



# HEARTBEAT

A PUBLICATION OF THE JACKSON HEART STUDY  WINTER 2022

## Jackson Heart Study begins Exam 4

By Karen Bascom, UMMC Communications

Ella Miller says she “doesn’t like to be late for anything.”

So when the Jackson woman arrived for her appointment at the Jackson Heart Study (JHS) Exam Center in July 2021 ten minutes behind schedule, Miller was glad to see someone outside waiting to greet her.

“It made me feel important,” she said.

The JHS team had been waiting to see Miller and thousands of other participants for in-person visits for Exam 4, no longer delayed by the COVID-19 pandemic. Originally planned to start in 2020, it is the first time since 2013 that the study has brought its volunteer participants back for a full look at their health.

Or, as Miller says, “It’s been a minute.”



Miller

Exam 4 includes questionnaires on family and medical history, food intake, and brain health. Physical procedures include height, weight, blood pressure, and waist measurements, as well as blood and urine samples. Participants also receive an echocardiogram and electrocardiogram to look at heart function.

Dr. Karen Winters, director of the JHS Field Center, estimates more than 3,000 JHS participants recruited for Exam 1 are still alive. She and her team expect to bring back about 2,000 of them for this next phase.

“Our doors are open and we are going to keep the research going on African Americans and heart disease,” said Darcel Odom, an outreach specialist for the JHS.

“People have been eager to come in,” said Dorothy Horton, a clinical research nurse for the JHS. “After

some false starts [due to COVID-19], the staff has also been eager and ready for things to progress.”

Exam 4 includes new assessments related to aging, such as gait, grip strength, and memory.

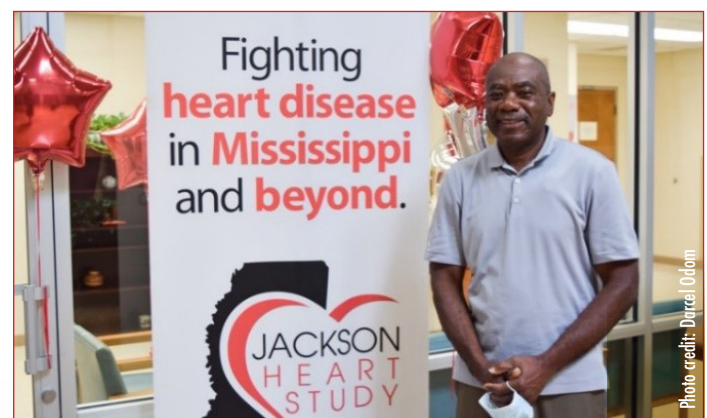
“It’s a joy,” Miller said. “It’s good to know that someone is concerned about the elderly and looking to keep us healthy.”

“We are excited to be back in business,” said Dr. Mario Sims, JHS Chief Science Officer. “Well, we were never really out of business.”

Exam 4 preparations began in 2018, when the National Institutes of Health renewed its funding. The JHS has continued to conduct follow-up calls with participants, publish research, train students and hold community events. They also hired new employees, conducted some participant questionnaires by telephone, rewrote exam protocols to meet new safety standards, and piloted the new procedures.

Woody Davis of Madison had his exam July 19, 2021. He said the team did a good job of limiting the risk of COVID-19 exposure, including symptom screening and mask-wearing during his visit.

“The JHS staff are good people: professional, courteous and upfront,” Davis said.



Davis

He joined the JHS because he wanted to help the study achieve its goals. He also saw the medical exams as an opportunity to help him to keep track of his health.

“I’ve learned a lot about the importance of exercise and food choices and how they make a big difference in long-term health,” Davis said. “I was already a

## Director's Corner



Dr. April Carson  
Director,  
Jackson Heart Study

Thank you for your well wishes and welcome messages. During the past few months, I have met several of you who came in for Exam 4, attended our Reunion Drive-Thru, called me, or ran into me around the city. I always enjoy meeting each of you and hearing your story about why you decided to join the Jackson Heart Study. I look forward to getting to know each of you in the coming years. It is my honor to be the new Director

of the Jackson Heart Study and to have the opportunity to work with each of you.

