



## The Jackson Heart Study: Toward a More Perfect Union

(Herman A. Taylor, Jr., MD, MPH, FACC, FAHA)

Dear Jackson Heart Study Participants,

The purpose of this letter is to share a description of our reorganization of the study since December 2007, and the current status of the study including selected recent achievements.

In July 2007, the Jackson Heart Study (JHS) was visited by a Site Visit Team comprised of representatives from the Project Office of the National Heart Lung and Blood Institute, and the JHS Observational Studies Monitoring Board to review operations at the JHS. The objectives of their visit included identifying barriers and discussing solutions to ensure the objectives of the study are met. At the end of their visit, several management issues had been identified and benchmarks set for improvement. In December of 2007, convinced that changes in the organization would improve the chance for success in



Dr. Taylor presenting during Community Monitoring Board 2009.

achieving those goals, a new structure for the JHS was approved by the National Institutes of Health, the Presidents of Jackson State, Tougaloo College, and the Vice Chancellor of the University Medical Center. The chief features of this new organization included 1) a more unified governance structure with clearer lines of reporting and accountability; 2) a focus on producing research results (this is measured mainly by the number of scientific articles our researchers produce), and 3) a continuation of our efforts directed at the community and training for our young people.

The reorganization is helping us achieve our goals. There have been substantial improvements in high priority areas; specifically in the number and quality of publications, and in the productivity of our collaborations with national experts and other institutions. Our success with publishing our work has soared.

The number of national presentations climb steadily. These trends have meant an increase in prominence and respect in the research community. But much more importantly, they mean that we are doing our job better for you—because the more new knowledge we produce, the more we are moving towards a healthier future for African Americans and others threatened by heart and related diseases. We still have much to do and far to go, but we have substantially quickened the pace.

I hope you all will support us in our continued efforts at improving the quality and the quantity of our work. We recognize that any change naturally brings about questions, and I invite you to write or call 601-979-8744 and speak directly with me.

In closing, it is **key** for all to know that the JHS is still a 3-school project partnership. There have been **no** changes in the amount of influence or money that each of the 3 institutions have. The Presidents of Jackson State, Tougaloo College and the Vice Chancellor at UMC have spent a lot of time discussing the new plan and have endorsed the reorganization as a step forward for the JHS. As director of the Study, I pledge to you that I will do all within my power to continue to focus the Study on the aim of improving the health and lives of our people.

This edition of the newsletter highlights last year's Celebration of Life and other Jackson Heart Study community events. Additionally, we invite you to the September reunion/birthday and the February Celebration of Life. **You** are the heart of the Jackson Heart Study, without you, there would be no study. I thank you and your families for your participation and your support through the years. In 2010, we will celebrate our 10<sup>th</sup> anniversary. Stay tuned to your newsletter for exciting information about our 10<sup>th</sup> year celebration!

Sincerely,

Herman A. Taylor, Jr., MD, MPH, FACC,  
FAHA

Professor of Medicine, Univ. of MS  
Medical Center

Principal Investigator, Jackson Heart  
Study

Shirley Professor for the Study of Health  
Disparities

THE HEART OF THE MATTER

## CommUNITY Shows Up for Jackson Heart Study 9<sup>th</sup> Annual Celebration of Life!

(Donna Antoine-LaVigne, MEd, MPH, PhD, Daniel Sarpong, PhD)

The Jackson Heart Study's 9<sup>th</sup> Annual Celebration of Life once again proved to be a fun-filled, informative family affair! The Celebration, open to the community, was held at the Jackson Medical Mall, UMMC Conference Center on Saturday February 28, 2009. The purpose of the Celebration of Life!, one of the largest JHS community events, is to celebrate the legacies of our African American ancestors and families. This year's theme, "We are excited about Exam 3!", focused on the clinical components of the



June 2009 Community Monitoring Board participant.

Jackson Heart Study's 3<sup>rd</sup> Exam. Doors opened at 8:00 A.M. with blood glucose, blood pressure and cholesterol health screenings provided by community partners: Hinds Community College Student Nurses Organization, St. Dominic's Health Services Inc., Central MS Health Services, Community Organization for Health Awareness (COHA), and the MS Diabetes Foundation. Over 300 friends, participants and other supporters attended the event.

