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Health Landscapes in the South: Rurality, Racism, and a Path **Forward**

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STUDY the SOUTH

HEALTH LANDSCAPES IN THE SOUTH: RURALITY, RACISM, AND A **PATH FORWARD**

BY ANNE CAFER, MEAGEN ROSENTHAL, BROOKSHIELD LAURENT, JENNIFER CONNER, AND RAEDA ANDERSON

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1 INTRODUCTION

Health disparities in the United States are well documented. While some of these disparity gaps are closing, three remain consistent: 1) the South fairs worse than other US regions, 2) racial and ethnic minorities are disproportionately impacted, and 3) rural spaces do not keep pace with urban centers. In many ways, these disparities, because of their persistence, are normalized or offered up as pretext for why some places are not "resilient" or "flourishing." Addressing these disparities is difficult, from both a practical and a conceptual standpoint. They are "wicked" problems, multifaceted in nature and require complex, interdisciplinary, multistakeholder approaches that are hard to manage and fund.

Yet Covid-19 has highlighted the very real need to invest in these types of approaches. And no place is this more germane to that need than the South. As of September 15, 2020, confirmed Covid-19 cases in southern states range from between 56,000 and 70,000 (Kentucky and Arkansas) to more than 660,000 (Florida and Texas). To date, the average testing rate in the rural South is only 5% less than the national average, but several states, such as Alabama, Mississippi, South Carolina, Texas, and Virginia, have testing rates that are around 25% lower, suggesting that the number of cases in the rural South are underestimated.² Additionally, the South is disproportionately impacted by those health conditions that are likely to exacerbate an individual case of Covid-19 (Table 1). Hospital closures have contributed to this problem, as more than half of rural hospital closures have occurred in the South.³

This conversation, with questions composed by the authors, incorporates the medical expertise of Brookshield Laurent and Jennifer Conner from the New York Institute of Technology's Delta Population Health Institute at Arkansas State University, with the social science expertise of Raeda Anderson from the Shepherd Center in Atlanta, Georgia, and Meagan Rosenthal and Anne Cafer from the University of Mississippi.

Table 1. High-Risk Comorbidities for Southern States

	Obesity ⁴ (%)	Diabetes ⁵ (%)	Hypertension ⁶ (%)	Heart Disease ⁷ *	Chronic Respiratory Disease ⁸ *
US	37.7	10.5	33.2	163	39.7
Rural South	34.7	13.2	37.2	186	48.9
AL	36.2	14.5	41.9	224	58.0
AR	37.1	14.1	41.3	217	61.7
FL	30.7	12.4	34.6	143	37.0
GA	32.5	12.6	33.1	175	45.7
KY	36.6	13.8	39.4	198	62.1
LA	36.8	14.1	39.0	212	43.1
MS	39.5	14.3	40.8	222	59.9
NC	33.0	12.1	34.7	155	42.6
SC	34.3	13.3	38.1	167	45.8
TN	34.4	13.9	38.7	202	55.9
TX	34.8	12.5	32.5	170	39.7
VA	30.4	10.5	32.4	148	34.7

*Age-adjusted deaths/100,000 population

References: Obesity⁴, Diabetes⁵, Hypertension⁶, Heart Disease⁷, Chronic Respiratory Disease⁸

2 WHAT IS THE CONTEXT THAT UNDERCUTS THE RACIAL DISPARITIES YOU SEE IN COVID-19 OUTCOMES? THERE ARE EXPERIENCES/SYSTEMS THAT TRANSCEND ANY ONE STATE, BUT THERE ARE ALSO SPECIFIC EXPERIENCES OR HURDLES FOR COMMUNITIES THAT HAVE BEEN HISTORICALLY MARGINALIZED IN EACH PLACE. WE WANT TO EXPLORE THOSE.

