## **Community and Training Centers add to Jackson Heart Study's mission**

Since 2000, the Jackson Heart Study(JHS) has worked to drive African Americans in general and the JHS participants in particular toward better health outcomes. Now, the study has even more tools to reach its goals.

The Jackson Heart Study is the largest, single-site study of African American cardiovascular health and risk factors for disease. It has followed 5,300 people from Hinds, Madison and Rankin counties. It is a partnership between the tri-county residents and four Jackson-area institutions: the University of Mississippi Medical Center (UMMC), Jackson State

University (JSU), Tougaloo College, and since 2018, the Mississippi State Department of Health (MSDH).

When the National, Heart, Lung, and Blood Institute renewed JHS funding last August, it added a new Community Engagement Center (CEC) led by MSDH and a second Graduate Training and Education Center (GTEC) housed in the John D. Bower School of Population Health at UMMC.

The Mississippi Civil Rights Museum in Jackson was the backdrop for the launch of the CEC on February 16. Leaders from the Jackson Heart Study, its affiliated institutions and study participants gathered to learn about the CEC's mission and planned initiatives.

"We are really, really excited to be a part of the Jackson Heart Study," said Dr. Victor Sutton, CEC principal investigator and MSDH director of the Office of Preventive Health and Health Equity.

During this phase of the JHS, Sutton said the CEC plans to form partnerships with barbershops, faith-based organizations, and a mayoral health council to disseminate health information and develop evidence-based approaches to promoting cardiovascular health.



Mr. Ralph Page of Byram, left, a Jackson Heart Study participant, talks about his experiences with the JHS during the Community Engagement Center launch Feb. 16. Other panel participants included JHS members, from left, Rev. James Sims, Ms. Tommie Winters, and Ms. Barbara Jackson.

"We want to find out what works and what doesn't," Sutton said.

Cardiovascular disease is the leading cause of death in the United States, but African Americans bear a disproportionate burden. According to the Centers for Disease Control and Prevention, 44 and 48 percent of African American men and women, respectively, have some form of cardiovascular disease. Understanding why these rates are so high and what can be done to reduce this burden is a primary goal of the JHS.

Dr. Claude Brunson, executive director of the Mississippi State Medical Association, delivered the launch's keynote address on the significance of the JHS in the history of African American health and involvement in research studies.

"We're painfully aware of the atrocities committed" in the name of research, Brunson told community members. The Tuskegee syphilis study and other unethical experiments contributed to distrust of physicians and medical research. As a result, "African Americans are less likely to enroll in research studies," he said.

Because of this history, the most important factor for getting the JHS off the ground was building trust with its community research partners, Brunson said.

"The Jackson Heart Study addressed the trust issue head-on by fully engaging the participants," he said. "It is now recommitting to bringing this study to the next level, and transforming a history of heart disease into a history of heart health."

That transformation will not be possible without the next generation of health professionals. The new UMMC-GTEC, led by principal investigator Dr. Bettina Beech, joins the centers at Tougaloo and JSU and expands the JHS's capacity to train students.

"We are very excited about our first cohort of students who will enter the program this summer," said Beech, dean of the Bower School of Population Health.

The Dr. Robert Smith Graduate Scholars Program has accepted eight doctoral or health professional students from Mississippi universities who will come to UMMC to learn about cardiovascular disease, epidemiology and health disparities. Students will then use existing data from the JHS or other population-based studies to conduct their own research related to CVD during the two-year program.

"These students will be on our campus for the next two summers and during a mid-year meeting," she said. "Even though these students will only be on our campus for a short while, they will be able to work with professors at their own institutions as well to complete their research."

Later in the program, the students will also visit Johns Hopkins University and the National Institutes of Health (NIH) in Maryland.

"This will be a great opportunity for networking and exposure to cardiovascular-related research opportunities" Beech said.

## Jackson Heart Study meets with U.S. Surgeon General

October 10, 2018, Jackson Heart Study staff, along with local business leaders and representatives from the Mayoral Health Councils, met with U.S. Surgeon General Dr. Jerome Adams. The meeting was held at Southern Farm Bureau in Jackson. The meeting, which included some members of the JHS leadership, focused on the Surgeon General's Community Health and Prosperity initiative, whose primary goals are to examine the connection between health and economic prosperity and facilitate private-sector investment in community health.

