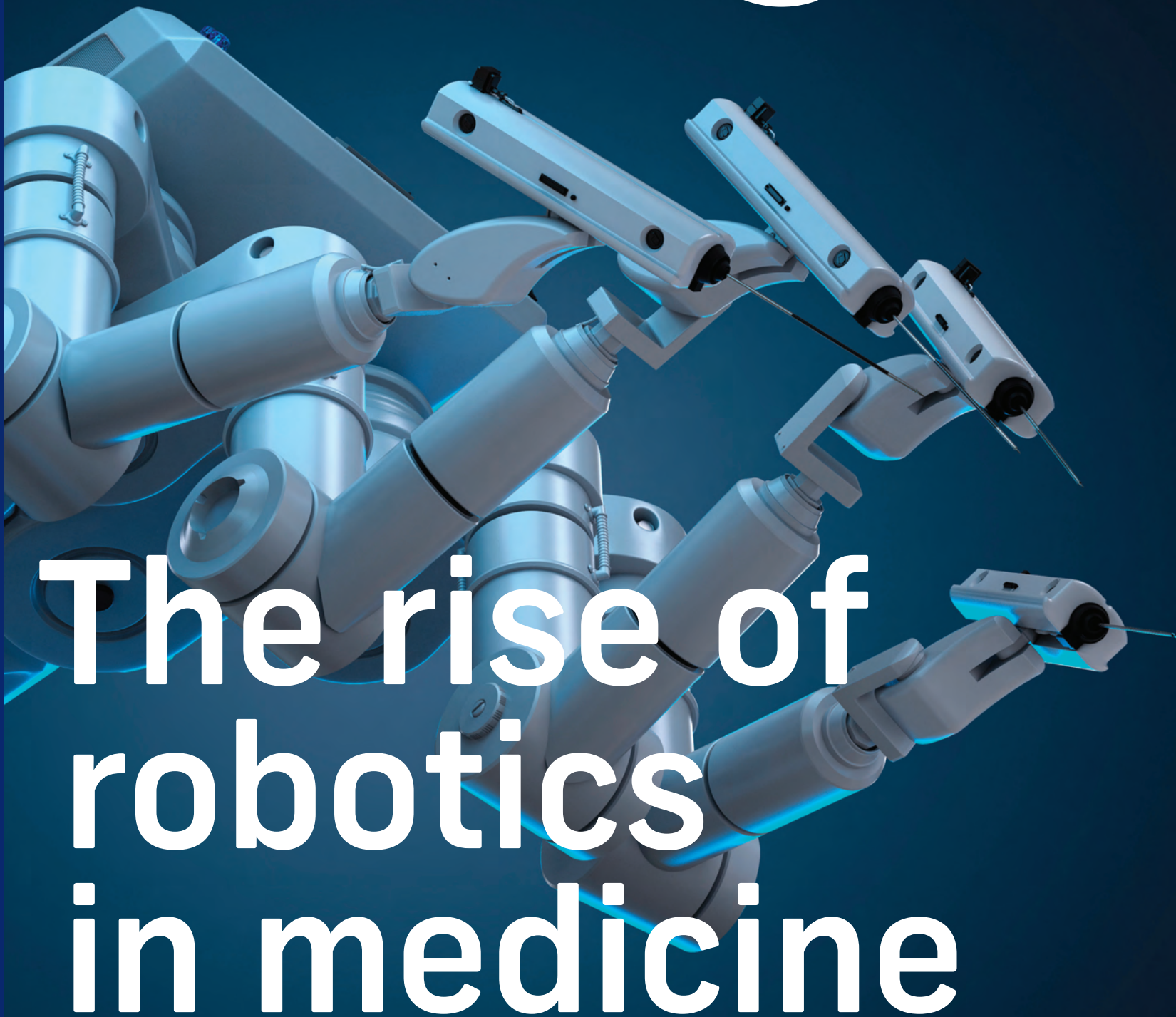




PRIMARYLY Caring

A PUBLICATION OF THE MOREHOUSE SCHOOL OF MEDICINE

FALL 2019



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EDUCATION Adding to the rise of physician assistants in medicine

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CLINICAL Making robotic surgery accessible to those who need it

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RESEARCH Fostering greater diversity in genetic datasets

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COMMUNITY Offering compassionate care for the uninsured



A Letter from the President

The environment in which individuals work, live, and play greatly influences how people engage the health care system. Everyday life stressors such as increasing financial obligations, demanding work conditions, chronic illnesses, and injuries all impact the health and well-being of those we serve. What we keenly understand and appreciate at Morehouse School of Medicine is our role in caring about these issues as we help patients lead healthy lives.

The school was originally founded to advance primary care, and its early years were deeply rooted in ensuring the state of Georgia and the nation had culturally competent primary care doctors committed to serving vulnerable populations and areas. With a dedication to eliminating health disparities, we expanded our educational programs to include public health, biomedical and clinical research, population science, health policy, and, most recently, physician assistant studies.

We focused our research to target the illnesses and diseases that place the greatest burden on our families and communities and/or have the highest inequities in outcomes. Lastly, we tailored our patient care services and community outreach efforts to underserved areas, providing critical care to often marginalized and undervoiced populations.

So, at Morehouse School of Medicine, we recruit, educate and train health care professionals who share our commitment to service and to our bold vision to lead the creation and advancement of health equity. Most importantly, we ensure that our faculty, staff, and students are primarily caring. Whether it is in the lab, through service programs in the community, or at the bedside of a patient, one thing is consistently true: Our innovations and discoveries must reflect our care for and dedication to those we have pledged to serve. To be caring is our greatest calling as health care professionals.

Primarily Caring not only highlights the work underway at Morehouse School of Medicine through our brilliant faculty, students, and staff but also grapples with the tough challenges we face in our health care system. We hope that it inspires, motivates, and informs, but above all, we hope it challenges each of us to strive to be primarily caring in all we do.

Sincerely,

Valerie Montgomery Rice, M.D.

President and Dean, Morehouse School of Medicine

PRIMARILY CARING

Fall 2019

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MSM's inaugural class of physician assistants, pictured here, is part of the rise in students pursuing this as a career. Read more about this trend, and MSM's new PA program, on p. 8.

News Briefs

SEPTEMBER 2019

MSM Welcomes Largest Entering Class in School's History

The auditorium at Morehouse School of Medicine was at capacity for the 35th fall convocation and white coat and pinning ceremony, primarily due to the growth the school has seen this year. MSM officially welcomed 211 new students at the event.

The 2019 record enrollment of future leaders in health and science professions is spurred by the addition of MSM's Master of Science in Physician Assistant Studies program, with its first cohort class of 20 students. The school also added nine students in the new hybrid Executive Master in Public Health degree, which combines online course work with in-person experiences, and four students in the recently added online Master of Science in Biotechnology program.

"Many of you are 'the firsts.' Family and friends have made sacrifices for you to be

where you are today and are very proud of you already," said Franklyn Geary, M.D., to the students. "Since you are embarking on a new journey, you have to have a strategy for success, a blueprint. To be your best self, let your blueprint include introspection, caring, and commitment."

MSM President and Dean Valerie Montgomery Rice, M.D., announced a generous donation from The Coca-Cola Foundation to the audience. The organization pledged more than \$2 million in scholarship support for MSM students. The funds will support 13 four-year, full-tuition medical student scholarships for members of the 2023 and 2024 graduating classes.

Convocation recognizes and celebrates the incoming class of students and serves as the official kickoff of the new academic year. Included in the event is the time-honored tradition of the white coat and pinning ceremony.

SEPTEMBER 2019

MSM Doctor Returns Home to Bahamas to Help After Hurricane Dorian Devastates Caribbean Nation

All she could do was watch endless news reports of Hurricane Dorian tearing through her homeland, destroying essentially everything in its path. But when the Category 5 storm finally left the Bahamas, Shaneeta Johnson, M.D., knew what she had to do.

Dr. Johnson arrived in her hometown of Nassau on Sunday, Sept. 8, one week after Dorian made landfall on the island nation. The next day, she headed to Freeport so she could start providing medical care to those in need. The airport there, which was also sheltering more than 1,000 evacuees, was open but had suffered serious damage from the hurricane. The local hospital was in even worse shape. Rushing rains and sea surge flooded Rand Memorial Hospital, and the emergency room was not operational. A field of white tents, a

temporary hospital, was set up nearby by the nonprofit Samaritan's Purse. This is where Johnson and other medical professionals cared for the tens of thousands in need.



AUGUST 2019

MSM Students Lift Up Local Elementary Students with Backpacks and School Supplies

About a dozen or so students from MSM helped young children at an Atlanta elementary school start the academic year off in style. They collected some 500 backpacks filled with notebooks, pencils, and other supplies that these young learners at Scott Elementary need to do their best in the school year.

First-year medical student Artesse Conley organized the event at the Bankhead neighborhood school.

"Growing up in the inner city of Atlanta sparked a burning passion within me to serve my community," said Conley. "I think it is pertinent that we as individuals lift up others as we climb."

In addition to the backpacks, the medical school students provided the children with free food, fun, games, and role models to look up to.

AUGUST 2019

MSM Brings Home National Medical Association Honors from Hawaii

MSM was front and center at this year's National Medical Association's Annual Convention and Scientific Assembly in Honolulu, Hawaii, garnering multiple prestigious awards at the nation's foremost forum on medical science and African American health.

Kamron Robinson, Class of 2021 M.D. candidate, received a 2019 NMA Emerging Scholars Award, the highest academic honor presented

to students by the NMA. It recognizes academic achievement, leadership, and potential for distinguished contributions to medicine.

Gail Ohaegbulam, M.D., a third-year resident in the Department of Obstetrics and Gynecology, won first place in the OB/GYN Resident Research Forum based on her research "Availability of Breastfeeding/Pumping Facilities in Georgia Public High Schools."

Sonja Hutchins, M.D., M.P.H., Dr.P.H., FACPM, was awarded the 2019 Scroll of Merit Award, NMA's highest merit honor, presented to individuals or organizations in recognition of preeminent efforts and contributions in medicine, health advocacy, or service to the NMA. Dr. Hutchins is the director of MSM's Health and General Preventive Medicine Program and professor in the Department of Community Health and Preventive Medicine.