Raeda Anderson: People living in rural areas have lower access to healthcare, and thus it should not be surprising that those same people have poor health outcomes. People living in rural areas have low rates of exercise and high rates of obesity, diabetes, mental health issues, abuse of drugs, and tobacco use, with shorter life expectancies than the overall US population. Even with this myriad of notable health issues, access to health care is consistently identified as the largest health priority for rural areas.⁹

Meagen Rosenthal and Annie Cafer: Unlike many states, more than half of Mississippi's population lives in a rural county. This is atypical, even in southern agricultural states—most have at least one reasonably large metropolitan area or several smaller metropolitan areas that

capture a significant portion of the population (Alabama, Georgia, and Louisiana, for example). Rural areas, even before Covid-19, were not seeing the same strides in improving life expectancy as urban areas.¹⁰

They also have the highest rates of premature death and death from preventable conditions related to high-risk health behaviors¹¹ Despite remoteness, which officials believed early on would be a protective factor against the pandemic, we've seen rural spaces hit hard. For example, Mississippi, one of the more rural states in the South, beat out Florida for two consecutive weeks for the highest positivity rate, and ranked No. 1 in per capita cases in early August.¹² Rural spaces, with higher percentages of elderly, disproportionately higher prevalence of residents with comorbidities, and reduced access to health care facilities, have provided the perfect storm of poor health.¹³

Raeda Anderson: Not only is there is a notable gap between rural and urban spaces for hospital mortality, rural hospitals are closing at a high and increasing rate. ¹⁴ One out of five rural Americans depends on their local hospital to serve as their main healthcare provider. ¹⁵

In many rural areas, there is not a hospital in each adjacent town. To that end, when rural hospitals close, people have to travel farther for medical assistance, including emergency medical assistance. People who live in urban areas have to travel an average of 10.4 minutes to the nearest hospital compared to 17.0 minutes for people living in a rural area. Of the top 25% most rural, the nearest hospital is an average of 34 minutes away.¹⁶

Laurent and Conner: While clinical care is vital for health stabilization and improvement, it only accounts for 15–20% of overall health and longevity. To Social, physical, and economic environments and conditions, collectively referred to as the social determinants of health, have more impact on how long and well people live than medical care. Social determinants of health are defined as the conditions where we are born, grow, live, learn, and play. Several studies suggest that addressing social and economic inequalities, such as inadequate education, which contribute to inequitable rates, would contribute more to overall population health than the emergence of new medical advances. According to the Henry J. Kaiser Family Foundation, health outcomes—mortality, morbidity, life expectancy, health care expenditures, health status, and functional limitations—are directly correlated in a cause/effect relationship to social determinants of health—economic stability, neighborhood and physical environment, education, food, community and social context, and the health care system. Within each of these social determinants of health are several influencing factors. The disparities that we see in health outcomes can be seen with the same groups in the social determinants of health, i.e., income, education, built environment, and economic development of communities.

Rosenthal and Cafer: While there are many types of disparities that this pandemic has cast into sharp light, in Mississippi the difference that exists between racial groups is staggering. Black

Americans are more likely to lack either healthcare coverage or a regular source of healthcare, or both. Of those who do not have insurance, nearly half have a chronic condition. Historically, Black Americans have been excluded from a variety of healthcare trials and as a result are much less likely to survive various healthcare problems. One of the key comorbidities—asthma—disproportionately impacts Black children, who have a 250% higher hospitalization rate than their white counterparts.²⁰ We are currently seeing the inevitable outcomes of these disparities; as of mid-June Black Americans had a hospitalization rate for Covid-19 that was five times higher than non-Hispanic whites. In this case, being Black is equivalent to having three or more comorbid conditions.²¹