Members from the JHS staff specifically discussed recent accomplishments and JHS research coordination that will focus on a novel approach to make the best use of study data to increase the quality and quantity of scientific output. This approach includes collaboration with subject matter experts at JHS Vanguard Centers, data access updated on a regular basis, and a streamlined application and review process for manuscripts and proposals.

Business leaders discussed their experiences and the benefits of investing in their employees and communities through employee health programs, while members of the Mayoral Health Council discussed how they are working with businesses and other community leaders to improve community health and outcomes.



Dr. Victor Sutton with U.S. Surgeon General Dr. Jerome Adams

### **Director's Corner**



Dr. Adolfo Correa, Director, Jackson Heart Study

Thank you for being a loyal Jackson Heart Study participant for the past 18 years!

Since the first enrollment of participants in the JHS in 2000, the Jackson Heart Study has been a source of interest, expectations, and inspiration for study participants, the researcher community, and graduate and undergraduate students. During its first 18 years of operation, the JHS has been successful in achieving its research, health promotion and capacity building goals.

In 2018, we were successful in obtaining

new funding from NIH to continue for the period of 2018-2024 in partnership with Jackson State University, Tougaloo College, the Mississippi Department of Health and the University of Mississippi Medical Center. With this new funding, we will continue to do many of the same activities such as calling you, sending you a JHS newsletter,

inviting you to different events, and training undergraduate students at Tougaloo.

Additionally, we will help train even more graduate students with funding for Training and Education Centers at Jackson State University and the University of Mississippi Medical Center and initiate health promotion activities across the state with a new JHS center, the Community Engagement Center, managed by the new JHS partner, the Mississippi State Department of Health. Last but not least, with the new funding we will conduct a new JHS Exam 4 and new ancillary studies during 2020-2022, distribute a new JHS Data Book based on results from Exam 4, continue our research into the causes for the increased burden of cardiovascular disease among African Americans, and continue our efforts to provide new evidence to inform health promotion and health policy to prevent cardiovascular disease and related deaths among African Americans.

Sincerely, Dr. Adolfo Correa

# **Get to know a Bolton Edwards Community Health Advisor (CHA): Alfernette Robinson**

Q: What motivated you to become a Jackson Heart Study (JHS) Community Health Advisor (CHA)?

A: I became a Community Health Advisor because I love my community. I was born and raised in Bolton, Mississippi. I am employed as a librarian at the local library, Annie T. Jeffers Library. Over the years, I have become more attentive to my own health as well as the health of my community.

Q: What have you learned about health and wellness since becoming a CHA?

A: Since becoming a CHA, I have learned to eat healthy, decrease my salt intake and become more involved in physical activity that promotes cardiovascular disease prevention.

Q: What stakeholders (organization, businesses and people) does your Community Health Advisor Network (CHAN) collaborate or partner with in the community?

A: The Bolton/Edwards CHAN partners with local churches, healthcare facilities, academia and community-based organizations.

Q: What resources or services have your community partners provided that helped your CHAN implement activities and programs?



Ms. Alfenette Robinson, Bolton/Edwards CHAN Member, 3rd from left along with the GirlTrek Walking Club at the fifth annual Jimmie Lewis Walk-A-Thon on July 31, 2018.

A: Our community partners have provided health education materials that we distribute to our churches, social clubs and the community at large. Furthermore, we established two annual community health awareness events: The Jimmie Lewis Walk-A-Thon, which promotes community participation in physical activity; and the Bolton/Edwards Health Awareness Day, a day set aside to inform the Bolton/Edwards community about cardiovascular disease (heart disease), healthy eating, and high blood pressure.

### **CHANs**

#### **Rankin CHAN**

On December 13, 2018, the Rankin CHAN held a recruitment and retention luncheon. The event was held at Sweet Rest Church of Christ Holiness, U.S.A. located on Old Whitfield Road in Pearl. The event provided an opportunity for the CHAN to share their work and recruit new members. Sherron Day, Project Director for the MS Tobacco Free Coalition serving Rankin, Scott and Simpson counties presented on the dangers of JUUL, a vaping device, and how parents can identify usage among their children.

#### **Clinton CHAN**

On November 5, 2018, the Clinton CHAN held its Annual Fall Festival Celebration at the Clinton Christian Community Corporation (4Cs). 4Cs is a non-profit, tax-exempt social service agency organized to create awareness of the needs in its community and to coordinate available resources and efforts to meet those needs. There were 39 attendees and the guest speaker was Phyllis Johnson, MSN, RN, FNP-BC and executive director



Left to Right: Ms. Saundra Lee, Clinton CHAN Member and Ms. Phyllis Johnson, Executive Director of Advanced Practice, MS Board of Nursing

of advanced practice at the Mississippi Board of Nursing. Johnson presented on the effect of genetically modified organisms on our food supply and health. She also stressed the importance of "knowing your numbers," including blood pressure, body mass index and fasting glucose level.