I want to take a moment to tell you a little bit about me. I was born in Atlanta and grew up in Augusta, Georgia, better known as the home of James Brown. I went to college at the University of Georgia and was first introduced to epidemiology during a summer undergraduate program sponsored by Morehouse School of Medicine and the Centers for Disease Control and Prevention. Although I had spent many days at the hospital during my high school and college years as my grandmother's heart failure worsened, it was that summer program that exposed me to public

health research and led me to pursue my graduate training in epidemiology at the University of North Carolina at Chapel Hill. For the last 15 years, I have worked with multiple cohort studies, including JHS and our sister study (ARIC), while on faculty at the University of Alabama at Birmingham. On a personal note, I have been married for 18 years (no kids or pets), my husband works for a non-profit headquartered in Atlanta that focuses on small business development, and we're both huge sports fans (Go Dawgs!!!).

As we get 2022 kicked off, we're looking forward to welcoming you back in for Exam 4. We are monitoring the changes with COVID-19 and will take all necessary precautions to ensure your safety. Thank you in advance for your flexibility as we may need to reschedule your exam or make alternate accommodations depending on the local community spread.

There is no JHS without you and we appreciate your dedication to the study. On behalf of our partners at Tougaloo College, Jackson State University, the University of Mississippi Medical Center, and the Mississippi State Department of Health, we thank you for your steadfast commitment that has allowed us to advance science, train the next generation of underrepresented scholars, and promote health in the local community. —

## Jackson Heart Study begins Exam 4 . . . continued from front

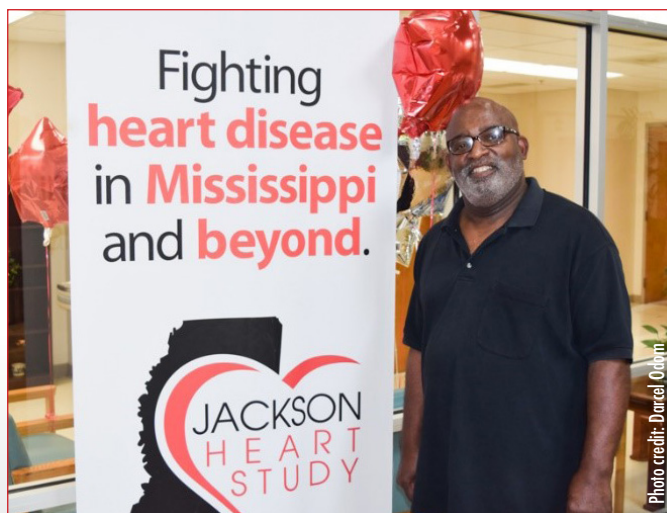
health-oriented person, and the Jackson Heart Study reinforces those same things."

"My grandparents died of heart attacks, so I have a history of heart disease in my family," said participant Douglas Purnell of Jackson, who also finished his exam during the first week. "I tell people that I joined the Jackson Heart Study for me, because nobody loves me more than I love myself."

Sims says the study results will benefit JHS participants and the local and national scientific communities.

Purnell said helping the JHS succeed is important for African Americans in Jackson and beyond.

"Our hearts get affected in all kinds of ways," he said. "This study is going to benefit future generations, and I pray that they keep it going."



Purnell



## JHS Participant: A Legacy of Giving

By Darcel Odom



Morris

Twenty years ago, Ms. Wilma Morris was riding down Medgar Evers Boulevard when she heard the famous Frank Bluntson announce on the radio, "Don't let people be hungry for Thanksgiving!"

That message stuck in her spirit and she thought, "Why do we love on folks more during the holiday season and not all through the year?"

She asked her pastor and he explained that it was the season! She remembered her father told her that as well. With her mind still pondering, an angel told her to stop by Fire Station 20 on Medgar Evers. She met Sergeant Spann outside the station and he invited her inside where they chatted. She asked him, "If I cook for you gentlemen, will you eat it?"

