

MISSISSIPPI

Medical researchers funded by the National Institutes of Health (NIH) are working every day to improve health, discover cures and provide hope to people the world-over affected by disease. This work, however, has a secondary benefit: it supports employment and economic activity across the United States, including in Mississippi.



ADDING TO MISSISSIPPI'S ECONOMY

In FY2017, seven institutions in Mississippi received



89 research awards



totaling more than \$53 million

While the bulk of the research awards went to the University of Mississippi Medical Center, others supported a range of institutions and businesses throughout the state. This research funding, when cycled through the economy, generated **\$113 million in total sales** for Mississippi businesses:



Supporting **more than 800 jobs** in Mississippi; and



Generating approximately **\$12 million in tax and fee revenues** for state, county and municipal governments statewide.

BOOSTING THE LABOR FORCE IN MISSISSIPPI

Jobs in the scientific R&D sector in Mississippi pay on average 1.6 times more than those in other sectors. In 2017, this was \$52,200 vs. \$31,700. And for young workers (under 25), the difference was also significant — 1.2 times the average pay in other fields, \$14,200 vs. \$11,500 — a factor important to the state's future growth.



REDUCING PUBLIC HEALTH COSTS

In Mississippi, **41% of the population** is enrolled in Medicare and Medicaidⁱ, far exceeding the national average of 35%, and spending on these programs amounts to **10% of Mississippi's total GDP**, also well above the national average. Contributing to this burden is the prevalence of chronic disease in Mississippi, which is much higher than in other states.ⁱⁱ

COMPARED TO OTHER STATES, MISSISSIPPI RANKS:

2nd for rate of **diabetes**

2nd for rate of **obesity**

3rd for rate of deaths from **cancer**

5th for rate of **cardiovascular disease**

9th for rate of deaths from **Alzheimer's disease**



DR. ADOLFO CORREA, JACKSON HEART STUDY DIRECTOR AND PRINCIPAL INVESTIGATOR, UNIVERSITY OF MISSISSIPPI MEDICAL CENTER COORDINATING CENTER AND FIELD CENTER



Image: University of Mississippi Medical Center

MEDICAL RESEARCH AT WORK IN MISSISSIPPI

Mississippi is home to the Jackson Heart Study (JHS), the nation's largest long-term cohort study of cardiovascular health among African Americans. Supported by the National Institutes of Health (NIH), the study recruited 5,300 African Americans living in the greater Jackson metropolitan area. The study has three main purposes: to investigate biological, genetic and environmental risk factors to better understand why African Americans are disproportionately affected by cardiovascular diseases; to promote healthy lifestyles and lower the risk of cardiovascular and related diseases in the local community and across the state of Mississippi; and to prepare and encourage underrepresented minority students to pursue biomedical careers.

Heart disease is the leading cause of death in the United States. However, among African Americans, about 44 percent of men and 49 percent of women have some form of heart disease compared to 37 percent and 32 percent for white men and women. Mississippi has the nation's highest heart disease mortality rates for both black and white residents.

Now in its 20th year, the JHS is providing data to help researchers and clinicians better understand, prevent, and treat heart disease in Mississippi and nationwide. Discoveries made by JHS researchers include a gene variant in African-Americans that doubles the risk of heart disease; the finding that even small spikes in blood pressure can lead to a higher risk of death; and a sickle cell trait linked to a higher risk of kidney disease. Researchers are conducting whole-genome sequencing of some 3,500 participants to identify new genetic risk factors for cardiovascular disease and new targets for therapy. Going forward, the study also will investigate the link between cardiovascular health and brain health.

JHS is built on a unique collaborative partnership that includes the University of Mississippi Medical Center, Tougaloo College, Jackson State University, Mississippi State Department of Health, community leaders in the Jackson area and the NIH.



JACKSON HEART STUDY PRINCIPAL INVESTIGATORS AND COMMUNITY MEMBERS

Image: Jackson State University



JACKSON HEART STUDY — CELEBRATING HEALTHY LIFESTYLES

Image: Jackson State University



United for Medical Research is a coalition of leading scientific research institutions and industries, and patient and health advocates that have joined together to seek steady increases in funding for the National Institutes of Health. Learn more at www.unitedformedicalresearch.com. For examples of the amazing things that NIH research is making possible, visit www.amazingthingspodcast.com.

¹ According to the most recent statistics available from the Centers for Medicare and Medicaid Services

² [Diabetes and Obesity: "The State of Obesity: Better Policies for a Healthier America 2018"](#)

[Cardiovascular Disease: Kaiser J Family Foundation State Health Facts](#)

[Cancer Deaths: National Cancer Institute State Cancer Profiles](#)

[Alzheimer's Disease Deaths: Alzheimer's Association "2018 Alzheimer's Disease Facts and Figures"](#)