David Satcher, M.D., Ph.D., the 16th U.S. surgeon general, founding director and senior adviser of the Satcher Health Leadership Institute and fourth president of Morehouse School of Medicine, received the Surgeon General's Medallion from current Surgeon General Jerome Adams.

The Surgeon General's Medallion is the third-highest award of the Public Health Service and the United States Public Health Service Commissioned Corps. It is presented in recognition of exceptional achievement to the cause of public health and medicine.

MSM President and Dean Valerie Montgomery Rice, M.D., FACOG, was awarded the Legend of the Section Award from the OB/GYN Section of NMA.



MAY 2019

MSM Leads All HBCUs in Number of Patents

Fortune magazine recently reported on the number of patents produced by historically black colleges and universities. Morehouse School of Medicine is at the top of that list. Between 2009 and 2019, MSM has been granted 63 patents. Howard University and Florida A&M trailed with 53 and 41, respectively.

"Morehouse School of Medicine, for example, has a comparatively small endowment of \$56 million; however, the institution produced the most patents of any HBCU," explains writer Anisa Holmes.

"This report shows the things in which we are engaged in terms of research have value," said James Lillard, Ph.D., associate dean for research at MSM. Things like therapies to counteract the effects of a stroke and a product to clean up biohazards that allows one to sweep up a biohazard spill instead of mopping it up.

"I am proud of our innovative faculty, coming up with these ideas and inventions," Lillard added.



MAY 2019

Shortage of Black Male Doctors Having Public Health Impact

The number of black male medical students peaked more than 40 years ago and has been declining ever since. *NBC Nightly News* reporter Ron Allen spoke with MSM medical student Otis Green '22 about his path to medicine and how he is inspiring young men of color to pursue medicine. Allen also interviewed MSM Associate Dean of Admissions and Student Affairs Ngozi Anachebe, M.D., Pharm.D. Dr. Anachebe spoke about why this matters and what MSM is doing to address the issue.



Former second lady Jill Biden visited MSM in March 2019.

MARCH 2019

'These Young Doctors Will Make a Difference,' Says Jill Biden During Cancer Talks with MSM Students, Staff

Former second lady and co-chair of the Biden Cancer Initiative Jill Biden, Ed.D., visited MSM in March. She came to meet with leaders at MSM but, more importantly, to speak with future doctors, medical professionals, and health scientists to learn how they are working to eliminate cancer.

Dr. Biden and her husband, former U.S. Vice President and current presidential candidate Joe Biden, launched their initiative after losing their son Beau to brain cancer in 2015.

"I've heard about some of the stories of the students here, and they're working on such interesting projects," said Dr. Biden. "I wanted to come and hear their voices, hear what they had to say, and where they are going and what we have to look forward to about the future."

Ian Saunders lost his grandmother to renal

cancer when he was just nine years old. Her doctors did not catch the cancer until it was too late. Losing his grandmother triggered Saunders' desire to study cancer, specifically colon cancer. He is now studying to see if an extract from the rhubarb plant can be used to treat patients. So far, he has seen promising results and is now looking at the next steps. Saunders is expected to graduate with his Ph.D. in December 2019.

Second-year Master of Public Health student Astra Watts' research will hopefully save her life. She shared with Dr. Biden how she had an interest in breast cancer and chose to study it. Watts' findings made her look at her own symptoms and lifestyle and request a mammogram from her doctor. She was diagnosed with breast cancer at just 24 years old.

"The one thing I heard from all these young doctors here at Morehouse [School of Medicine]: It's personal for them too," said Dr. Biden. "It started with something personal. They knew they had to make a difference, and

I believe that these young doctors will make a difference."



OCTOBER 2018

Morehouse School of Medicine and Carter Celebrate Lee Street Campus Groundbreaking

As MSM adds more programs, students, and staff, the school is also expanding its campus. In October, Atlanta Mayor Keisha Lance Bot-

toms joined MSM President and Dean Valerie Montgomery Rice, M.D., the Board of Trustees, and local dignitaries to break ground on a new 7.2-acre mixed-use development. The property on Lee Street will include the campus's first-ever graduate student housing with 187 studio, one-, or two-bedroom units. The property will also include a 25,000-square-foot ambulatory health facility, a 9,000-square-foot fitness/wellness center, 2,500 square feet of retail space, and a four-level parking deck at the corner of Lee Street and Westview Drive. The construction is in partnership with Carter and Oakwood Development. This more than \$52 million mixed-use development will provide a new gateway to the Atlanta University Center, in Atlanta's Historic West End. Construction is expected to be complete in time for the 2020 school year.

MSM also continues to modernize classrooms and other facilities to best serve students. In spring 2019, renovations to the second floor of the Hugh Gloster Building were unveiled after nearly a year of work. Classrooms received new furniture and technology. Power plugs are now at every student's seat, so they will not have to worry about their laptop battery dying on them in the middle of class. Cozy conference and study rooms of various sizes were also added. Students can check when a room is available and reserve it by using a touchscreen near the door.



AUGUST 2018

MSM Trauma Team Rewrites Medical History

They save lives, and now they're trying to save history. Trauma surgeons from Morehouse School of Medicine are on a mission to share the untold stories of pioneering African American physicians. In August 2018, the *Atlanta Journal-Constitution* featured an article on members of the MSM Trauma Team and their effort to share the stories of African American medical pioneers.

Leslie Matthews, M.D., Omar Danner, M.D., Kahdi Udobi, M.D., Assad Taha, M.D., Jonathan Nguyen, D.O., and Ed Childs, M.D., led the effort to tell these forgotten stories. MSM student Latasha Oaks '21 and resident Ronald Hoard, M.D., also contributed to the project.

The team focused on the lives and contributions of Alvin Blount, M.D., the first African American to serve in an integrated MASH unit in the Korean War; Clinton Battle, M.D., who as a young doctor delivered conjoined twins in a rural Mississippi home; and Vance Marchbanks, who designed an oxygen mask later used in aviation and aerospace.

SEPTEMBER 2019

MSM Awards \$100,000 to Fund Healthy Community Initiatives and Train U.S. Elected Officials

In August 2018, MSM awarded a total of \$100,000 to fund healthy community initiatives. Ten municipalities from eight states joined the 2018 Cohort of the Healthy Communities Initiative (HCI), selected as \$10,000 grant recipients from MSM.

The initiative engages mayors, county and elected officials, and community leaders to enhance their health leadership skills, influence health policies, and implement health projects to address health inequities.

Civic leaders from Baltimore, Md., to Omaha, Neb., took part in the training.

"We are excited and honored to be one of the Morehouse School of Medicine grant recipients," said Deana Holiday Ingraham, mayor of the city of East Point, Ga. "To expand our efforts to combat our food access challenges, we will use the grant to provide access to fresh fruits and vegetables and provide cooking demonstration and meal kits at various convenience stores throughout our great city."

MSM Leaders Make History as Members of National Accrediting Boards

Two MSM academic administrators and faculty members made history when they were selected to national accrediting bodies in their fields. Yolanda Wimberly, M.D., associate dean for graduate medical education, was appointed to the Accreditation Council for Graduate Medical Education (ACGME) Board of Directors,

and Stephanie Miles-Richardson, D.V.M., Ph.D., was named chair of the Council on Education for Public Health (CEPH). ACGME accredits residency and fellowship programs in the United States, and CEPH accredits public health programs across the nation. Dr. Wimberly is one of the few African American women to sit on the ACGME Board of Directors, and Dr. Miles-Richardson is the first African American woman named chair of CEPH.



OCTOBER 2018

MSM's Montgomery Rice Honored by March of Dimes with Lifetime Achievement Award

The March of Dimes recognized Morehouse School of Medicine President and Dean Valerie Montgomery Rice, M.D., on Thursday, October 11. She received its Lifetime Achievement Award for her continued work in women's health and her dedication to the March of Dimes. The award was presented at MOD's inaugural Atlanta's Women of Distinction Breakfast at the Atlanta History Center. The awards honored women from metro Atlanta for their dedication and leadership in community service in various categories. Atlanta Mayor Keisha Lance Bottoms served as the keynote speaker.

"Powerhouse" Women with Heart Group Marks a Major Milestone

What began in 2009 as a small group of women with an interest in addressing the ongoing crisis in heart health has developed into a fundraising force to be reckoned with, bringing nearly \$1.8 million in gifts and 113 student scholarships to Morehouse School of Medicine.

"When my husband became president of



Eilene Maupin, MSM President Valerie Montgomery Rice, M.D., and Atlanta Mayor Keisha Lance Bottoms at the February 2019 ceremony honoring Women with Heart.

Morehouse School of Medicine, I thought about how MSM could make women of color aware of heart disease and at the same time raise scholarship funds for our students,” said Eileen Maupin, former MSM first lady and founder of WWH. “In addition, I thought we could have a separate, yet similar, event for men and a heart fair component to involve the community. Once he gave me the OK to proceed, I enlisted several of my friends to help us accomplish this goal.”

“Women with Heart—it is a powerhouse,” says President and Dean Valerie Montgomery Rice, M.D. “This is an incredibly generous group that inspires generosity in others.”

Heart disease is the leading killer of American men and women, and African American

women are more likely to die from heart disease than are women of any other race. To combat the problem, Women with Heart raises awareness and funds and invests in students who have demonstrated a commitment to heart health and a dedication to serving the underserved.