### The Jackson Heart Study Undergraduate Training and Education Center



Dr. Wendy White, Principal Investigator, Tougaloo College, UTEC

The goal of the Jackson Heart Study Undergraduate Training and Education Center (JHS-UTEC) at Tougaloo College is to attract minority students to public health careers. Since 1999, UTEC has offered the Science Language Arts and Mathematics (SLAM) program, a summer enrichment workshop for Jackson-area high school students, and the flagship JHS Undergraduate Scholars Program. SLAM's three levels enroll rising sophomores, juniors and seniors, respectively. More than 1000 high students have participated in SLAM workshops, with 60 percent of those completing

SLAM I later enrolling in SLAM II and III.

The Scholars Program is a collaboration between the Tougaloo College Natural Sciences Division and the JHS-UTEC. The program is designed to provide students with solid preparation in math and science; high-level reading comprehension; introductory biostatistics, public health and epidemiology; and research methods. Scholars participate in three years of mentored research and attend colloquia where guest speakers include former Scholars who work in medicine, public health and biomedical research. Scholars attend learning excursions to the National Institutes of Health, Centers for Disease Control and Prevention and Bioethics Center at Tuskegee University. More than 200 students have graduated from the Scholars program and now work in public health, medicine, nursing and law.

# The Jackson Heart Study Graduate Training and Education Center at Jackson State University



Dr. Marinelle Payton, Principal Investigator, JSU-GTEC

The Jackson Heart Study Graduate Training and Education Center at Jackson State University (JSU-GTEC) was established in August 2013. Its goal is to train and educate students in cardiovascular disease (CVD) epidemiology through the Daniel Hale Williams Scholars (DHWS) Program. This two-year graduate certificate program was the first graduate training and education program attached to a major National Institutes of Health-funded cohort study. This program seeks to alleviate the shortage of trained professionals in cardiovascular epidemiology

by training graduate students while they complete their academic degrees. The program recruits students enrolled in science, technology, engineering, mathematics, psychology, sociology and public health programs at Mississippi universities.

JSU-GTEC is designed to build evidence-based approaches to train graduate students while implementing a robust education training program. Training focuses on developing proficiency in cardiovascular health knowledge through the DHWS Program. The program promotes public health and biomedical science education and provides enrichment opportunities to equip scholars with the capacity to contribute to the prevention of CVD disease and disability.

#### The Jackson Heart Study Field Center

The purpose of the Field Center is to conduct examinations of JHS participants, administer annual follow-up interviews, and confirm cardiovascular disease events and mortality among study participants. In 2018, the University of Mississippi Medical Center received a renewal of the Field Center contract for 2018-2024, with Dr. Adolfo Correa as Principal Investigator.

Under the new contract, the Field Center will: (1) conduct follow-up and clinical events ascertainment activities; (2) conduct a new exam of the JHS participants; (3) distribute research findings to scientific and lay communities; (4) continue novel epidemiologic research on cardiovascular and related diseases; and (5) serve as a resource to the scientific community for ancillary studies. With the support of the Coordinating Center, the Field Center will start planning Exam 4 and new ancillary studies scheduled to take place from February 2020 to November 2022, as well as conducting meetings with JHS participants to provide information on Exam 4 and new ancillary studies.

#### **The Jackson Heart Study Coordinating Center**

The purpose of the Coordinating Center (CC) is to provide overall study coordination, data management and analytical support for investigators and students collaborating with the JHS. In 2018, UMMC received a renewal of the Coordinating Center contract for 2018-2024, with Dr. Adolfo Correa as Principal Investigator. Additionally, the CC supports the Field Center in conducting activities related to cohort engagement.

Under the new contract, the JHS Coordinating Center will: (1) support the JHS Field Center in conducting a new exam (Exam 4) of the JHS participants; (2) provide continued support to the JHS Field Center in conducting annual telephone follow-up and clinical events ascertainment activities; (3) continue to enhance JHS's contribution to sciences by fostering scientific collaborations, providing expertise for analyzing and publishing JHS findings and facilitating access to JHS resources and expertise to interested researchers and students; and (4) support JHS Centers in activities that promote cardiovascular health in communities around Jackson, MS.