Three major components of Exam 3 were discussed at the "Celebration: Magnetic Resonance Imaging (MRI), Importance of Medication Adherence and Cognitive Functioning and its Relationship and to Heart Disease. Dr. Frances Henderson, Deputy Director of the Jackson Heart Study provided an overview of all components of Exam 3. Local experts, Drs. Bertrand Mock-Mohamed (cardiologist), Wanda Keahey (pharmacist), and Hursie Davis-Sullivan

(family medicine physician), served as panelists focusing on three elements of the Exam: cardiology (MRI), pharmacy and cognitive functioning respectively. Participation was the rule of the day as audience members and panelists engaged in lively, interactive discussions!

**MRI** — Dr. Mock-Mohamed shared that MRI safely provides the capability to assess cardiac structure and function in asymptomatic (free of symptoms) individuals. Specifically, the MRI will help researchers:

1. Determine people at higher risk for heart attack, stroke, and congestive heart failure.
2. Find methods for identifying people at greater risk of developing heart disease; thus, intervening earlier to treat and prevent stroke, heart attack, congestive heart failure in a more cost-effective manner.

**Medications** — The Medication Survey (MSR) is part of the core data collection instruments and is administered to all participants during Exam 3. The instrument surveys the participant's use of any prescribed or over-the-counter medications, including vitamins, mineral supplements or other herbals or home remedies, and aspirin. The survey also asks participants how they usually take their medications. The survey assesses how participants were taking their medications two weeks preceding the interview. Dr. Keahey's presentation also encouraged compliance by stressing that:

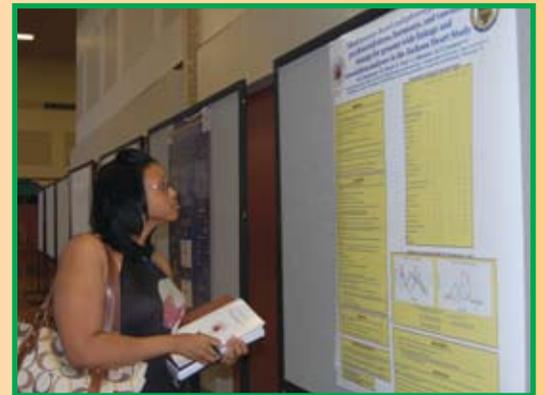
1. All medications should be taken only as prescribed by your health care provider.
2. Individuals should talk to their health care provider before making any changes in how they take their medications.

**Cognitive Functioning** — There is indication of a link between cognitive functioning and heart disease; however, because the Jackson Heart Study has several older members and a high stroke presence, we can better understand the relationship between cognitive function-

ing and heart and stroke disease. The mental tasks assessed in this test are not an assessment of intelligence.

Knowledge gained from the cognitive function assessment may indeed serve as a screening method for detecting earlier cognitive decline, which may be linked to heart disease risk factors such as hypertension and diabetes. Dr. Sullivan discussed the differences in various forms of dementia, including Alzheimer's and mental decline related to strokes and changes in the blood vessels.

Celebration of Life continues to serve as a community outreach venue where the investigators and staff of the Jackson Heart Study can present new discoveries in diagnosing, treating and curing heart disease. We sincerely thank our community partners, friends, and other supporters for helping us accomplish this. Without your demonstrated commitment to and support of the JHS, we could not succeed.



2009 Community Monitoring Board attendee



Sara Tribune, Lavon Young and Sarah Buxbaum discuss a poster at 2009 Community Monitoring Board

## Jackson Community Health Advisors

(Lashondra Upkins, MPH)

“There’s time enough, but none to spare.”  
— Charles W. Chesnutt. This quote is so enlightening when we think about heart disease, many people think that we have all the time in the world, but in reality we shouldn’t waste any of that precious time. This is one of many quotes found in the “With Every Heartbeat is Life” Training that is currently being used with all five Community Health Advisor groups. The Jackson CHAN specifically is indeed having a wonderful time every month covering the different sessions. Some of the sessions focus on cholesterol, blood pressure, healthy weight, and physical activity. Several members have even had the opportunity to share their personal experiences with heart disease. They have truly been educational but fun at the same time. These trainings are designed to empower the Community Health Advisors to go out in their respective communities and share the valuable information with their neighbors and friends, all in an effort to reduce the amount of cardiovascular disease among African Americans in the state of Mississippi.