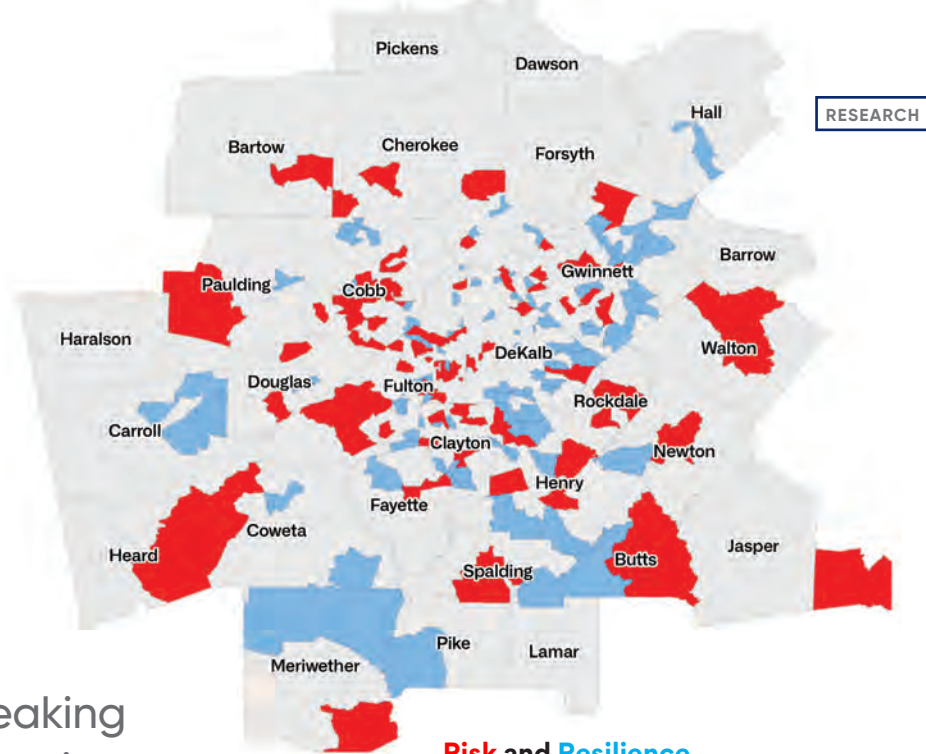
For the 10th anniversary of Women with Heart’s “Heart Healthy Week,” a series of events and fundraising activities took place, designed to promote healthy lifestyles and increase community awareness of heart health and cardiovascular disease. In 2018, the group raised a record-setting \$360,000 and created the Eilene Maupin Women with Heart Endowed Scholarship, named after the event’s founder and former MSM first lady.

Also in 2018, Women with Heart was granted the Phoenix Award by the city of Atlanta. The Phoenix Award is designed by the mayor’s office for organizations and individuals who have made significant contributions to the residents of Georgia.

“Because of organizations such as Women with Heart, Morehouse School of Medicine can continue to educate and train health care learners and leaders,” Montgomery Rice says. “The Women with Heart group truly lives up to its name.” ^M

The Science of Resilience

Dr. Herman Taylor's groundbreaking research offers powerful insights into cardiovascular resiliency among African Americans in Atlanta



Risk and Resilience

The census tracts across metro Atlanta (above) show variable rates of risk (red) and resilience (blue) in premature cardiovascular disease (CVD) outcomes in patients, even when median household income is taken into account.

When scientists discuss the health of African Americans, the conversation tends to focus on the negatives of health disparities. It's well documented that disease rates and premature deaths are much higher for African Americans than for other groups in the United States. Herman Taylor, M.D., M.P.H., director of the Cardiovascular Research Institute at Morehouse School of Medicine, prefers to look at the health of African Americans in a more positive light. He points to members of his own family, who lived into their 90s. Somehow, they overcame the stresses of the civil rights movement and the pollution once generated by the steel industry in his native Birmingham, Ala. "The deficits that blacks face are true, by and large," Dr. Taylor says. "They are the direct result of the vast differences that blacks and whites have lived under for the past few centuries. Yet there are numerous African Americans living healthy and long lives against the odds. To me, this is the untold and underemphasized story of black health in America."

Dr. Taylor is in the midst of a five-year study of the factors that put African Americans at low or high risk of cardiovascular disease (CVD) in metropolitan Atlanta. Specifically, he is zeroing in on the neighborhood and psychosocial influences that contribute to CVD resiliency and risk.

The study is a project of the Morehouse-Emory Center for Cardiovascular Health Equity, or MECA, directed by Dr. Taylor and funded by the American Heart Association.

During the study's first phase, researchers surveyed 1,500 residents, men and women ages 35 to 64, in 200 Atlanta neighborhoods by telephone. Half of the residents lived in "resilient" neighborhoods—those with lower rates of ER visits, hospital admissions, and deaths related to CVD. The other half lived in "at-risk" neighborhoods—those with higher rates of the same three indicators of CVD health.

Both groups were asked to rate the health of their neighborhood based on qualities of aesthetics, walkability, safety, food access, social cohesion, activity with neighbors, and violence.

Participants also rated their individual resilience factors. Among them: discrimination, environmental mastery, purpose in life, optimism, resilience, and depression.

In the analysis of the telephone survey, residents with the best cardiovascular (CV) health indicators considered social cohesion and activity with neighbors to be the most important neighborhood factors and optimism and strong purpose in life to be the greatest individual factors.

A second-study phase involving 500 resi-

dents from all neighborhoods focuses on the impact of neighborhood resilience on individual CV health. In this phase, researchers examined the relationship between "resilience" and "risk" factors and the Life Simple 7 score, which physicians regularly use to assess CV health. The seven indicators include blood pressure, blood sugar, cholesterol, diet, exercise habits, smoking habits, and weight.

Although study results from the clinical phase are still being analyzed, they do show an association between the neighborhood qualities of social cohesion and activity with neighbors and healthy Life Simple 7 scores for exercise, diet, and weight.

"That interaction somehow appears to be very supportive of the positive things that lead to neighborhood resilience for CVD health," Dr. Taylor says.

An upcoming third-study phase, led by co-investigators from MSM and Emory School of Medicine, will examine the microRNA and metabolomic profiles associated with the social and environmental factors in African Americans to further determine what factors lead to CVD resilience. Findings will be based on biological samples from the 500 participants in the clinical study. [M](#).



The PA Will See You Now

Increasingly, medical care is being provided by physician assistants. And that's a good thing. What's driving this trend, and what does it mean for patients?

First-year Morehouse School of Medicine physician assistant (PA) student Tara Martin has known since her early adulthood that she wanted to be a PA, or a medical professional who diagnoses illness, manages treatment plans, prescribes medications, and often serves as a patient's principal health care provider.

When Martin was a junior in college, her mother was diagnosed with lupus. The town where Martin's family lives and where she grew up, Eatonton, Ga., was so small that a PA basically served as her mom's primary care doctor. The care and attention that her mother received from that PA opened Martin's eyes to the special role PAs can play in filling gaps in care for rural populations.

"Where I'm from, there is one high school, one middle school, one elementary school, one hospital. Maybe two grocery stores," Martin says. "People usually have to travel far for specialty care, and sometimes insurance isn't covered at the hospital. Our area has a high level of unemployment, and most people are on Medicaid. It's hard to get the care you need sometimes."

These facts are not just limited to where Martin grew up. Georgia consistently rates among the worst 10 states for health care performance, delivery, and outcomes. The Commonwealth Fund, a private U.S. foundation that supports independent research on health care issues, recently ranked Georgia 42nd in its score card on health care system performance. And MoneyRates.com ranked Georgia 49 in its analysis of health care in the 50 states and the District of Columbia.

A shortage of primary care physicians across the state adds to Georgia's health care crises. According to a 2017 report by the Georgia Board of Health Care Workforce, more than 60 of Georgia's 159 counties have no pediatrician. Nearly half of Georgia's counties, 75 in total,

lack an obstetrician/gynecologist. Eight counties in Georgia have no doctors at all. The same report stated that 11 Georgia counties lack a single doctor of family medicine, and 37 of the 159 counties do not have an internal medicine physician.

This shortage of physicians in Georgia matches the pattern nationwide.

Morehouse School of Medicine launched its inaugural PA program in June 2019 to help diversify the health care field and to fill the health care service gap with an emphasis on primary care and interprofessional education (IPE). This is in keeping with a national trend of bolstering primary care service through the training of more PAs, given

More than 60 of Georgia's 159 counties have no pediatrician, and eight counties in Georgia have no doctors at all.

– 2017 report by the Georgia Board of Health Care Workforce

Data published in 2019 by the Association of American Medical Colleges (AAMC) predicts that by 2032, as the population ages and demand for physicians continues to grow faster than supply, the United States will see a shortage of nearly 122,000 physicians. In the South, the area with the highest projected demand, the need would increase by more than 350,000 physicians.

that PA practice and training emphasize patient education, preventive care, and chronic care management, allowing for treatment of the "whole patient."

MSM PA student Courtney Smart appreciates MSM's focus on IPE.

"You pick up a lot from working with other students," Smart says. "We did a project with some pharmacy students from the Philadelphia College of Os-

teopathic Medicine-GA (PCOM-GA). We were given a scenario, and we each offered our perspectives as PA students and pharmacy students. We worked together to combine our perspectives and come up with a solution to give the best care to the patients.”

Says Martin: “I feel like I will be prepared when I have to go out and practice because I have an understanding of the roles of the other [members of the] health care team and how they can help me and how I can provide my knowledge to help them.”

The idea of working in teams is ingrained in MSM’s mission. “Medicine and health care delivery are a team sport,” President and Dean Valerie Montgomery Rice, M.D., says. “You will reach a higher level of success for the patient if you have diverse care providers on the team to assist the patient in reaching their optimum level of health.”

The physician’s assistant, she says, “is a valuable part of the team, allowing the physician—who is usually the quarterback on the team—to be able to hand off some of the responsibilities of decision-making and care providing under their guidance. Many physician’s assistants, because of their education and training, are able to function independently, relieving the physician from being the only person taking the lead on providing care for the patient.”

THE DEMAND FOR PAS

PAs are more in demand than ever, and that demand is expected to grow by nearly 40 percent over the next 10 years, according to *U.S. News and World Report*. The occupation is estimated to flourish by 31 percent between now and 2028, much faster than the average for



all other occupations, according to the Bureau of Labor Statistics.

However, despite this rapid growth, certified PAs who identify as black only make up about 3.7 percent of PAs nationally. For context, 13 percent of the U.S. population identifies as black, according to Pew. A majority of certified PAs, nearly 89 percent, identify as white. This dearth in diversity can have consequences in how health care providers care for patients of color.