That chance meeting was the beginning of a unique friendship and labor of community service that has spanned 20 years. Ms. Morris is now a retired educator, but at the time she began cooking for Station 20 she was teaching at Lanier High School. Ms. Morris's famous cooking got the guys talking and bragging among the other stations. Ms. Morris got word and later started cooking for Stations 26 and 10. In total, she was cooking three meals for 42 folks. Ms. Morris gave from her heart and her kitchen, never asking for a donation to prepare food for those City of Jackson Fire Stations. However, she is blessed beyond measure with over 42 folks making sure she is okay weekly.



Morris with firefighters from Station 20

Over the years, Ms. Morris has had to cut back on weekly meals, and recently suffered a back injury from a car accident. Her granddaughters Olivia, Delisa, and ShaMya now help her in preparing the meals. The legacy of community giving is being passed

on to them. The message of Ms. Morris's actions shows us that Thanksgiving is an everyday thing and that taking care of your community



Morris's granddaughters

through an act of giving, whatever it may be, will help your community grow more in love and peace. The Jackson Heart Study salutes Ms. Wilma Morris for a Legacy of Giving!

## JHS Reunion Drive-Thru Event

JHS staff members were excited to see and greet participants and community members during the JHS Reunion Drive-Thru event. It has been over a year since we have had the opportunity to see and honor our participants. Those in attendance received JHS branded items and other giveaway items that were donated from various community partners and organizations. Participants also received canned goods donated by the

Mississippi Food Network and had a chance to meet the new JHS director, Dr. April Carson. In addition, Open Arms Healthcare Mobile Clinic was on-site providing COVID-19 vaccines. This was a wonderful opportunity to engage with our participants and we look forward to planning other community events in the future.



JHS Reunion Drive Thru Participant with Carson



JHS Reunion Drive Thru Participant

## Jackson Heart Study Community Engagement Center (CEC)

*Telehealth Diabetes Prevention Intervention for the Next Generation of African American Youth (TELE-GEN) Pilot Study*



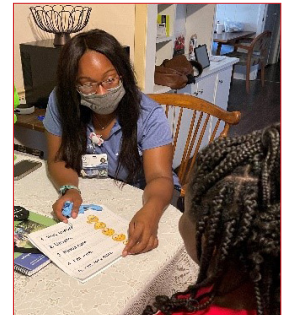
Diabetes testing

Jackson Heart Study research shows diabetes is a growing epidemic affecting many African American families in Mississippi. Lifestyle interventions can prevent diabetes for many adults, but few good approaches exist for youth diabetes prevention. UMMC is helping the CEC put research into action by evaluating a telehealth lifestyle

intervention for African American children 8-11 years old and their parents, both of whom are at high-risk for diabetes. The plan is based on the Diabetes Prevention Program and tailored to meet the needs and wants of African American families in Mississippi. A trained lifestyle coach

meets with families using iPads with Wi-Fi and cellular connectivity provided by the study.

Families meet weekly for eleven core sessions and then monthly for four maintenance sessions. The intervention targets parents' confidence in making healthy dietary and physical activity changes for their family and includes a focus on family health values and parenting skills to promote healthy lifestyle changes in kids. The goal of the study is to help our children and their parents achieve a healthy weight. Nineteen families enrolled in the study. Investigators learned that parents are interested in making lifestyle changes to prevent diabetes and that they are finding success with the support of the Lifestyle Coach. Families completed the study in December 2021.



Maintenance session

## Undergraduate Training and Education Center- Tougaloo College

The Jackson Heart Study scholars participated in a National Institutes of Health (NIH) virtual site visit July 27-29, 2021. Before the COVID-19 pandemic, JHS scholars and staff would travel to Maryland to visit the NIH. This visit has become part of the training program and has been a truly memorable experience for JHS Scholars over the years. However, the virtual visit did not disappoint, as it was informative, engaging and an overall wonderful experience for scholars.

The three-day virtual visit was packed with invaluable resources for students, including scientific presentations and engaging speakers. Scholars learned about the cutting-edge science that goes on at the NIH and opportunities at the NIH such as internships, scholarships, and training. For the first time, our JHS scholars had the opportunity to present their student research during the virtual visit in the presence of NIH leadership.