Rankin Community Health Walk participants

Not only have the Jackson CHAN members been learning, but setting examples. On August 16, 2008 the Jackson CHAs hosted a Jackson CHAN Health Walk in the Jackson Medical Mall. Those who participated were challenged to a 3K walk around the Medical Mall. The event started with blood pressure screenings, a thorough warm-up, and off we went! The walk was certainly a success, and our hope, for those that participated, was to incorporate physical activity into their everyday lives. Also in October of 2008, the Jackson CHAs, for the first time, hosted a Blood Pressure Check day in the Jackson Medical Mall. We set up a couple of tables and chairs directly in front of Piccadilly, purposely

around lunch time. We wanted to be sure to catch those individuals coming and going in the Medical Mall and provide a free blood pressure screening. It was also a good opportunity to provide education and literature on the harmful effects of hypertension on one’s well-being. All in all, if we changed one person’s attitude, we definitely served our purpose.

It is certainly an exciting time for the Jackson Heart Study and all of the area Community Health Advisor groups! The Jackson CHAN held several events in 2009 also. On Wednesday July 15, 2009 we hosted another Blood Pressure Screening in front of Piccadilly. It was held from 10:00 A.M.–1:00 P.M. Also on Saturday August 22, 2009, the Jackson CHAN hosted an educational session in the UMC Conference Center that focused on the benefits of healthy eating.

The community is more than welcome to come and take part in all of the events we coordinate. For more information about future Jackson CHAN activities please call me at 601-979-8708. On behalf of the Jackson Community Health Advisors, we hope you have a **heart healthy day!**

## JHS Community Calendar

ACTIVITY	DATE(S)	LOCATION	CONTACT INFORMATION
9th Annual Conference Eliminating Health Disparities—Obesity	October 8–9, 2009	Hilton Jackson Convention Center 1001 East County Line Road Jackson, Mississippi	601-979-1102
Partnership for Community Awareness and Health Education Meeting	October 14, 2009 11:30 A.M.–1:00 P.M.	Jackson Medical Mall Community Meeting Room	Darcel E. Thigpen (601-979-8709) Or LaShondra Upkins (601-979-8708)
Symposium for Junior Investigators on Psychosocial and Neighborhood Predictors of Cardiovascular Risk in African Americans	October 15–16, 2009	Mississippi E-Center, Convention Hall, Jackson State University	Melveta Bender Brown (601-979-8739)
Community Forum: “Unnatural Causes... Place Matters”	October 19, 2009 11:30 A.M.–1:00 P.M.	Jackson Medical Mall Community Meeting Room	Cynthia Dorsey Smith (601-979-8730)
JHS Community Health Advisors’ Holiday Celebrations	November & December 2009	Call for Location Information	Darcel E. Thigpen (601-979-8709) Or LaShondra Upkins (601-979-8708)

## Rankin & Canton Community Health Advisor Networks

(Darcel Edwards Thigpen)

Community Health Advisors Network is a mouthful, but the concept is so rewarding. A community health advisor is a natural helper who volunteers to help improve their community. The Rankin County (Pearl) Community Health Advisors and the Canton Community Health Advisors are on a mission to help their communities become heart healthy. Each group has worked on preventive methods to help increase the awareness of cardiovascular disease in their communities. There have been community walks, community health fairs, presentations to various organizations, regarding Know Your Numbers (KYN) that list the risk factors associated with heart disease. The Community Health Advisors (CHAs) are also actively working in the schools, Boys & Girls Club (Canton) and daycares to edu-

cate children and their parents about how to make healthy lifestyle changes.

Each group has established partners in their prospective community to help spread the word regarding heart health in their communities. The established partnerships



LaShondra provides a blood pressure screening.

help open doors that might otherwise be closed to the community workers.

The CHAs usually meet once a month to receive training and, discuss new projects and goals for the organization. Some of the CHA's have also made lifestyle changes by walking in the community parks, or changing the way they prepare their food. The Rankin County (Pearl) CHAs has a member, 92 years of age, that walks 3 to 5 days a week at the local community park in Pearl, MS.