For example: The average wait time for black patients who need a live donor kidney transplant is almost twice as long as the wait for white patients. Of those diagnosed with breast cancer, it is much more likely to be fatal for black women than for white women. An influential 2002 study in the *Journal of Health and Social Behavior* regarding doctor-patient race concordance concluded that patients across races report greater levels of satisfaction with their care when treated by physicians with similar racial backgrounds. Multiple studies since then have come to the same conclusion, according to the National Institutes of Health.

The number of minority patients is growing in the United States. If patients

are unable to find a health care provider they identify with and trust, they may opt not to seek care—and that can have serious implications for their health.

Consider a recent study from Stanford University. Researchers randomly assigned black and nonblack male doctors to a group of more than 1,300 black men in Oakland, Calif. The researchers found that patients treated by black doctors were more likely to seek preventive services than those treated by nonblack doctors. Patients were also more likely to discuss other health issues with doctors of the same race. The study concluded that increasing the number of black doctors “could help reduce cardiovascular mortality by 16 deaths per 100,000 per year” among black men.

“I think it’s important that people of color enter into the medical field, so that other people of color feel comfortable going to the doctor. Seeing people that look like me—that helps,” Martin says. “Going to MSM to get my PA degree and getting my white coat shows that nothing is impossible. I want to go back to my community and show people they will be in good hands entrusting their care to me.”

MSM’s Inaugural PA Class: First row (front) left-right: Deandra Mahon, Amarachi Odu, Courtney Smart, Krystle Richmond, Alberto Pineda, Tara Martin. Second row left-right: Lorna Gitari-Mugambi, Kabriel Moorehead, Nnena Ezeabasili, Thelisha Glover, RaKetra Snipes, Nicolle Ramsey-De Jesus, Candace Lymus. Third row (back) left-right: Quaadir Otto-Smallwood, Brianna Cummings, Alexandria Blake, Edmund Smith, Erica Courson, Victoria Ohuoba, and Amanze Onwuka.



Pangela Dawson, Ph.D., PA-C, teaches a keenly focused group of students.

One of the major goals of MSM's PA program is to recruit from the under-represented groups the program aims to serve, and to do so not just by focusing on race but also by focusing on where

ties, graduates tend to return to those communities to practice," founding program director Pangela H. Dawson, Ph.D., MSPAS, PA-C, says. "Our aim is to increase the number of students who come from rural communities so that they will go back to those rural communities."

The current cohort of 20 students in the MSM PA program are mostly black women. Twelve of the students are from Georgia, and two come from rural communities.

"Health equity includes educating people. And yes, that means health education, but that also means giving people greater access to advanced degrees," Dawson says. "By recruiting students from underserved communities, the program also contributes to

the economic health of those students and the communities they come from."

Applicants to MSM's PA program have grown substantially since last year.

More than 100 applicants (average age, 26) applied for 20 spots in the current MSM PA class. The 28-month program accepted 20 students for the 2019–2020 academic year and plans to accept 30 for the next cohort starting in 2020. As of Sept. 1, applicants for the class beginning in 2020 totaled 285.

While applicants are required to have a minimum of 500 hours of direct patient care before entering the program, the inaugural cohort that started in June 2019 averaged more than 4,000 hours of such experience. By offering a PA program, MSM is helping to diversify the health care field.

PAs "continue to be an answer to the shortage of health care providers," Dr. Dawson says. "There are not enough physicians. We are known as collaborators with physicians and the medical team. Medicine is not a one-man show; it's a team concept." **M**

PAs are more in demand than ever, and that demand is expected to grow by nearly 40 percent over the next 10 years.

that population resides—be it in a rural or urban community.

"Research shows that when you recruit from underserved communi-



A Consensus in Need of Courage

Editor's Note: The following is an excerpt from the Sept. 25, 2019, testimony of former U.S. Surgeon General David Satcher to Congress, titled "The Social and Health Costs of Gun Violence and Mass Shooting"

By David Satcher, M.D., Ph.D.

"WITH YOUNG Americans being gunned down at a rate far beyond anything seen in other developed countries, it would be hard to imagine a more fitting activity for a U.S. government agency concerned with the public's health than firearms research."

This is how I started an article I wrote in 1995. And so here we are today. We are losing 60,000 lives a year from violence, with close to 40,000 from firearms. All preventable.

Violence as a public health issue is not new,

and health approaches to violence prevention aren't either. They are not innovative, groundbreaking, or a promising practice—they are best practice, they are scientifically proven, and they are common sense, and they save lives and money. In the words of our young people, it's "enough." We know "enough." We've heard "enough." We've seen "enough." It's time to act.

When I was surgeon general, from 1998 to 2002, my first site visit was to Columbine, to respond to the tragic mass school shooting. Soon after, I wrote about youth violence

as a health issue while also issuing a report on suicide prevention. The Violence Against Women Act and the Kellerman research were released around the same time. The Kellerman research documented that having a gun in the home meant we were less safe. Despite the wave of research findings and calls for preventive action at the turn of the century, this country responded to these opportunities to improve the nation's health not with health approaches but by defunding the CDC's ability to research this known health issue. When it comes to public health research, there have been many instances where people disagree with or question the results, but this has led to additional research to either prove or disprove the findings. Secondary studies will often change populations, geographies, or other components to see if the same results are yielded, but what they don't do is stop the research when a potential health threat is discovered. The Dickey Amendment damaged our nation's health—without the Dickey Amendment, the power of this agency could have been used to prevent the mass shootings in Parkland, Orlando, Las Vegas as well as the daily gun violence tragedies that occur in cities

like Baltimore, St. Louis, Chicago, and more. Before he passed, Congressman Dickey himself admitted publicly that he regretted his decision and believed that it should be reversed. You have the power to right this wrong—to save lives and save money.

We do know the social costs are enormous. As are the financial costs. Multiple sources estimate the total costs to be in the billions of dollars. CDC estimates that suicide costs \$50.8 billion, and homicides cost \$26.4 billion. Giffords Law Center estimates the cost of gun violence alone to be around \$229 billion annually. The cost of reported domestic violence cases per year is estimated to be \$460 billion, according to the *Washington Post*.

The costs on the health system are substantial. From 2010 to 2015, Medicare and Medicaid covered 45 percent of health care costs related to firearm injury, with the uninsured being held responsible for 20 percent of the total. This number obviously will go up once we get recent data on the impact of Medicaid expansion as the uninsured population has gone down significantly.

With roughly 100,000 firearm injuries each year (a number we cannot state is 100 percent accurate because there is no standard collection for data on shootings or mass shootings for that matter)—it is estimated that hospital charges cost \$2.8 billion annually. This is a gross underestimate because the long-term cost including physical rehabilitative services and mental health services, such as treating post-traumatic stress disorder, are not factored in. While on the topic of mental health, I must address a key issue: We do have data on the clear linkage between trauma and health outcomes, and we also have data on mental health and violence. People with mental health issues are more likely to be victims, not as perpetrators.

This common conflation is dangerous and further stigmatizing this health issue. Other stigmas including the overt or covert racism in our media as it relates to the epidemic of gun

violence among black and brown men is also causing significant harm. The police are also not thriving in our current system. They are exposed to trauma regularly, and many are not treating it in healthy ways—instead it shows up in increased alcohol abuse, domestic violence, and the brutality we see on the news far too often. The toll of violence is harming us all.

As outlined in the Framework on Violence Prevention created by the Movement Towards Violence as a Health Issue, we must build a health system that addresses all forms of violence that allows for integration of best practices across all agencies in communities, led by people most impacted by the problems to implement comprehensive solutions that save lives in sustainable, equitable manners. Here are a few of the best practices outlined in the Framework:

A Chicago program using public health methods to interrupt violence, reduce risk, and change neighborhood norms reduced homicides and shootings by up to 70 percent and retaliations by 100 percent. In Baltimore, one historically violent neighborhood went over 22

months without a homicide when implementing the same model.

An Oakland, Calif., hospital-based violence intervention effort that incorporated trauma-informed care and case navigation resulted in 98 percent of the clients not being reinjured and 70 percent not being arrested.

Youth exposed to an adolescent dating-violence-prevention intervention in North Carolina showed from 56 percent to 92 percent less dating violence victimization compared to controls, with the effects sustained for four years.

A nurse-visiting program delivered to children born to high-risk unmarried teens saw 80 percent fewer cases of child abuse and neglect in Elmira, N.Y., and in Memphis, Tenn., yielded 79 percent fewer hospital days for child injuries than in comparison groups.

There are many more. While federal legislation to effectively address this public health emergency being faced by communities across the country has not progressed, an increasing number of states are proactively taking up the issue. This has included the passage of legislation in Maryland, Pennsylvania, New York, New Jersey, Massachusetts, Illinois, and California. Much of this legislation is specifically focused on increasing investment in evidence-based health programs aimed at addressing various forms of violence, and these states have invested well over \$100 million this year alone. Agencies like APHA, AMA, AHA, and the American Academy of Family Physicians are stepping in as well.