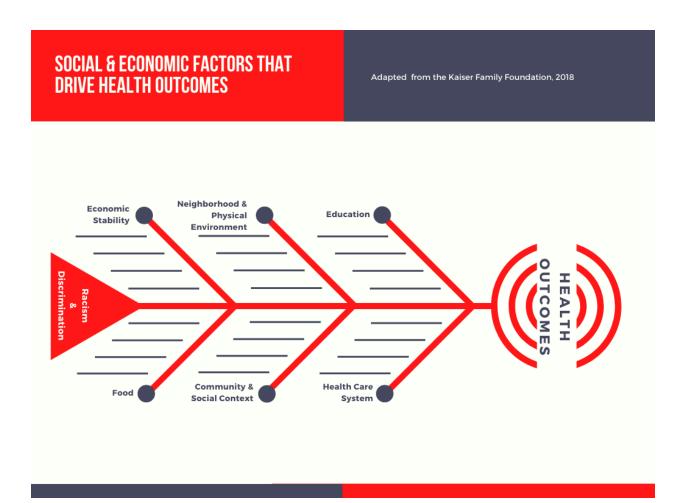
Laurent and Conner: In 2003 the landmark Institute of Medicine report "Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care" drew needed attention to disparities in the health care of racial and ethnic minorities in the US.²² Although some disparities in health care have narrowed, disparities in the health of minority and disadvantaged populations have persisted. Since the 1960s, the mortality rate for Blacks has been 50% higher than that for whites, and the infant mortality rate for Blacks has been twice as high as that for whites.²³

The patterning of racial and ethnic inequities in health has served as an impetus for research on racism and health. Rates of disease and death are elevated for historically marginalized racial groups, Blacks, Native Americans (or American Indians and Alaska Natives), and Native Hawaiians and Other Pacific Islanders, who tend to have earlier onset of illness, more aggressive progression of disease, and poorer survival.²⁴ Secondly, empirical analyses have revealed the persistence of racial differences in health even after adjustment for socioeconomic status. For example, at every level of education and income, Blacks have a lower life expectancy at age twenty-five than do whites and Hispanics, and Blacks with a college degree or more education have a lower life expectancy than do whites and Hispanics who graduated from high school.²⁵ The persistence of racial inequities in health should be understood in the context of relatively stable racialized social structures that determine differential access to risks, opportunities, and resources that drive health. In their work "Moving Upstream: How Interventions That Address the Social Determinants of Health Can Improve Health and Reduce Disparities," David Williams and his collaborators conceptualize this system of racism, chiefly operating through institutional and cultural domains, as a basic or fundamental cause of racial health inequalities.²⁶

Structural or institutional racism seen in racial residential segregation is the most studied mechanism of racism. Multiple social institutions have shaped this physical separation of races in distinctive residential areas, including the forced removal and relocation of American Indians.²⁷ Although segregation has been illegal since the Fair Housing Act of 1968, its basic structures established by the 1940s remain largely intact. The study by Williams et al. names racial segregation as the fundamental cause of racial disparities.

A 2017 review and meta-analysis of forty-two articles that examined the association between segregation and birth outcomes found that segregation was associated with increased risk of low birth weight and preterm birth for Blacks. 28 A systematic review of seventeen papers that examined segregation and cancer found that segregation was positively associated with laterstage diagnosis, elevated mortality, and lower survival rates for both breast and lung cancers for Blacks.²⁹ Segregation can also adversely affect health by creating communities of concentrated poverty with high levels of neighborhood disadvantage and low-quality housing stock, with both government and the private sector demonstrating disinterest or divestment from these communities. In turn, the physical conditions (poor-quality housing and neighborhood environments) and the social conditions (co-occurrence of social problems and disorders linked to concentrated poverty) that characterize segregated geographic areas lead to elevated exposure to physical and chemical hazards, increased prevalence and co-occurrence of chronic and acute psychosocial stressors, and reduced access to a broad range of resources that enhance health.³⁰ The living conditions created by concentrated poverty and segregation make it more difficult for individuals to practice healthy behaviors. 31 Segregation also adversely affects the availability and affordability of care, contributing to lower access to high-quality primary and specialty care and even pharmacy services.³²

The Surgo Foundation released a validated interactive Covid-19 Community Vulnerability Index Map that uses each state's current "state of condition" within several social determinants of health factors to illustrate each state and county's level of vulnerability. The Delta, as shown by Neighborhood Atlas, has a high Area Deprivation Index, which is based on a measure created by the Health Resources and Services Administration. It allows for rankings of neighborhood by socioeconomic-status disadvantage in a region of interest. It includes factors for domains of income, education, employment, and housing quality. The Covid-19 pandemic has underscored and exacerbated the disparities in health and all community sectors that intersect with the social determinants of health, specifically in the Delta and rural communities, demonstrated in these maps, which significantly increases their vulnerability to the negative health impacts of this pandemic.³⁴