# JHS gains a second Graduate Training and Education Center



Dr. Bettina Beech, Principal Investigator, UMMC-GTEC

With its strong commitment to education and training, the JHS gained a second Graduate Training and Education Center housed at the University of Mississippi Medical Center (UMMC-GTEC) that is dedicated to creating a healthier Mississippi through research designed to cultivate the next generation of scientists and innovators. UMMC-GTEC is a research mentoring and training program for students in doctoral and health professional degree programs in Mississippi. It prepares program participants to start careers that can contribute to the discovery of new knowledge and share

this information with diverse stakeholder groups.

Dr. Bettina M. Beech serves as the principal investigator for UMMC-GTEC. Beech, founding dean of the John D. Bower School of Population Health and professor of population health science, is a leading expert in pediatric cardiometabolic risk factors among African American and Hispanic youth, as well as the recruitment and retention of racial and ethnic minority populations in research studies.

Each year the UMMC-GTEC selection committee will review applications and select eight doctoral and health professional students enrolled in health-related degree programs from participating universities in Mississippi to engage in our rigorous program in cardiovascular epidemiology, health disparities, and the responsible conduct of research. Individuals selected to participate in UMMC-GTEC will be Smith Scholars, named in honor of Dr. Robert Smith, one of Mississippi's most prominent healthcare heroes. Smith Scholars will strengthen their skills in quantitative methods and scientific writing and have opportunities to explore data from national datasets and the Jackson Heart Study. These experiences along with strong mentoring will complement and extend each Smith Scholar's doctoral and health professional programs, as well as establish and expand their professional networks. Those who complete the UMMC-GTEC program will be prepared to pursue career opportunities such as post-doctoral fellowships, residencies and positions as early-career academic faculty.

## **The Jackson Heart Study Community Engagement Center**



Principal Investigator, CEC

The Mississippi State Department of Health (MSDH) joins the Jackson Heart Study and will manage the new Community Engagement Center (CEC). The goal of CEC is to promote successful programs that encourage heart health and prevent disease. CEC sets a historic example for the way public health is practiced in Mississippi. As with many public health organizations, MSDH traditionally seeks funding to develop and carry out programs based on research and best practices. Through CEC, the

agency is combining a national research project with community-based programs.

CEC creates the potential for the study to reach beyond the metro Jackson area by using a community engagement approach that will affect communities statewide and nationally. To expand the reach of heart health messaging and health behavior change, CEC will collaborate with local, state and national partners that possess strong reach into varying segments of the community. Strategies will focus on implementing activities at municipal levels to reduce risk factors for heart disease, establishing Mayoral Health Councils, working with faith- and community-based organizations, establishing a Community Health Worker Network, training community advocates and implementing a Community Engagement Strategy and Communications Plan to assist with distributing health promotion messages based on JHS research.

Working closely with the other JHS Centers, CEC's other objectives are to perform community-based pilot studies or demonstration projects for CVD risk reduction that could be scalable to larger efforts and publish on the results and impact of CEC's work.

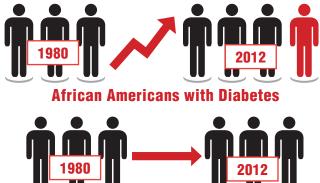
Through CEC's core values of working collaboratively, transparency, and "nothing about us, without us," these objectives will be achieved through a strategy that ensures that program planning, coordination, implementation, and evaluation are focused on outcomes that increase communication, partnerships, change in behaviors and sustainability.

# **Promoting lifestyle behaviors to reduce diabetes** among African Americans

Diabetes (high blood sugar) can cause heart disease and death.

The number of African Americans with diabetes or high blood sugar increased over time but stayed the same for non-Hispanic whites.

# **Problem (Purpose of the study):**



**Non-Hispanic Whites with Diabetes** 

### To understand why diabetes was increasing in African Americans:

IHS Investigators followed 3,252 IHS participants who did not have diabetes from 2000 to 2013 and looked at their lifestyle behaviors such as diet, physical activity and the amount of sleep they were getting.

## **Results of the Study:**

participants developed diabetes BETWEEN 2000 AND 2013.