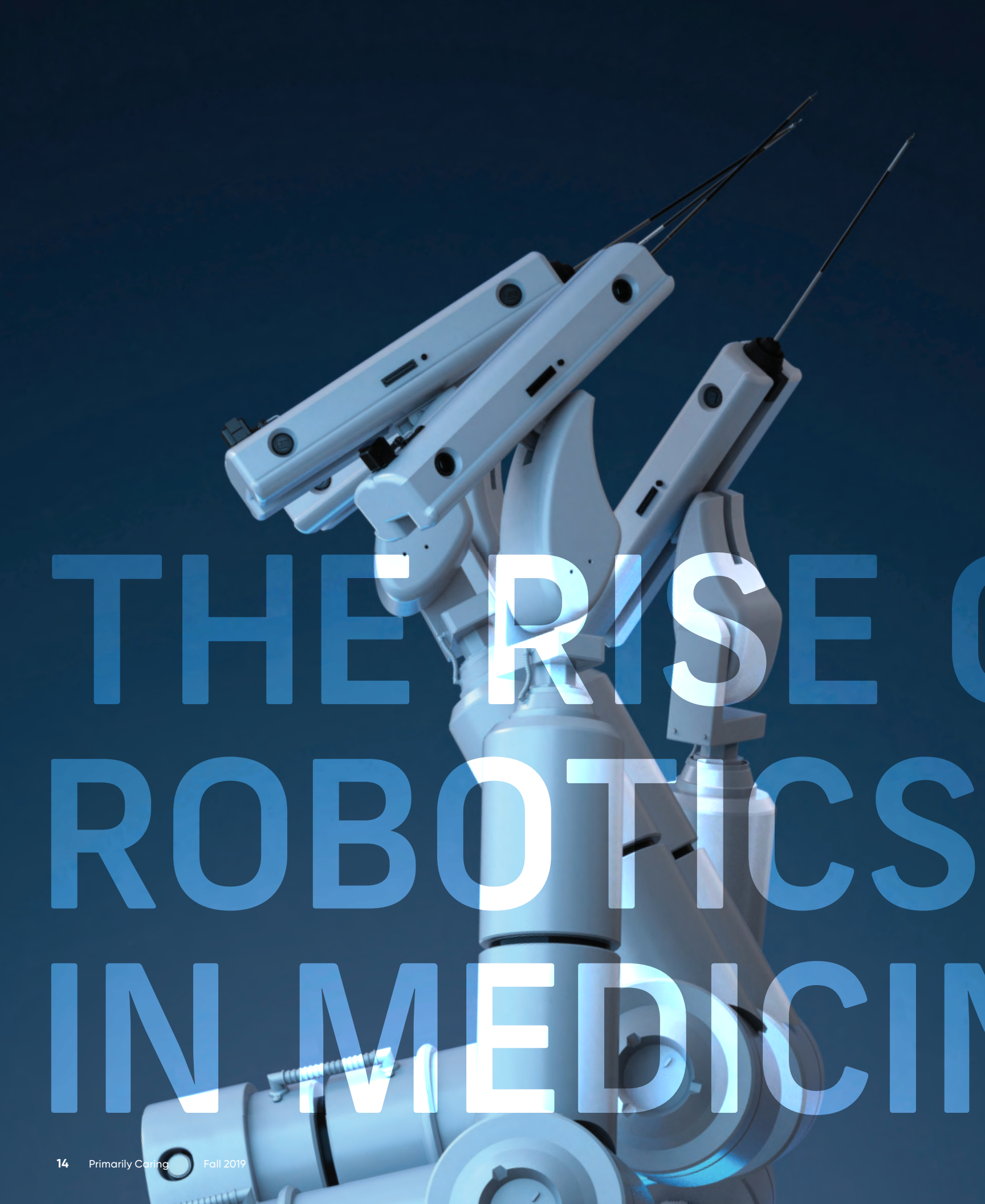
We all see we have a crisis on our hands. And I come to you, as I have many times before, asking you on behalf of the public health field, and your constituents and the young people who are screaming “enough” in our streets—now is the time. Let’s stop this epidemic—let’s save money, but more importantly let’s save lives. Let’s invest in what works and move away from traditional approaches that rely on the criminal justice system. Let’s see the integration of proven practices as our primary response. Let’s build this system so that it is more than enough for our youth to realize their potential—to grow up safely and be proud to be part of this country. **M**

“We are losing 60,000 lives a year from violence, with close to 40,000 from firearms. All preventable.”

**DAVID SATCHER, M.D., PH.D.
FORMER U.S. SURGEON GENERAL**

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An Oakland, Calif., hospital-based violence intervention effort that incorporated trauma-



THE RISE OF ROBOTICS IN MEDICINE

Surgery is evolving to include more and more robotics, and MSM is a pioneer in this new technology in patient care.

IT HAS BEEN TWO YEARS SINCE Morehouse School of Medicine faculty member Shaneeta Johnson, M.D., expanded the robotic surgery landscape in Atlanta. In 2017, she introduced a robotic surgery curriculum for MSM residents and performed the first robotic surgery at Grady Memorial Hospital, making it one of the first U.S. hospitals to offer the procedure to vulnerable patients. Dr. Johnson is director of the robotic surgery service and chair of the 27-member robotics committee at Grady.

While robotic surgery is new to Grady, it is not new to medicine. Surgeons first used robots for cardiac and urologic surgery 20 years ago. Since then, robotic surgery has expanded into other specialties, most recently in thoracic, colorectal, ENT (ear, nose, and throat), and bariatric. Many surgeons prefer it over laparoscopy, which remains the noninvasive procedure of choice for simpler surgeries such

as appendectomy. Robotic surgery, on the other hand, offers surgeons greater visualization and precision for more complex surgeries, such as gynecologic cancer or colon or lung resection.

When Dr. Johnson joined the MSM faculty in 2016, she found a kindred spirit in Rhonda Scott, Ph.D., then chief operating officer at Grady. Both believed the hospital needed

With robotic surgery, patients have less blood loss, lower risk of infection, less pain, and shorter recovery time

robotic surgery to advance patient care and medical education. But surgical robots come with a high cost that public hospitals typically cannot afford.

Dr. Johnson and Dr. Scott found a solution by partnering with Emory School of Medicine and Intuitive Surgical through a pilot pro-

gram designed to make robotic surgery available to underserved patients. The pilot program includes Grady and five other safety-net hospitals across the country. Intuitive Surgical provided each hospital with a da Vinci surgical and teaching robot and an in-kind grant of \$2 million each.

"To my knowledge, no other safety-net hospitals offer robotic surgery outside of the pilot program," Dr. Johnson says. "That's one of the reasons the pilot was so intriguing to Intuitive and to us. The patients we serve would benefit greatly from this technology."

Of the six hospitals, "we are the most successful, with the highest number and [widest] breadth of cases thus far," Dr. Johnson adds. "The robot is quite an investment. It's very difficult for safety-net hospitals to fund something like this."

Grady's robotic surgery service has performed more than 500 procedures to date. Initially used for procedures in general surgery, gynecology oncology, and urology, the service has expanded to include hepatobiliary surgery, surgical oncology, thoracic surgery, colon and rectal surgery, cardiac surgery, pelvic and reconstructive surgery, and benign gynecology.

Seventeen surgeons—11 from MSM and six from Emory—use the da Vinci robot to operate on patients. Morehouse residents train on the robot, which has a dual console where the attending and resident sit side by side during simulation training and actual surgery.

Terry Holt has a view of the activity from the ground up. As robotics coordinator at Grady, Holt is responsible for making the service run smoothly. She makes sure that all 17 surgeons have ample blocks of time for surgery, that inventory is fulfilled, that instruments are sterilized, that staff and residents know when training takes place, and much more.

Working on the robotics service has been a welcome change for Holt, who

has been an OR and ICU nurse at Grady and Emory for 20 years.

"It's been a joy," Holt says. "I get to use all of my knowledge to help put something together that will be part of history at Grady."

The best part for Holt is seeing patients after surgery.

"There's a big difference between having open surgery and laparoscopic or robotic surgery, which are minimally invasive," she says. "In the ICU, patients stay in bed for several days because they don't feel like getting up. The nurses

"My five years at MSM and Grady were phenomenal for me. I learned how to take care of the underserved."

Carolyn Moore, M.D.
MSM surgeon/resident graduate

have to coax them out of bed. Robotic surgery patients are up and walking around right after their surgery. They are so appreciative. They can't believe they've had this major surgery and are feeling like this."

ANOTHER ROBOTICS FIRST

In 2018, Carolyn Moore, M.D., became the first MSM resident to become certified in robotic surgery. Making history in the specialty wasn't part of Dr. Moore's career plan when she began her general surgery residency at MSM, although some early life experiences paved the way for her to get there.

Born in New Jersey, Dr. Moore spent most of her childhood in Liberia, her parents' homeland. After civil war resumed there in the late 1990s, Dr. Moore's family returned to the United States. They settled outside of Atlanta, and right away Dr. Moore discovered that, unlike for her extended family in

Liberia, illnesses such as pneumonia and heart disease were easily treatable in the States.

The realization motivated her to learn all about medicine. So, at age 16, she shadowed an orthopedic surgeon at Grady Hospital, where she saw patients who also had limited access to high-level care.

"I knew then I wanted to be a healer by becoming a physician," Dr. Moore says.

During her fourth year at University of Pittsburgh School of Medicine, she did a clinical rotation in general surgery and trauma surgery and found her calling. She knew the best place to go for her surgical residency.

"My parents' background and Grady's patient population drew me to MSM," says Dr. Moore, who is now a cardiothoracic surgery fellow at University of Kansas Medical Center. "My five years at MSM and Grady were phenomenal for me. I learned how to

take care of the underserved. At Grady, you have to take into consideration that some patients don't have money for bus fare, which may be why your first case of the day is going to be late. You develop a keen eye for circumstances you may not see at other hospitals."

By gaining expertise in robotic surgery, she and other residents have helped raise the level of care for Grady patients.

HOW ROBOTICS WORKS

The beauty of robotic surgery, residents eagerly learn, lies in doing complicated procedures that require small incisions as opposed to large incisions, which require weeks to heal. With robotic surgery, patients have less blood loss, lower risk of infection, less pain, and shorter recovery time—a valuable benefit for patients who can't afford much time away from work or family.

Surgeons benefit as well. Sitting at a



The first robotic surgery at Grady Memorial Hospital was performed in 2017 by MSM faculty.

robotic console is less fatiguing. During surgery, their visualization is magnified times 10 by a powerful microscope that provides a 3D view of an organ or artery. To provide greater detail, a surgeon can overlay an X-ray or CT scan over the computer screen.

“A robot isn’t a machine. It’s an information system,” explains Robert Satava, M.D., an internationally known surgeon and professor who worked on the military team that developed the first surgical robot in the mid-1980s. “When your hand moves the robotic surgery handles, an electronic signal goes from the console to the robotic arm that performs the surgery for you. Your instruments can flex and rotate and move like your fingers and your wrists. The robotic system filters out

any small hand tremors, which increases precision overall. The robot knows everything you are doing.”