3 LET'S TALK ABOUT THESE SPECIFIC ACTIONS THAT WE AS SCHOLARS, HEALTHCARE PROFESSIONALS, AND COMMUNITY DEVELOPMENT PRACTITIONERS COULD TAKE TO ADDRESS THESE ISSUES:

Rosenthal and Cafer: Thinking broadly across the health context of the rural South during the Covid-19 pandemic, there are three overarching problems that need to be addressed: 1) our communities are clearly not prepared for systems-level disruptions, 2) our inefficient and underfunded healthcare system cannot care for everyone, and 3) there is lack of trust of experts and expert knowledge.

Raeda Anderson: Well-funded and sustained rural hospitals. Of the 174 rural hospitals that have closed in the US since 2005, over half (89) occurred in just 11 states across the rural South. These 11 states account for 51% of the rural hospital closures since 2005 but only 22% of all US states. These rural southern hospitals that have been closed accounted for 6,400 beds across 11 states, with the highest number of hospitals shut down in Texas and North Carolina, where

cases counts are some of the highest.35

Rosenthal and Cafer: It is important to acknowledge that this pandemic caught the country ill-prepared, and it has been made it plainly obvious that we currently only have blunt instruments for dealing with these kinds of disruptions. Issuing "stay at home" orders was certainly the correct call as Covid-19 entered the US, however, it was shortsighted to presume that the mere shutting down of normal life would be sufficient to stop the virus. Rather, proactive planning was needed to safely reopen our communities and the economy. Even with the best containment measures resurgences of the virus were inevitable. However, the systems needed to engage in this kind of thoughtful and proactive planning do not currently exist at most levels (neither locally, statewide, nor federally).

Raeda Anderson: Without accessible access to healthcare, people in the rural South are unable to get their maintenance health requirements (e.g., yearly physicals), therapy (e.g., physical therapy, occupational therapy, speech therapy, and recreational therapy), and emergency medical needs (e.g., heart attack, Covid-19) realistically addressed. A third of rural counties are at high risk for Covid-19, compared to a 6% high-risk population in urban areas. This disparity is largely the result of differences in demographics: rural areas have higher average age, more people with disabilities, and fewer with insurance. Rural areas also have less access to local medical professionals. Studies have shown that access to healthcare is a stronger predictor of surviving Covid-19 than a person's race.

Rosenthal and Cafer: The healthcare system is funded by an inefficient model that only pays for people once they are sick, focusses on maintaining narrow profit margins with just-in-time inventory management, and places a much greater emphasis on treating people once they are sick rather than focusing on ways to prevent them from being sick in the first place. The overall cost of care delivery in the US has increased significantly over time. A recent evaluation found that national health spending reached roughly \$3.6 trillion in 2018.³⁸ Costs to individuals and public and private insurers have also increased dramatically. Per capita out-of-pocket individual spending has risen to \$1,150 in the last fifty years, while public and private insurance now covers 34% and 41% of total health expenditures, respectively.³⁹

This disadvantages people who do not have health insurance when they become ill. In 2018, 27.5 million people (8.5% of the national population) in the US lacked health insurance, which is an increase from 25.6 million people (7.9%) in 2017. A related problem is the increasing number of people who are now underinsured. People who are underinsured have high deductible health care plans, meaning that they must pay a large amount of money out of pocket before their insurance will begin to cover any health expenses. It was estimated in 2018 that approximately 29% of people who had insurance were underinsured. Consequently, people who are underinsured often delay needed care (~41% of respondents to the

Commonwealth Funds Survey), which can result in high downstream healthcare costs. 43

A lack of insurance or being underinsured often places people in financial distress if they need to seek healthcare. This results in "bad debt" for hospitals and health systems as these people cannot afford to pay their bills. Bad debt is debt that cannot be collected, and in 2018 was estimated to be approximately \$56.5 billion. Furthermore, smaller facilities, government-controlled facilities, and Medicare low-volume hospitals carry a disproportionate amount of bad debt because they are located in economically disadvantaged and rural areas.⁴⁴

Laurent and Conner: Also, we need data. Policy makers may not be adequately informed of the true needs of a community and are relying on the "squeaky wheel" to drive issues. If there is data to point to unmet needs, this can support policy aims and allocations of resources as well.