If you are inspired by all of the activities the Rankin County and Canton Community Health Advisors are involved in, we invite you to join us at our monthly planning meetings or during our community events. For information regarding either please call me at 601-979-8709.

## Jackson Heart Study ETP Scholars 2009 Trip to Washington DC



Front Row: Edward Lyles, Dr. Chitra Krishnamurti, Cheryl Nelson, Mary Crump, Tamera Hughes, Dr. Susan Shirin, Dr. Helena O. Mishoe, & Dr. Nimr Fahmy  
Second Row: Morgan Woerner, Dr. Nara Gavini, Grejika Abram, Ashley Poullard, Zakia Butler, Jordan Henley  
Third Row: Daren Walters, Janae Roberts, JeMarcus Welch, Maurice Crawford, Obie McNair, Jasmine Washington, and Edjohnier Phillips

The JHS Scholars visited the National Institutes of Health (NIH) July 28-29, as part of the Jackson Heart Study training program, an initiative supported by the Office of Research Training and Minority Health (ORTMH), Office of the Director, National Heart, Lung, and Blood Institute (NHLBI). During their two-day tour of the campus, the 12 students had a wonderful opportunity

to engage with leaders throughout the NIH as staff from various Institutes and Centers spoke to the students and shared their many experiences with them. They also visited several NHLBI laboratories.

Among the celebrated leaders, students also met with Tougaloo College Alumni including Office of Communications and Public Liaison Branch Chief Calvin Jackson

and National Cancer Institute Research Fellows Drs. Audray Harris and Kimberly Jackson, all of whom shared stories with the students and reflected on how their experiences at Tougaloo College helped define who and where they are today as members of the NIH community.

## Polyphenols in Olive Oil and Wine may Decrease Risk of Cancer and Heart Disease\* (Matthew Walker and Dr. Clifton Addison)

Researchers at the Catalonian Institute of Oncology in Spain suggest that extra virgin olive oil may fight breast cancer. Their research suggests that olive oil contains antioxidants known as polyphenols that preserve healthy cells. Antioxidants work in the body to fight harmful cells known as free radicals.

Free radicals are unstable atoms within cells that cause damage to other cells because of their electron-stealing properties. Normally, an atom contains balanced numbers of protons, neutrons, and electrons, and is therefore stable. When an unstable free radical comes in contact with a stable atom, it steals one of its electrons in an attempt to become stable. Due to its interaction with a free radical, the once-stable atom becomes unstable. This process is perpetuated as more electron-stealing free radicals are formed. Research proves that free radicals are responsible for cell damage, DNA mutation, and cancer. Free radicals harm our bodies through oxidation.

Oxidation is the destruction, or burning, of an unprotected substance or tissue during its interaction with another object.

This is due to the loss of one or more electrons that occurs during the meeting of the objects. An example of oxidation is the rusting of the unprotected metal of a car. Generally, the paint and wax that are applied to the metal of a car act as barriers against the destructive properties of the oxygen in the air. When left unguarded, the oxygen molecules react with the metal, causing it to weaken and rust.

In relationship to our bodies, oxidation of the unprotected atoms in our cells can occur through their interactions with free radicals. We can stop the damage of our cells by increasing our levels of antioxidants. Antioxidants are molecules in the body that fight the oxidation, or destruction, of good molecules in the body. They act as the paint and wax on the metal of a car. The researchers have found that the antioxidants in extra virgin olive oil, known as polyphenols, defend the body from free radicals. Researchers have found that polyphenols disrupt cancer cells. They have also found that the polyphenol possesses properties that kill tumors, both from cancers that have

estrogen receptors and from those that lack the estrogen receptors.

Another study conducted by researchers involved in the IMMIDIET program suggests that polyphenols in wine—also a source of antioxidants—have an additional effect on omega-3 fatty acids in our bodies. As you know, we get most of our heart-healthy omega-3 fatty acids from our fish intake. Through their study of the alcohol consumption and diet habits of research participants from England, Belgium, and Italy, the IMMIDIET researchers found that the polyphenols in wine amplify our bodies' levels of omega-3 fatty acids. Omega-3 fatty acids protect consumers from coronary heart disease and sudden cardiac death.