Students engaged with Dr. Gary Gibbons, Director of the National Heart, Lung and Blood Institute, and Dr. Eliseo Perez-Stable, Director of the National Institute on Minority Health and Health Disparities. Students were

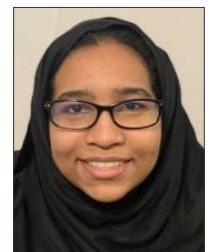
able to participate in a lively question and answer session with these leaders.



Paige

“The NIH visit was very informative. In the amount of three days, the knowledge I gained was powerful! Everything that was learned from the information presented and the wise words delivered I can honestly say I have learned a lot and will be used in all of my future endeavors!”  
- Scholar She’Kyra Paige

“In my opinion, the visit was an invaluable opportunity to see the current leaders of medicine and research, and it was so inspiring seeing the diversity of ideas among the academic professionals and experts affiliated with the NIH. I was able to clearly visualize my path towards accomplishing my goals, and all of my questions were answered with both wisdom and compassion,” - Scholar Monia Zein



Zein

## Graduate Training and Education Centers -

### Graduate Training and Education Center - Jackson State University

JSU would like to highlight the accomplishments of two Daniel Hale Williams Scholars Program alumni:



Smith

- **Dr. Princeton Smith, MS, PhD**, became a licensed clinical psychologist on August 23, 2021.

- **Mr. Jerome Bronson** was selected as a Harvard University Fellow in the Department of Molecular and Cellular Biology, June 1, 2021.

He will collect information on “Racism as a Public Health Crisis” for Harvard University’s Lab Xchange (new digital learning platform for STEM high



Bronson

school students). Bronson was also selected as the 2021-22 Thurgood Marshall College Fund Graduate Scholar, where he received a scholarship for the Doctor of Public Health Program at Jackson State University. In addition, he recently submitted his manuscript proposal

examining the comparison between artificial intelligence and standard echocardiographic measure in detecting subclinical cardiovascular disease in the Jackson Heart Study. -/-