Essentially, surgical robots are giant life-saving tools. Dr. Johnson became convinced of this in 2012, when she first used robotic surgery to help obese patients lose weight.

“It allows me to provide surgery that cures diabetes, high blood pressure, and sleep apnea. It gives patients their lives back,” she says.

Her first robotic surgery patient was a woman who was several hundred pounds overweight.

“Using the robot made her surgery as easy as someone with normal weight,” Dr. Johnson remembers. “My visualization was enhanced, and the procedure went so smoothly that I’ve used robotic

surgery since case number one.”

RIGOROUS TRAINING REQUIRED

Last year, a story in *Wired* magazine (August 2018) noted that some medical schools emphasize robotic training for surgery residents more than others. In some cases, residents spend little time at the robotic controls. Dr. Johnson has made sure that is not the case at MSM.

“We implemented a very rigorous program to ensure residents are very well trained,” she says.

Training begins online. Residents are assessed and must complete an online training certificate before advancing to the next step: training in the lab—Grady’s robotic surgery room—where they learn how to exchange instruments and dock/undock the robot at



Grady's robotic surgery service has performed more than 500 procedures to date, for surgeries including general gynecology, oncology, and urology. MSM's Shaneeta Johnson, M.D., pictured right, is leading the effort.

the bedside.

Through simulation training, they learn to cut, suture, tie a knot, and other skills needed during surgery. Residents advance next to the dual-teaching console, where surgeon and resident sit side by side during surgery, aided by the 3D monitor that affords them the same view inside the patient's body. Residents also learn how to quickly intervene should the need for open surgery arise.

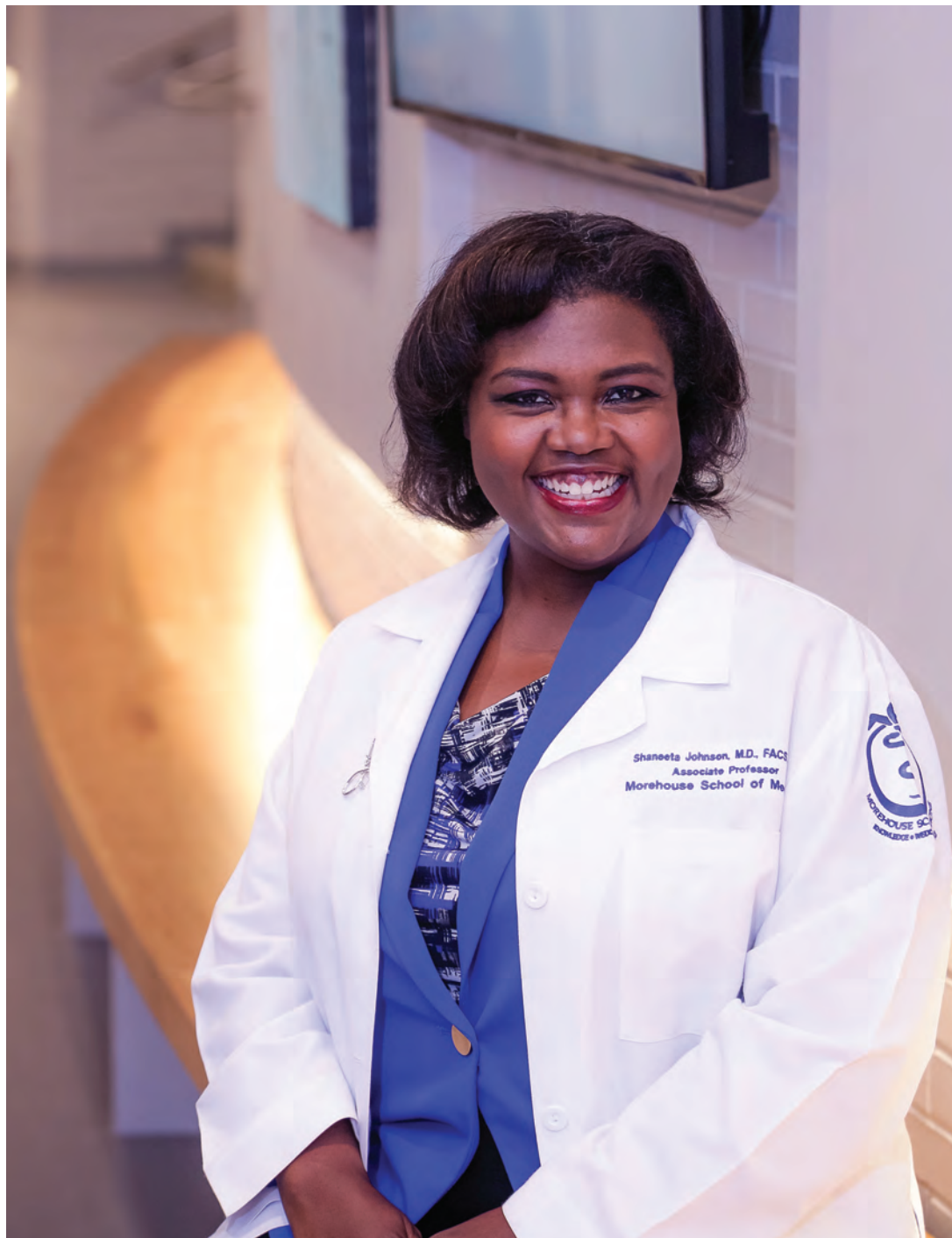
By the end of residency—five years for general surgery and four years for gynecology—residents will have completed autonomous cases carefully proctored by faculty to ensure they are using the surgical robot correctly and safely.

“By sitting at the console, you're able to instruct the resident on using the robot in real time,” Dr. Johnson says. “They can see what I'm doing. I can give them control of the robotic arm or

take the control back. It's a graduated form of giving them responsibility in the operating room.”

Now well into its second full year, MSM's robotic surgery certification program is attracting attention from residency applicants and faculty candidates.

“When we interview for new residents to join us, they ask us: ‘Do you have a surgical robot? What type of surgical



robot is it? Do we have access to the robot?" They're very savvy about robotic surgery before they join the program," Dr. Johnson says. "It's something we have to offer. The school just recruited a new physician in gynecology who trained on a robot during her fellowship. She likely would not have gone to a hospital that did not have a robot."

In recent weeks, MSM resident Ada-tee Okonkwo, M.D., has flown around

the country to interview for fellowships in colorectal surgery. Having trained in robotic surgery, she believes, makes her a stronger candidate.

She understands the challenges that hospitals like Grady face in serving a large and diverse urban population. As a resident representative on the robotic surgery committee that Dr. Johnson leads, Dr. Okonkwo has a window into how physicians and hospital adminis-

trators advance patient care together.

"Dr. Johnson has big dreams for Grady," Dr. Okonkwo says. "A lot of times, people think something is too expensive or can't be done. Dr. Johnson doesn't see any of that. The robotic surgery service has made cutting-edge technology available to patients at Grady. It's contributing 100 percent to health equity." **M**



2020 x 2020

Health Equity: It's in Our DNA

In all the many megabytes of data and discoveries in the world of medical science, something is frequently missing: critical information on black and brown patients. And that has significant consequences for prevention, treatment, and the application of health care. **Here is what MSM is doing about it.**

IN THE UNITED STATES today, cancer causes more deaths among African Americans than any other racial group. Black men have the highest rate of prostate cancer, and breast cancer death rates are 40 percent higher for black women than white women.

And yet, research shows, fewer than 5 percent of African Americans participate in precision cancer research studies, which rely on individuals' genetic data to better target cancer treatments.

"If this trend continues, then cancer therapies of the future will not be designed for us," says James Lillard, Ph.D., MBA, associate dean for research and professor of microbiology, biochemistry, and immunology at Morehouse School of Medicine.

MSM aims to reverse the trend as a partner in "2020 by 2020," an initiative of the American Association of Cancer Research (AACR). Since last year, AACR partners have been collecting genetic data from African American cancer pa-

tients across the nation. Their collective goal: to enroll 2,020 patients in the year 2020 to increase participation of African Americans in precision medicine research and, in turn, reduce cancer health disparities.

"We are working to democratize precision medicine and make it more available to African American cancer patients," says Dr. Lillard, the principal investigator for 2020 by 2020 at MSM. "Gathering more genetic data will help us identify biomarkers and new drug targets. Having more data will allow us to better match patients to clinical studies that will save more lives."

To date, more than 500 adult patients from Atlanta's Grady Memorial Hospital have enrolled in the 2020 by 2020 initiative. Patients enroll through Total Cancer Care, a standard protocol used to consent patients and track their molecular, clinical, and epidemiological data during their lifetime. All patient information is housed in a large data

repository, managed by the company M2GEN, and shared by members of the Oncology Research Information Exchange Network (ORIEN). The network includes 18 academic cancer centers and MSM, the only historically black college and university (HBCU) member.

At MSM, researchers are in the first stages of establishing their own repository of genetic data from cancer patients and patients with other diseases.

"Our hope is that when an MSM physician treats an African American woman for breast cancer, we'll have access to her genomic data so we can compare it to the robust repository at ORIEN and our repository at Morehouse [School of Medicine] to help better treat that patient," says Brian Rivers, Ph.D., M.P.H., director of MSM's Cancer Health Equity Institute. "We want to translate that data into clinical practice to better treat her cancer, reduce treatment side effects, and extend her quality of life."

Tailoring treatment based on cancer



“
If this trend continues,
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will not be for us.
”

James Lillard, Ph.D.

genomics will strengthen the health of African Americans, individually and as a group.

“Many times, when a patient is failing treatment, or better yet, when the treatment is failing the patient, it’s because the treatment is not representative of all individuals,” Dr. Rivers says.

A HISTORY OF DISPARITIES

In 1985, a landmark report on the state of black and minority health in America was published. Known as the Heckler report, it was written by a work group led by former Health and Human Services Secretary Margaret Heckler to raise awareness about disparities in minority health. At the time, survival rates for cancer among black Americans lagged well behind white Americans.