**THESE** participants were LESS LIKELY TO Eat healthy. Be physically active, and Get enough sleep

## Lifestyle behaviors can help prevent the onset of diabetes or high blood sugar.



Eat Healthy



Be physically active



Get enough sleep



No smoking

Citation: Joseph JJ, Echouffo-Tcheuqui JB, Talegawkar SA, Effoe VS, Okhomina V, Carnethon MR, Hsueh WA, Golden SH. Modifiable Lifestyle Risk Factors with Incident Diabetes in African Americans. Am J Prev Med 2017;53(5):e165-e174. PMID: 28818415

# **Healthy Eating: Oven-Fried Green Tomatoes**

#### **Ingredients:**

Vegetable oil spray

2 large green tomatoes, about 2 inches high (about 1 pound)

1 tablespoon olive oil

½ cup yellow cornmeal (stone-ground preferred)

Paprika, to taste

¼ teaspoon salt

#### How to prepare:

- 1. Preheat the oven to 425°F. Line a baking sheet with aluminum foil and lightly spray with vegetable oil spray.
- 2. Cut and discard a thin slice from the top and bottom of each tomato. Cut each tomato into 4 slices, each about ½ inch thick.
- 3. Pour the oil into a shallow bowl or plate. Put the cornmeal in another shallow bowl or plate. Set the two bowls and the baking sheet in a row, assembly-line fashion.
- 4. Lightly coat a tomato slice with the oil, then with the cornmeal, shaking off any excess. Place the tomato slice on the baking sheet. Repeat with the remaining tomato slices. Sprinkle lightly with paprika and salt. Using the prongs of a fork, gently turn the slices and repeat.
- 5. Bake for 10 minutes. Turn the slices. Bake for 8 minutes, or until tender. Remove from the oven. Turn the slices. Let stand for 3 to 4 minutes so the tomatoes will soften slightly.

**Tip:** Be sure to use the prongs of a fork to turn the tomatoes because a spatula may scrape off the coating. Stone-ground cornmeal is preferred in this recipe because it provides a better texture.

Dietary Exchanges: 1 Starch, 1 Vegetable, 1/2 Fat

Source: Amos M, Booker M, Hughes NS, King A, Ritchie C, Shapero J, & Hancock T. (2008). The Best of Healthy Soul Food Recipes. The American Heart Association. Lincolnwood: Publications International.



Yield: 2 Tomatoes	
Per Serving:	
Calories	112
Total Fat	4 g
Saturated Fat	0.5 g
Polyunsaturated Fat	0.5 g
Monounsaturated Fat	2.5 g
Cholesterol	0mg
Sodium	158 mg
Carbohydrates	19 g
Dietary Fiber	2 g
Sugars 4 g	
Protein	3 g

## Calendar of Events • May-October 2019

May							June							
SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	
			1	2	3	4							1	
5	6	7	8	9	10	11	2	3	4	5	6	7	8	
12	13	14	15	16	17	18	9	10	11	12	13	14	15	
19	20	21	22	23	24	25	16	17	18	19	20	21	22	
26	27	28	29	30	31		23	24	25	26	27	28	29	
							30							
JULY							AUG	AUGUST						
SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	
	1	2	3	4	5	6					1	2	3	
7	8	9	10	11	12	13	4	5	6	7	8	9	10	
14	15	16	17	18	19	20	11	12	13	14	15	16	17	
21	22	23	24	25	26	27	18	19	20	21	22	23	24	
28	29	30	31				25	26	27	28	29	30	31	
SEPTEMBER				ОСТ	OCTOBER									
SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	
1	2	3	4	5	6	7			1	2	3	4	5	
8	9	10	11	12	13	14	6	7	8	9	10	11	12	
15	16	17	18	19	20	21	13	14	15	16	17	18	19	
22	23	24	25	26	27	28	20	21	22	23	24	25	26	
29	30						27	28	29	30	31			

• SLAM Workshop II:

(for students who will have completed 10th grade by June 2019): June 3-28  $\,$ 

• SLAM Workshop III:

(for students who will have completed 11th grade by June 2019): June 3-28

- UMMC GTEC First Year Summer Scholars Institute: June 24-28
- **SLAM Workshop I:**(for students who will have completed 9th grade by June 2019): July 8-26, 2019
- JSU GTEC Summer Institute: July 14-19
- JHS Working Group Co-Chairs Meeting: July 29-30
- JHS CEC Community Health Worker Training: July 29-August 2
- JHS Birthday Celebration: September 21

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The Jackson Heart Study Heartbeat Newsletter is published semi-annually (spring and fall) by the Jackson Heart Study Newsletter Team.



Dear JHS Participant,
We are pleased to inform you that
Exam 4 will begin in February
2020. Stay tuned for more details
in the next newsletter.

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