### Graduate Training and Education Center - University of Mississippi Medical Center



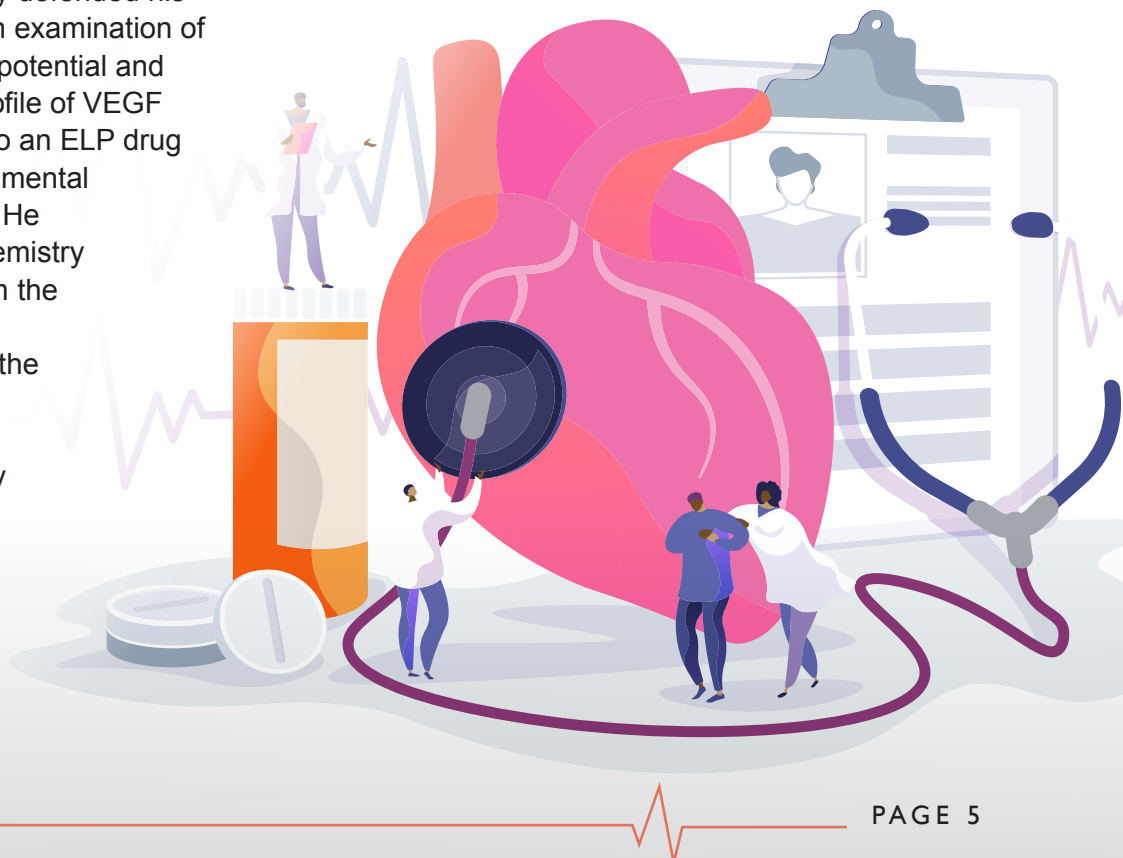
Waller

**Jamarius P. Waller** is a member of the second cohort of Robert Smith, MD Scholars at the UMMC-GTEC. He is an MD/PhD student at UMMC and successfully defended his dissertation, “An examination of the therapeutic potential and toxicological profile of VEGF proteins fused to an ELP drug

carrier” to earn his PhD in experimental therapeutics and pharmacology. He previously earned a BA in biochemistry with a minor in mathematics from the University of Mississippi.

Waller’s research centers on the effects of Vitamin D sufficiency status on the development of diabetes. His focus is specifically on African Americans, a population that is disproportionately affected by hypovitaminosis D. Jamarius hopes to continue his career as a physician-scientist

pursuing a deeper understanding of the mechanisms of different disease processes while also working to discover new and innovative therapies. -/-





## Cigarette Smoking among Blacks Decreases Blood Flow

### Purpose of the study

Fatty deposits in the blood vessels can decrease the flow of blood to the legs and arms. When this happens, it is called peripheral arterial disease (PAD). PAD is more common among African Americans than White Americans and is a risk factor for having a heart attack or stroke. Cigarette smoking is one of many factors that can lead to PAD. Jackson Heart Study researchers examined the relationship between cigarette smoking and smoking intensity with early signs of PAD, such as decreased blood flow to the limbs and calcium buildup in the aorta - the main artery that moves blood away from the heart.

### Major findings

- Compared to non-smokers, current smokers
  - had greater narrowing of the arteries in their legs and arms, and
  - were more likely to have calcium buildup in the aorta
- Those who smoked more than 20 cigarettes daily (1 pack) were more likely to have greater narrowing of the blood vessels in the limbs and calcium buildup in the aorta than those who smoked fewer cigarettes.



### Take away message

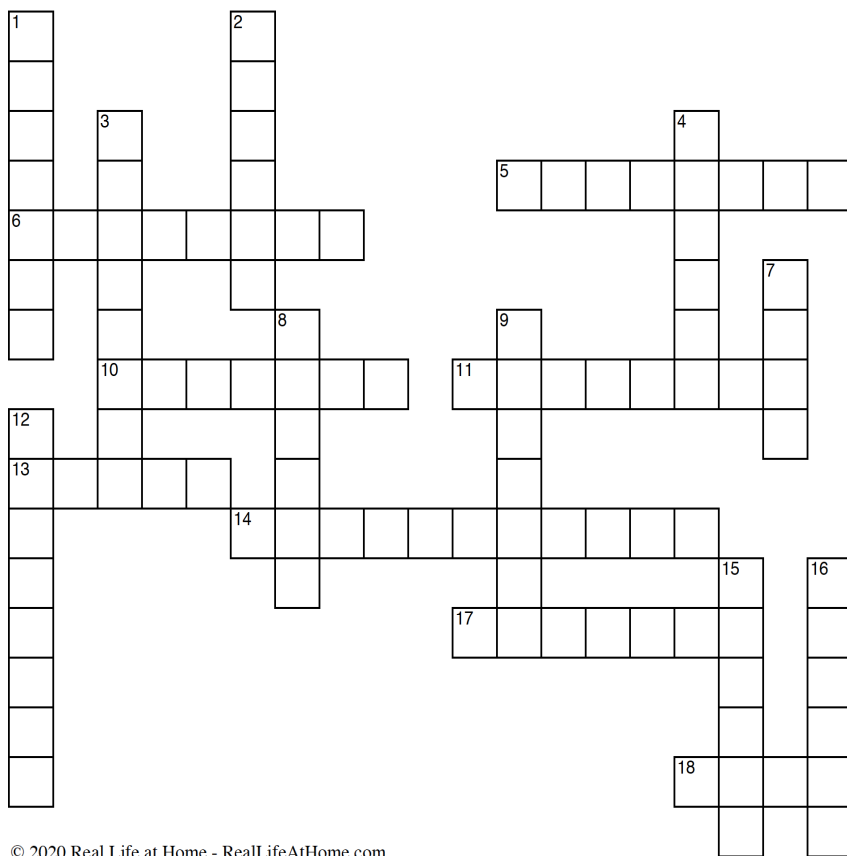
Cigarette smoking is related to decreased blood flow to the legs, arms, and main artery of the body among African American men and women. These findings highlight:

- The importance of the connection between smoking, peripheral arterial disease, and heart health;
- The importance of programs and treatments available to help people to quit smoking which ultimately reduces the chance to develop PAD, heart attack, or stroke.

**Citation:** Clark D 3rd, Cain LR, Blaha MJ, DeFilippis AP, Mentz RJ, Kamimura D, White WB, Butler KR, Robertson RM, Bhatnagar A, Butler J, Correa A, Benjamin EJ, Hall ME. Cigarette Smoking and Subclinical Peripheral Arterial Disease in Blacks of the Jackson Heart Study. *J Am Heart Assoc.* 2019 Feb 5;8(3):e010674.

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# Black History is American History



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**WORD BANK:** Colvin, Johnson, Marshall, Mississippi, February, New York, Walker, Obama, Robinson, Coleman, Virginia, Du Bois, King, Rice, Hughes, Angelou, Tubman, Douglass.

## ACROSS

- 5 This month is known as Black History Month
- 6 He was the first African American U.S. Supreme Court Justice
- 10 Shirley Chisholm was the first black woman elected to the U.S. House of Representatives. She represented this state.
- 11 He was the first African American to play Major League Baseball.
- 13 He was the first black president of the United States
- 14 Hiram Rhodes Revels was the first African American elected to the U.S. Senate. He represented this state.
- 17 This poet, award-winning author, and Civil Rights activist wrote an acclaimed memoir called I Know Why the Caged Bird Sings
- 18 She was the first black woman to serve as U.S. Secretary of State

## DOWN

- 1 She was the first licensed African American female pilot
- 2 She escaped from slavery and then became one of the most celebrated leaders of the Underground Railroad
- 3 In the 1967 case of Loving v. \_\_\_\_\_, the Supreme Court ruled that prohibiting interracial marriage was unconstitutional.
- 4 This leading figure of the Harlem Renaissance of the 1920s was a prolific writer. One of his most famous poems is Harlem ("What happens to a dream deferred?")
- 7 This Civil Rights leader advocated nonviolence and wrote and delivered the famous "I Have a Dream" speech
- 8 She refused to give up her bus seat to a white man nine months before Rosa Parks famously did
- 9 He was the first African American World Heavyweight Champion in boxing (1908)
- 12 He was a leader in the abolitionist movement, an early champion of women's rights and wrote about his life in slavery in the book 'Narrative of the Life of Frederick \_\_\_\_\_, an American Slave.'
- 15 He was the first African American to earn a Ph.D. and was one of the founders of the NAACP
- 16 She was the first black millionairess in America and invented the world's first hair-straightening formula

## Vegetable Turkey Soup

**Calories:** 224 per serving, **Protein:** 26g per serving, **Fiber:** 7g per serving



### Ingredients:

- 1 lb. ground skinless turkey breast, broken up
- 3 large carrots (peeled, sliced)
- 3 medium zucchini (sliced)
- 1 small onion (chopped)
- 1 can no salt added tomato sauce
- 1 can no salt added cannellini beans (rinsed, drained)
- 2 medium garlic cloves (minced)
- 1 tablespoon dried Italian seasoning (crumbled)
- 1/2 teaspoon salt
- 1/2 teaspoon pepper
- 4 cups fat-free, low-sodium chicken broth

### Directions:

In a large bowl, stir together all the ingredients except the broth. Transfer the soup to a 1-gallon resealable plastic freezer bag. Place the bag flat in the freezer and freeze.

