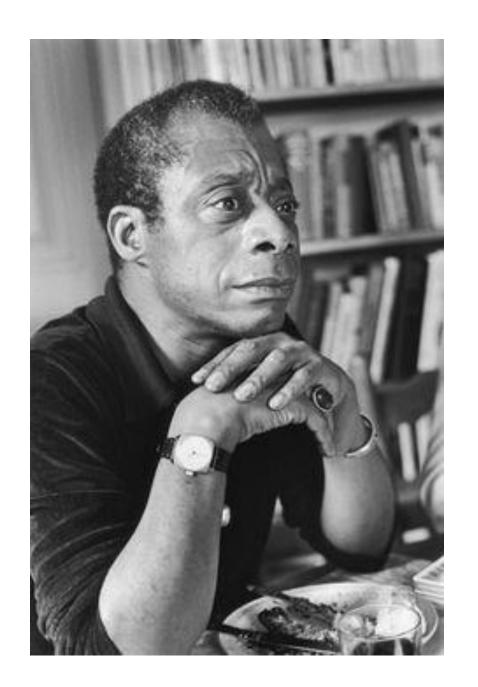
- 1: Provide transformative and dignified partnerships with diverse communities to address equity health outcomes
- 2: Increase diversity in science, medicine, and health professions
- 3: Diversify participation in clinical trials and research studies
- 4: Advance a culture of faculty and staff growth through professional development and perpetual learning
- 5: Promote health equity advocacy and social policy changes



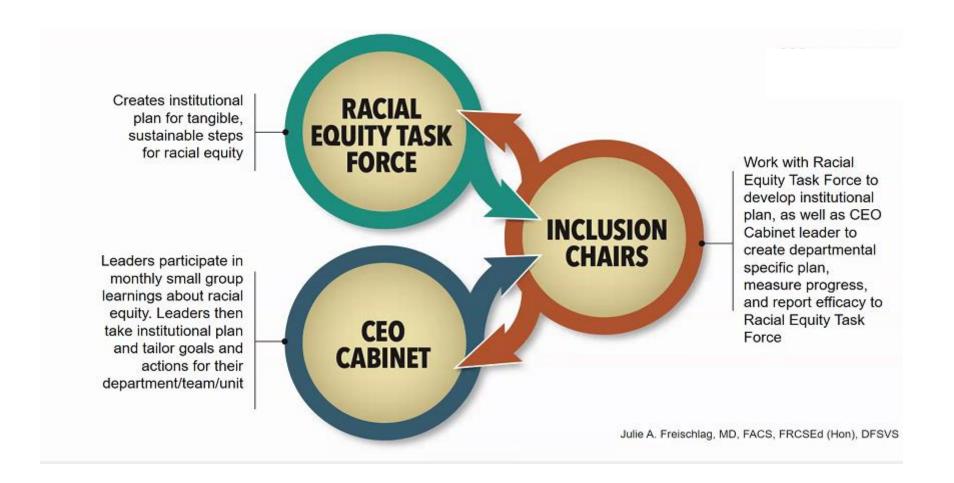
## **Face Reality**

"Not everything that is faced can be changed, But nothing can be changed until it is faced."

James Baldwin



## Racial Equity from the Top, Middle, and Grass Roots Level





## Data Sets informed 9 Equity Issues and 27 Strategies

Domain	Data Sources
People	<ul><li>Peoplesoft Employee database</li><li>HR Exit Survey</li></ul>
Education	<ul> <li>Applicants, Acceptances, Matriculates for different programs</li> <li>Follow-up interviews and conversations</li> <li>AAMC data for application, acceptance, matriculation at U.S. medical schools</li> </ul>
Patient Care	<ul> <li>Press-Ganey Patient Experience Surveys</li> <li>Regional Quality &amp; Safety Health Equity Data Sets</li> </ul>
Culture	<ul> <li>Press-Ganey Employee Experience Survey</li> <li>AAMC Standpoint Survey</li> <li>HR Exit Survey</li> </ul>
Research	<ul> <li>Wake Integrated Solution for Enterprise Research (WISER) data on study participants</li> <li>Research Participant Satisfaction Survey</li> <li>Key Informant perceptions</li> </ul>
Community	<ul> <li>Key informant perceptions</li> <li>Barriers to Health Justice in Winston-Salem &amp; Forsyth County Study from Wake School of Law</li> <li>Forsyth Futures data sets</li> </ul>



#	Results
9	Fundamental Equity Issues
76	Sub-Issues Across 6 Domains
27	Strategies





## Framework for the Racial Equity Taskforce

#### Culture



Assure a
just, equitable
diverse,
inclusive culture
driven by policies
and
practice

#### People



Recruit, retain and advance diverse and skilled individuals at all levels

#### Patient Care



Provide all patients
with inclusive
equitable
and
quality care

#### Education



Train faculty
students, staff
providers,
and community
to address
inclusion and
racial equity

#### Research



Advance research
to include health
disparities, health
equity and
inclusion

#### Community

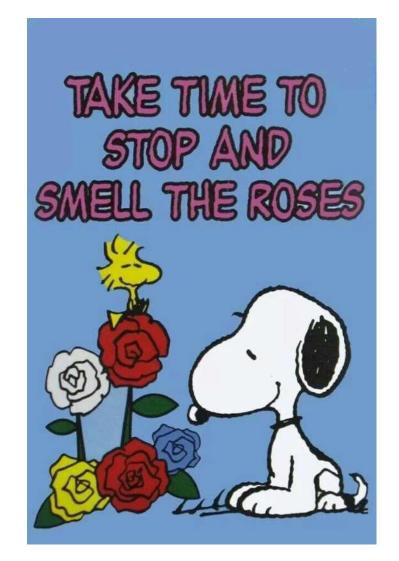


Engage and
empower internal
and
external communities
to create a just
environment

Action for Cultural Transformation: Strategies to Ensure Equity, Mitigate Bias and Eliminate Racism at Wake Forest Baptist Health



"Beneath the skin, beyond the differing features and into the true heart of being, fundamentally, we are more alike, my friend, than we are unalike." -Maya Angelou









17,000+ Killed

Rescuers searching for survivors in the rubble of a collapsed building in Syria's opposition-held Idlib Province, on the border with Turkey, on Wednesday. Omar Haj Kadour/Agence France-Presse — Getty Images

### **JOURNAL: Do You Have A One-Word Thought?**