Rosenthal and Cafer: Beyond the infrastructure of hospitals and funding, we also need to rebuild trust in experts. Part of this work has to be done at the physician level—implicit bias, racial attitudes, and cultural competencies are extremely important issues for medical practice that are not addressed in medical training, but they absolutely influence the delivery of medicine and healthcare outcomes for minority groups.

Raeda Anderson: Yes, intentional training of medical professionals on antiracist behaviors with sociological understanding of cultures and their associated norms is of paramount importance. Researchers have overwhelmingly found that when patients and providers have an effective working relationship, patients are healthier. When patients, however, do not trust medical providers, as the result of a long history of manipulation, the quality of patient-physician interactions, specifically communication, is ineffective. Medical providers need to be conscious that a patient's perceived race, class, and gender identity very likely affects their decision-making process about diagnosis and general perceptions of the patient.

While the patient and medical care provider relationship is largely the cornerstone of healthcare, larger systemic factors in healthcare are prevalent. Pharmacies in minority neighborhoods carry opioid pain medicine at lower rates than in white neighborhoods; minority neighborhoods are also less likely to have a pharmacy. Hospitals are often found to provide a lower quality of care to racial minority patients. When a healthcare system, however, has implemented cultural competence training, health outcomes for patients improve.

Covid-19 has made these gaps in healthcare and health outcomes painfully obvious. As of August 4, 2020, 1 in every 1,250 Black Americans who has contracted Covid-19 has died, compared to only 1 in every 2,800 white Americans. In total, if Black Americans had died at the same rate as white Americans, around 18,000 Black Americans would have not died a Covid-19-related death. While these differences exist across the United States, the South has varying

rates of Covid-19 death differences between white Americans and Black Americans per 100,000 as of August 4, 2020: Alabama with 25.7 for whites and 51.1 for Black, Arkansas with 12.6 for whites and 28.2 for Blacks, Florida with 30.4 for whites and 44.2 for Blacks, Georgia with 32.7 for whites and 53.0 for Blacks, Louisiana with 65.9 for whites and 131.2 for Blacks, Mississippi with 43.8 for whites and 76.6 for Blacks, North Carolina with 15.9 for whites and 27.3 for Blacks, South Carolina with 24.8 for whites and 51.2 for Blacks, Tennessee with 12.2 for whites and 32.7 for Blacks, and Texas with 31.0 for whites and 27.8 for Blacks.

As of August 18, nationally, 35,932 Black people have died of Covid-19 and 82,323 white people have died of Covid-19, thus the proportion of Black deaths to white deaths is 0.44. In the South, however, there have been 12,006 Black people and 19,719 white people die as a result of Covid-19 infections, increasing the proportion of Black deaths to white deaths to 0.61.⁴⁸ This significant difference in deaths is a health disparity that must be addressed at the micro level with providers and with patients, the meso level with healthcare organizations and hospitals, as well as at the macro level with national associations and their associated policies.

Laurent and Conner: I am also concerned about the 2020 US census, especially for communities that are underrepresented. The census determines the federal funding that will be allocated for years to come, and people are not being counted. It determines how billions of dollars in federal funding flow into states and communities each year, which affects education, infrastructure, economic development, growth of small businesses, services for families, new roads, new schools, food assistant programs, school lunches, the prevention of child abuse, housing assistance for the elderly, transportation, highway planning, and programs for rural areas. It also determines how many seats in congress each state gets.