### Directions for Cooking

Thaw the bag overnight in the refrigerator. Pour the contents of the bag into a slow cooker. Pour in the broth, stirring to combine. Cook, covered, on low for 8 hours, or until the turkey is no longer pink.

**Source:** American Heart Association. <https://recipes.heart.org/en/recipes/vegetable-turkey-soup>

Share your favorite heart-healthy recipe with us at [jhsnewsletter@umc.edu](mailto:jhsnewsletter@umc.edu) or mail to:

Jackson Heart Study, Attn: Newsletter Team, 350 West Woodrow Wilson Avenue, Suite 701, Jackson, MS 39213



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



### Upcoming Events:

JHS participants are invited to take part in the mobile food distribution events



sponsored by UMMC EversCare.

For more information, call 601-815-3535.

**Dates:** Mar.16, April 20, May 18 and June 15

**Time:** 10 a.m.-1 pm.

**Location:** 2548 Livingston Road, Ste 1, Jackson, MS 39213

The Jackson Heart Study (JHS) is supported and conducted in collaboration with Jackson State University (HHSN2682018000131), Tougaloo College (HHSN2682018000141), the Mississippi State Department of Health (HHSN2682018000151) and the University of Mississippi Medical Center (HHSN2682018000101, HHSN2682018000111 and HHSN2682018000121) contracts from the National Heart, Lung, and Blood Institute (NHLBI) and the National Institute on Minority Health and Health Disparities (NIMHD). The authors also wish to thank the staffs and participants of the JHS.





# Jackson Heart Study Exam 4 Additional Research Studies

We look forward to seeing you soon during your Exam 4 visit. By now, you have probably heard that there are additional research studies that you will have a chance to participate in during a return visit following Exam 4. Here's your chance to read more about these additional research studies. More details will be shared with you when you visit the Exam Center.

Name of Study	Description of Study
<p><b>Ambulatory Blood Pressure Monitoring Study</b></p>	<p>This study will evaluate whether blood pressures taken by an ambulatory blood pressure monitoring (ABPM) device are more accurate than blood pressure measured in an exam room by staff. The first visit includes blood pressure readings taken by staff and fitting for the ABPM device, which will be worn for 24 hours. The ABPM will be returned to the JHS Exam Center the next day.</p>
<p><b>Collaborative Cohort of Cohorts for COVID-19 Research Study</b></p>	<p>This study wants to learn how COVID-19 affects heart disease. Participants will complete a questionnaire and be given a small kit to collect a blood sample to be mailed to our central lab. The lab will test for antibodies to COVID-19.</p>
<p><b>Resistant Hypertension Study</b></p>	<p>This study will investigate why blood pressure might be hard to control. This study will require two visits about two days apart. Participants will complete a brief questionnaire related to how they take their blood pressure medication; wear wrist and sleep monitors 1; and collect a 24-hour urine specimen.</p>
<p><b>Sensory Study</b></p>	<p>The study will evaluate how the body may respond to pressure and its effect on heart health. A questionnaire on pain experiences and a pressure response test will be administered to see how the participant responds to pressure on their skin.</p>
<p><b>Stand-Up Study</b></p>	<p>This study will evaluate how standing affects heart health. Participants will complete questionnaires, wear a device on the thigh to monitor activity for 7 days, complete a log, and return the device and log by mail. This study requires an initial visit and a follow-up visit in 2 years.</p>
<p><b>24-Hour Activity Study</b></p>	<p>This study will evaluate how movement during the day and sleep at night affects brain health. Participants will wear monitors around the wrist and waist and complete logs. Participants will return the logs and the devices by mail after wearing the monitors for 8 days.</p>