These studies prove that antioxidants are excellent for the body. The antioxidants found in extra virgin olive oil and in wine shield the body from cancer-causing free radicals. When combined with the heart-healthy components of omega-3 fatty acids, the antioxidants decrease the body's risk of coronary heart disease and sudden cardiac death.

*\*This article was adapted from two research studies. The first study was entitled "Olive Oil May Fight Breast Cancer" and reported in the December 8, 2008 issue of the journal BMC Cancer by Drs. Javier Menendez and Antonio Segura-Caretero. The second study was the IMMIDIET study, funded by the European Union and conducted by Jozef Arnout, Frank Buntinx, Francesco P. Cappuccio, Pieter C. Dagnelie, Michel de Lorgeril, Vittorio Krogh, Alfonso Siani, & Kathrynne Holden. It was published in the January 2009 issue of the American Journal of Clinical Nutrition, an official publication of the American Society for Nutrition, and is available on the web ([www.ajcn.org](http://www.ajcn.org)).*

## Poached Salmon\*

### Salmon

- 4 5-ounce salmon steaks
- 3 cups water
- 4 black peppercorns
- 1 lemon, thickly sliced
- 3 parsley sprigs
- 1 small onion, thickly sliced
- 2 bay leaves

### Spicy Tomato Relish

- 2 medium tomatoes, chopped
- 2 tablespoons yellow onion, finely chopped
- 2 tablespoons fresh parsley, finely chopped
- 1 teaspoon red pepper flakes, or to taste
- ¼ cup red wine vinegar
- 2 tablespoons olive oil
- black pepper, to taste

1. For relish, combine all the ingredients in a bowl and set aside.
2. Using a pan large enough to hold salmon steaks, bring water to a boil and add peppercorns, lemon slices, parsley, onion, and bay leaf.
3. Lower heat to a gentle simmer, cover, and let flavors infuse for 5 minutes. Add salmon steaks and make sure they are covered with water. Add additional water if needed.
4. Cook, uncovered, for 10 to 12 minutes or until fish is just tender. It will flake easily when tested with a fork. Never let water boil or toughen fish.

Yield:	4 servings
Serving size:	1 steak and ¼ cup relish
Calories:	246
Total Fat:	10 g
Saturated Fat:	3 g
Cholesterol:	93 mg
Sodium:	94 mg
Total Fiber:	2 g
Protein:	31 g
Carbohydrates:	7 g
Potassium:	945 mg

*\*This recipe was taken from "Heart Healthy Home Cooking African American Style," U. S. Department of Health and Human Services; National Institutes of Health; National Heart, Lung, and Blood Institute and the Office of Research on Minority Health. Download a copy at <http://www.nhlbi.nih.gov/health/public/heart/other/chdblack/cooking.htm>*

## Article Submissions

JHS Heartbeat is published quarterly to enhance health awareness and understanding of cardiovascular disease among the community by presenting research findings, articles, book reviews on cardiovascular disease, diabetes, hypertension, strokes, cholesterol, physical activity and nutrition. Additionally, the newsletter facilitates communication among Jackson Heart Study staff, investigators, cohort members, contractors and the extended JHS family.

Articles are being selected for the following upcoming issues:

<i>Submission Date</i>	<i>Newsletter Publication</i>
March 15	Summer Edition
September 15	Winter Edition

Submissions should be about 800 words or less. Relevant pictures, illustrations and/or charts may be submitted with the articles. Information regarding forthcoming educational conferences and/or meetings is also requested. All material is subject to copyediting. Please include the author's full name and credentials, the agency's full name, street and web address and the author's contact information, including telephone, fax and e-mail. Information should be e-mailed or mailed to **Ms. Brenda Jenkins**, at:

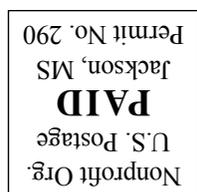
By mail: JHS Newsletter, 350 W. Woodrow Wilson Drive, Suite 701, Jackson, MS 39213, or

By e-mail: [brenda.w.campbell@jsums.edu](mailto:brenda.w.campbell@jsums.edu)

## JHS HEARTBEAT

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