4 WHAT ARE THE TWO OR THREE ISSUES THAT, IF ADDRESSED, WOULD BE INSTRUMENTAL IN IMPROVING HEALTH IN OUR COMMUNITIES?

Building and Developing Resilient Communities That Can Better Withstand Disruptions

Rosenthal and Cafer: This means integrating systems across communities and approaching problems from an interdisciplinary perspective. This also means lifting and centralizing the voices of communities to tailor interventions to local context and resource availability. We can bolster health promotion and chronic illness management by maximizing currently available healthcare resources and trained professionals to deliver chronic-disease-management services and exploring holistic approaches to healthcare.

Raeda Anderson: We need emergency funding to prevent rural hospitals from closing. Quite simply, if people need to go to the hospital, there needs to be a hospital they can access. We also need mobile healthcare worker units that are able to travel to areas that are surging with Covid-19 to reduce burnout and burden on local healthcare workers. Further, the entire US, not just the rural South, needs to have a mandate for correct mask use in all public spaces because of the high rate of asymptomatic cases. In reality, we need to seriously consider a nationwide Covid-19 lockdown, like Italy and China.

Rosenthal and Cafer: Another goal is to insure universal access to the health-promoting infrastructure, such as low-income patient access to fresh fruits and vegetables; systems integration; high-touch, intensive, preventive health therapies. These therapies can include daily contact, the use of medical nutrition therapy alone or in combination with diabetes self-management training. Funding for these programs should be prioritized toward historically marginalized communities, such as rural communities, communities of color, and low-income communities. Long-term goals are to examine and improve funding mechanisms, such as quality measures, which are used to "quantify healthcare processes, outcomes, patient perceptions, and organizational structures [and] systems." Incentives within healthcare need to be improved upon, including more reimbursable costs for preventive medicine, nutrition-management therapy, and behavioral interventions.

Raeda Anderson: Rural hospitals generally close due to funding issues.⁵⁰ Research-based policies should be developed to reallocate funding to hospitals in these rural areas. Rather than attempting a multitude of options until one works, these decisions need to be based upon both local needs and availability, as well as larger patterns of successfully funded and managed rural hospitals across the South.

Educating Citizens

Rosenthal and Cafer: There need to be academics who are actively engaged with the public about the work that they do and why it is important. We will need to fundamentally rethink how we communicate with our "new" audience. Universities need to invite people to participate in the creation of science and change how experts engage with the general population. We also need to provide greater education on how knowledge is created and agreed upon within our scientific communities. Some universities are already recognizing the importance of science communication for their professional students. University of Missouri and the University of Florida are just two examples of that happening. Increasingly, federal and state-level funding agencies are requiring that scientists translate what they do to the greater good. However, the long game completely reimagines the relationship between academic institutions and communities so that communities are placed at the center of knowledge

creation, which is what UM CREW (Community First Research Center for Wellbeing and Creative Achievement) is designed to do here in Mississippi. We see this shift happening in strategic disciplines like health and agriculture, and that is translating to graduate training at universities like Vanderbilt and Delta State. We also see this as an emerging trend in academic publishing.

Laurent and Conner: We agree. Academic institutions could leverage their assets to assure their community service can go beyond an event. We can create pathways for policymaking, for systemic and environmental changes in health equity, and for collaboration with the organizations they are serving. Many community-based organizations are usually open to finding better ways to provide services, but they often don't have the capacity to do so. Academic institutions have assets to facilitate some of these needs. For example, these institutions can help create surveys, conduct needs assessments, and conduct studies to discover those who have the greatest and most immediate needs.

Create and Use Objective Data in Decision Making

Rosenthal and Cafer: Right away, we need to focus on matching presently available data to the data needs of communities and healthcare professionals, as well as on developing educational resources to increase accessibility to these data. Data available to communities is hard to access without some tacit skills in data management, analysis, or familiarity with the dataholding entity. We also need to work with communities to clearly articulate the importance of good data for program planning and funding. This includes having robust census participation. Finally, we also need to work with the community to prioritize data needs and create plans to address them. This includes capacity building at the municipal and organizational level for research design and implementation. Building awareness and capacity allows for collaborative partnerships that focus on implementation of plans to address community-generated needs. This requires a long-view of partnership between communities, especially those that have been historically under-resourced or marginalized and where the relationship is both equitable and reciprocal. This will require significant institutional shifts for universities in both the incentive structure and operational procedures.