In the years since, “treatments for cancer and other diseases have improved outcomes for all groups, but the

disparities that existed in the 1980s are still with us today,” says Michael Sayre, Ph.D., director of integrative and biological and biobehavioral sciences at the National Institute on Minority Health and Health Disparities (NIMHD) in Bethesda, Md.

Dr. Sayre points to a recent online article in *JAMA Oncology* (August 15, 2019) that analyzed clinical trials leading to cancer drug approvals in the United States from 2008 to 2018. The paper examined 230 trials involving more than 112,000 volunteer participants. Sixty-three percent of the trials involved at least one racial group. Of those trials reporting on racial composition, 76 percent of participants were white, 18 percent were Asian, and 6 percent were Hispanic. Only 3 percent were black.

Based on the article, Dr. Sayre cites several factors affecting African Americans’ low participation in clinical trials:

less awareness of how to find studies; distance from major cancer centers where trials are conducted; ineligibility because of chronic conditions such as heart disease or diabetes; work and transportation difficulties; and not being told about clinical trials by doctors.

“Blacks are just as willing as whites to participate in clinical trials, but they’re often not asked,” Dr. Sayre says. “A lot of investigators don’t feel comfortable approaching minority patients and communities to recruit them for a trial.”

Overcoming such barriers is a strength that MSM brings to AACR’s 2020 by 2020 initiative.

“Morehouse [School of Medicine] is a great example,” Dr. Sayre says. “Physicians have very good relationships with the African American community, and Morehouse Choice (MSM’s accountable care organization) serves a lot of people in the Atlanta metro area.”



Pictured above left-right: Brian Rivers, Ph.D., M.P.H., director of MSM's Cancer Health Equity Institute, and James W. Lillard, Ph.D., MBA, associate dean for research at MSM.

WHEN CANCER HITS CLOSE TO HOME

Dr. Rivers first paid close attention to cancer as a student in the Master of Public Health program at MSM. For a class assignment, he drew a genogram to map his family's history of disease and discovered a pattern of prostate cancer. At that point, he already had two of the three risk factors for the disease. He was African American and had a family history of prostate cancer. Age, the third factor, was a matter of time.

In 2015, Dr. Rivers came back to MSM to direct its Cancer Health Equity Institute. He continues to move the needle nationally as immediate past chair of AACR and current chair of its Minorities and Cancer Research Council. He also serves on the National Advisory Council of NIMHD, helping strengthen research strategies around the drivers of gene expression for cancer and other diseases.

"We know that gene expression could be driven in part by behavior such as tobacco use, lack of physical activity, or poor dietary habits," Dr. Rivers says. "We also know there are environmental considerations that drive gene expres-

sion, whether it's the community that you live in or exposure to pollutants or other external contaminants. Stress is another driver. It increases the rate of inflammation, which ripens the molecular environment for the development of cancer."

In 2015, President Obama announced the Precision Medicine Initiative to accelerate research based on people's genes, environments, and lifestyles. A year later, he announced the Cancer Moonshot to speed up research in cancer prevention, diagnosis, and treatment.

"The 2020 initiative aligns well with the goals that President Obama put in place during his administration," Dr. Rivers says. But the patient populations served by these initiatives "are not as diverse as one would think. As we advance genomic science and our understanding gets better, there are some genetic mutations that are unique to certain racial and ethnic groups for a variety of reasons. To not have them represented early in the process makes the whole notion of precision medicine imprecise."

TALKING UP CANCER RESEARCH

Since 2020 by 2020 was launched in 2018, Dr. Lillard has spent considerable time talking up the initiative with Grady patients, community physicians, and the media, including audiences listening to Atlanta's WCLK and HBCU Digest Radio.

Enrolling in precision cancer trials, he tells everyone, will make cancer care and cancer research more effective for African Americans, based on the information found in each person's unique genetic blueprint.

"It will lead to better drug treatments and reduce health care costs by enabling us to diagnose disease sooner and provide more effective treatments resulting in fewer side effects and better response rates," Dr. Lillard says. "Patients and their families will benefit from research that better identifies cancer risk to prevent disease. This type of research will reduce disparities by improving cancer outcomes and prolonging life." **M**



MSM's Priscilla Pemu, M.D., center, is directing the All of Us initiative at MSM.

RESEARCH

Health Data for "All of Us"

MOREHOUSE School of Medicine is helping shape the future of precision medicine on a national scale.

The school is a partner in the All of Us Research Program, a 10-year undertaking by the National Institutes of Health (NIH) to accelerate research and improve health by gathering data from more than 1 million adults living in the United States.

Launched by NIH in May 2018, All of Us evolved from the Precision Medicine Initiative announced by President Barack Obama in 2015. More than 230,000 people from across the United States had enrolled by July this year. Adults 18 and

older, in good health and with no health conditions, are eligible to enroll.

MSM joined All of Us in 2017, along with the University of Miami, University of Florida-Gainesville, and Emory University, as part of the SouthEast Enrollment Center (SEEC).

As Priscilla Pemu, M.D., director of the R-Center Community Based Research Core and the Community Physicians' Network at MSM, explains, All of Us will allow researchers to develop cures based on the health, environmental exposures, and genetics of every study participant.

"Precision medicine is an approach

to developing cures that consider each person's individual characteristics," Dr. Pemu says. "The advantage of a precision approach is that we increase the chance of cure while reducing unwanted factors such as drug side effects or complications of treatment."

By establishing a site at MSM, All of Us can cast a wider net and address health disparities within precision medicine through targeted enrollment of African American, Hispanic/Latino, Native American, rural community, and lower-income individuals.

Targeting these groups will help break



down the barriers known to limit diversity in precision medicine and health research in general, Dr. Pemu says. For example, minorities may not receive care at academic health centers where research is conducted. Some may be unwilling to take part in research, based on the unfair treatment of participants in the Tuskegee Study of Untreated Syphilis in the Negro Male (1932–1972) and the sterilization of 3,406 American Indian women without their permission (1973 and 1976).

The SEEC consortium aims to represent the rich diversity and diverse health needs of the southeastern U.S. population.

“New medicine comes out of research. Yet, historically, African Americans and other minorities have been underrepresented in medical research,” says Stephan Zuchner, M.D., PhD., lead prin-

cipal investigator of SEEC. “Morehouse School of Medicine has unique access to the African American community and tremendous experience with population health studies.”

More than 1,600 individuals have enrolled in All of Us through MSM since August 2018. Once collected, information from All of Us participants is curated and securely stored at data centers around the country.

“Once curation is complete, the data will be made available to academic and citizen scientists to ask and answer questions that will advance how we currently treat and prevent illnesses,” Dr. Pemu says.

MSM is focused on leading in the creation and advancement of health equity.

“One way we can achieve this is by training the next generation of researchers and health care providers

who come from communities that are disproportionately affected by adverse health conditions,” Dr. Pemu says. “Such learners are in the unique position of caring enough and knowing enough to ask the right questions. The availability of the All of Us Research Program data will allow them to find the answers and cures that apply to our communities.”

Ultimately, All of Us will lead to research breakthroughs that transform health care as we know it, Dr. Zuchner notes.

“As the flagship program of NIH, All of Us has the potential to further push health care systems to think about entire populations in their reach and how clinical research at scale can enhance patient experiences and outcomes for everyone.”^M

In a small village in Mozambique, MSM resident Elyse Stevens helped train community health workers and developed preventative health education programs.



Made to Be a Morehouse School of Medicine Doctor

By Elyse Stevens, M.D.

I USED TO BARTEND at a little dive bar in downtown New Orleans, the kind of bar where everyone knows each other and the bartender is your best friend, your therapist, and, occasionally, your cat sitter or emergency contact. They say you shouldn't try to work during medical school, and "they" are probably right, as every spare minute is precious study time. I used to lay out my flashcards behind the bar

so I could glance at them while mixing drinks. I practiced neurological exams on reluctant co-workers and doodled mnemonics on bar napkins. I'm not the greatest mixologist, per se, but I've learned that the company is often more important than the drink. Most people just want to be heard, and I am always happy to listen. For all of the long hours and sleepless nights, I wouldn't change a thing.

Nhamatanda district, where Stevens worked, was devastated by Cyclone Idai in March 2019, which left more than 55,000 people in the area homeless, according to Doctors Without Borders.



I have always been interested in people—what makes us human, how we survive, how we suffer, how we treat one another. At 15 years old, I dropped out of high school and enrolled as a college freshman at a liberal arts school that specialized in educating little sponges like me. I took on two part-time jobs and volunteered at the local middle school at an after-school program. By age 18, I had spent a year working in public health projects in Mozambique in southern Africa and graduated with a Bachelor of Arts degree in human services.

After graduation, I returned to Mozambique to continue my work at the Community Center of Nhamatsane. I trained community health workers, developed preventative health education programs, and helped establish the village's first and only Health Post, where we provided wound care, community health education, and transportation to the city hospital. Throughout my years in Nhamatsane, I fought

to mitigate the consequences of the absence of accessible health care and sanitation—afflictions that are inconvenient in my world but devastating in theirs. Over time and many tragedies, I began to see the complexity of the concept of development, and at the heart of it all, I saw health. I returned to the United States to pursue a career as a doctor, specializing in internal medicine. While working full time, I completed my M.D. and M.P.H. degrees in global health systems and development at Tulane School of Medicine. My parents and I had never been prouder!

I was never meant to be just another physician in a white coat. On Match Day, I truly found my match at Morehouse School of Medicine. MSM and I are kindred spirits—an institution that stands for something greater than ourselves, a place where medicine is more than a science and where history is being made every day. MSM not only saw past my

roundabout path to medicine, my outspoken nature, my admittedly outlandish goals and dreams, but throughout the past two years of residency has supported my passions and given me opportunity after opportunity to be a leader in the program, the hospital, and the community. I have spent over a decade of my life working for the privilege of spending every day listening, learning, and taking care of people. I became a doctor to be a *Morehouse School of Medicine* doctor. [M](#)

Elyse Stevens is an internal medicine resident at Morehouse School of Medicine.