<u>In this video</u>, Jennifer Conner and Brookshield Laurent present on how their training has taught them to listen to the stories of our bodies, which inform their work in population health in the Delta. Conner and Laurent explore how the interconnectedness of place, time, and health are expressed in our bodies and can serve as the pathway for holistic healing for self and communities. This talk was prerecorded to serve as a complement to a Center for the Study of Southern Culture SouthTalk lecture and Q&A, moderated by University of Mississippi professors and co-directors of the UM Community First Research Center for

Wellbeing and Creative Achievement (CREW), Anne Cafer and Meagen Rosenthal. SouthTalks is a series of events exploring the interdisciplinary nature of Southern Studies.

CONTRIBUTORS

Raeda Anderson is a research scientist focusing on technology and big data analytics for Shepherd Center in Atlanta, Georgia. Shepherd Center is a Top 10 rehabilitation hospital in the United States and specializes in the rehabilitation of people with disabilities, specifically spinal cord injuries, multiple sclerosis, acquired brain injuries, and veterans experiencing PTSD. Anderson is a statistical and methodological consultant for the US Department of Energy. She is a former quantitative data specialist and assistant professor in the Department of Research and Engagement at Georgia State University. While serving in that role, Anderson was a data and quantitative consultant for over two thousand studies, with the majority of those focusing on big data and analysis.

Anne Cafer is an assistant professor of sociology at the University of Mississippi and co-director for the UM Community First Research Center for Wellbeing and Creative Achievement (CREW). She also serves as coordinator for the Applied Policy and Community Based Research Laboratory housed within the UM Center for Population Studies, of which she is an affiliated researcher. She holds a BS in both molecular biology and sociology, an MA in anthropology, and a PhD in rural sociology. Her research uses a systems approach to examine community resilience and social change around health, nutrition, food procurement, agricultural systems, and environmental sustainability. She works primarily in Sub-Saharan Africa and the Mississippi Delta. Cafer is a 2019 Andrew Carnegie Fellow and a former Borlaug Scholar in Global Food Security.

Jennifer Conner is deputy director of the Delta Population Health Institute. She has a DPH (Doctor of Public Health) in leadership and policy and over eighteen years of experience bringing people and organizations together to achieve a better quality of life and quality of place in communities. Conner was instrumental in launching the Arkansas Coalition for Obesity Prevention and has achieved many policy, system, and environment changes within the South to improve community resiliency. Conner has received numerous honors and awards at the local, state, and national level for building sustainable partnerships. In 2019 Conner was named a Robert Wood Johnson Foundation (RWJF) Culture of Health Leader finalist and an RWJF Culture of Health Community Prize finalist for her work in her hometown of Lake Village, Arkansas.

Brookshield Laurent is the executive director of the Delta Population Health Institute and is an osteopathic family medicine physician. She is a fellow of the American Association of Colleges

of Osteopathic Medicine's Health Policy Fellowship Program. She is the founding chairwoman for the Department of Clinical Medicine at the New York Institute of Technology (NYIT), College of Osteopathic Medicine at Arkansas State University and the founding executive director for the Delta Population Health Institute.

Meagen Rosenthal is an associate professor of pharmacy administration in the School of Pharmacy at the University of Mississippi and co-director of the UM Community First Research Center for Wellbeing and Creative Achievement (CREW). Her research focuses on developing systems to integrate health research evidence into practice faster and more effectively. She approaches this broad topic area through two specific areas. The first specific area involves partnering with people who have chronic conditions, such as diabetes and obesity, to understand their specific needs and help to generate research questions that are meaningful to them. The goal being that these people will be more likely to adopt and integrate that knowledge into their daily lives. The second specific area involves working with community pharmacists to provide patients, especially those in rural communities where resources are limited, with much-needed services focused on chronic disease management.



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