Assurance for the Uninsured

How MSM's HEAL Clinic is filling in coverage gaps across Georgia

It's 9 a.m. on a Saturday, and, while other classmates might be sleeping in, three Morehouse School of Medicine students in white coats sit at a conference table, across from an MSM physician. One student, a young woman, begins reporting out to the attending physician about a patient who came in for a regular checkup but who may, in fact, have pinkeye. The attending physician nods as the students talk, then gestures for the students to follow him.

This is just a regular weekend in the life of medical volunteers at MSM's Health Equity for All Lives (HEAL) Clinic, a program dedicated to carrying out the school's mission of creating health equity by providing primary care for underserved urban and rural populations of

metro Atlanta and Georgia. The clinic, with funding from grants and in-kind donations, provides free services to uninsured patients.

"We've seen and heard, firsthand, a side to health care that you might not see unless you are working in these free clinics," says Lindsay Stanford, a second-year medical student and one of the nine MSM-HEAL student co-directors. Through her work with HEAL, Stanford and the other student co-directors have heard horror stories about people who have lost their insurance and then lost much-needed care for chronic illnesses.

Many of the patients who arrive at MSM's HEAL Clinic have avoided seeing a physician for years because they could not afford the

Second-year MSM medical students receive firsthand experience in patient care in MSM's HEAL Clinic. The clinic provides free primary care services to uninsured patients in urban and rural Georgia.



cost. Some have stopped taking life-saving medications because they were too expensive. A decrease in quality of life due to a loss of insurance coverage should not be an issue for anyone living in this city, says Jacob Sloan, a second-year medical student and one of the student co-directors of HEAL.

"We hope to change that," he says.

Georgia has some of the highest health care prices in the nation, according to Georgia Health News, yet almost two in five Georgians are low income. Coverage from Georgia Health News shows the state has higher medical costs than most, and metro Atlanta is pricier than many other cities.

With Georgia's decision not to expand Med-

icaid, publicly funded hospitals like Grady have experienced a drastic increase in emergency room visits for advanced cases of diseases that could have been prevented with regular primary care visits.

In Fulton County alone, 17 percent of people under the age of 65 are without health insurance. Many within that percentage are African Americans, Asian/Pacific Islanders, and Latinx living below the poverty line. These individuals often have no access to health insurance through their employers, do not meet the criteria for Medicare or Medicaid, and cannot afford to purchase insurance through the Affordable Care Act (ACA).

Additionally, although Atlanta is a large

city with many health care providers, there is still a giant deficit of physicians to care for all the possible patients in the metro area, with a 950:1 patient-to-physician ratio in greater Atlanta. Given these barriers, MSM recognized the shortage of primary care clinical services accessible to underserved populations and took action.

"There was a growing need to provide medical care to underserved populations in Georgia, especially in the rural areas," says HEAL program director Folashade Omole, M.D.

To help patients overcome these barriers to care, MSM established a student-run clinic in 2011 at the Good Samaritan Health Center, called "MSM-Student Run Clinic (SRC) at Good Sam."

Initially, the student-run clinic at Good Samaritan offered primary care services to patients one evening a week. This planted the seeds for what is now known as the HEAL Clinic. According to Danielle Duvernay, program coordinator for HEAL, the clinic has grown in three areas: new clinical sites and times, expanded interdisciplinary leadership roles/ additional volunteer spots, and new community outreach initiatives.

The second HEAL Clinic opened in February 2016 at Howell Mill Road. This clinic successfully served six patients on its first day. Additional space has allowed MSM medical students volunteering in the HEAL Clinic to see an average of five additional patients per clinic session.

Since the addition of a second clinic site, there has been incredible growth. The 59 patients served at two HEAL clinic sites in 2016 ballooned to 138 in 2017. Additionally, 26 more practicing physicians were recruited from MSM's Department of Family Medicine,



MSM medical students discuss possible therapies for a patient at one of three MSM HEAL Clinic locations.



Folashade Omole, M.D., left, chair of the Department of Family Medicine at MSM and program director of the HEAL Clinic, observes a medical student during a patient visit in the HEAL Clinic.

institutional alumni, and community providers to serve as attending physicians at the HEAL Clinic.

In 2017, a third clinic site was added at the Comprehensive Family Healthcare Center (CFHC) at Buggyworks in East Point, Ga.

Since 2017, clinic sessions have been held at the three different stand-alone sites around metro Atlanta, with eight to 10 patients per clinic session. From May 2019 to September 2019, five sessions were held at the CFHC/Buggyworks location, nine were held at Good Samaritan, and seven were held at the Howell Mill location. From October 2019 to April 2020, nine clinics are scheduled for the first and third Wednesday evenings at CFHC/Buggyworks, 12 for the first and third Saturday mornings at Good Samaritan, and eight for the second and fourth Saturday mornings at the Howell Mill Road location.

Students from each year of MSM's M.D. curriculum share the clinical

workload with public health graduate students, master's-level premedical students, and Ph.D. students, as well as pharmacy students from the Philadelphia College of Osteopathic Medicine in Georgia (PCOM-GA).

Once patients have been financially screened, their clinical visit includes patient education, disease management, and pharmacist consultation. Laboratory studies can be drawn on-site by student or medical staff volunteers. Imaging services or surgical procedures may be referred to affiliate hospitals or health care facilities. The HEAL Clinics are staffed by licensed physicians who supervise the students and finalize the physical assessments, review laboratory test results, and help create plans of action.

An updated resource guide is used to track local pharmacy prices for medications at free or reduced prices. In addition, pharmacy students assist patients in completing applications for patient assistant programs offered by major

pharmaceutical companies. If patients require medications, they are given a year's worth of supply and education on adherence and health conditions, with the expectation they will return the following year for continuity of care.

Besides working at new clinic sites, HEAL volunteers have been serving communities through an engagement initiative. Since the launch of the community engagement initiative, MSM HEAL has participated in six health fairs and community events in the metro Atlanta area within a 15-mile radius of the stand-alone Howell Mill Road clinic. Student volunteers performed blood pressure and blood glucose screenings and educated patients about diabetes, hypertension, and hyperlipidemia. Over a one-year period, the HEAL Clinic screened about 500 patients during health fairs and community outreach events.

Chevon Brown-Stubbs, M.D., a physician volunteer and previous HEAL student co-director, said that any stu-

dent at MSM can volunteer and help at any of the HEAL Clinic sites and events. Students also have the chance to gain hands-on experience in a variety of capacities, from phlebotomy to blood glucose testing and HIV testing.

“Student co-directors have more of a time commitment and develop leadership skills as they help run the clinics and work with community partners. Co-directors learn how to perform data collection, data analysis, needs assessment, and even grant writing,” Dr. Brown-Stubbs says.


“The HEAL Clinic offers a great opportunity, especially for first- and second-year medical students. You get to put some of the skills you have learned in the classroom in practice. You become more advanced before rotation. I think it helps with your confidence and your rapport with patients,” says Brianna English, president and one of the 2019 co-directors of the HEAL Clinic. “It definitely helps put things into perspective.”

Since 2011, the HEAL Clinic has constantly evolved. Clinic program staff and student co-directors have established partnerships with local community organizations—such as local homeless shelters, transitional housing, and church groups—and have even provided MARTA passes to patients for transportation.

“There is a triangle of wellness that we don’t do a good job of recognizing—health, education, and income are intertwined,” says Christopher Ervin, M.D., clinic operations director. “For example, if you are unhealthy, you may not be able to complete your education, so then you can’t make a good income. If you don’t have any income, how can you make healthy decisions? When you have the proper income, you have the means to make healthy decisions. Providing basic health care for people can improve the productivity of a community because healthy people can work and pay bills. That is why HEAL is important, and that is why Morehouse

School of Medicine’s approach to health equity is important.”

Additionally, the HEAL clinic works to improve interdisciplinary student clinical education by preparing preclinical students for their clinical rotations. Medical students enhance their clinical education through real-life application of disease processes learned in the classroom, which are applied to patients in the MSM-HEAL clinic setting.

“Students learn to become really good listeners,” says Dr. Christopher Holaway, Pharm.D., pharmacy adjunct faculty member at PCOM-GA. “Because until you become a good listener, you don’t know what the problem is. You can’t solve the problem unless you know what the problem is.” 

“Health, education, and income are intertwined. Providing basic health care for people can improve the productivity of a community because healthy people can work and pay bills.”

Christopher Ervin, M.D., Clinic Operations Director

○ For more information about the HEAL Clinic, please visit msm.edu/Current_Students/currentStudents_commservice.php

Faculty & Staff Scholarship

- RECENT PUBLICATIONS
- (CO-AUTHORED)
- RECOGNITIONS
- GRANT AWARD
- APPOINTMENTS
- ACTIVITIES



David Alexander III, D.H.Sc.
Clinical Director
PA Program

● “Underrepresented Minority Physician Assistant Faculty Mentorships: It Takes a Village,” with Daytheon Sturges, MPAS, PA-C, in the June 2019 edition of the *Journal of Physician Assistant Education*.



Peter Baltrus, Ph.D.
Assoc. Prof.,
Comm Health

● “Identifying County-Level All-Cause Mortality Rate Trajectories and Their Spatial Distribution Across the United States,” published in *Prevention Chronic Disease*.



Gilberte Bastien, Ph.D.
Asst. Prof., Psychiatry

● “A Chance to Get It Right: Addressing the Invisible Scars of Ebola Using Culturally Informed and Community Engaged Strategies,” published online in the *Saporta Report*.



Carey Bayer, Ed.D.
Prof., Comm. Health

● “Curriculum Mapping, Needs Assessment & Training Health Policy Leaders,” published in *Ethnicity & Disease*, 29 (Suppl. 2),
● Selected as an Adult Advisory Board Member at the Center for Reproductive Health in the Southeast for the Youth Engagement Initiative.



Natasha Browner, Ph.D.
Director, Research
Admin. & Operations

● Selected as a new member of the Southeastern Association of Shared Resources (SEASR) Executive Board (EB) for the 2019–2023

term. SEASR is an official chapter of the Association of Biomolecular Resource Facilities (ABRF), with a mission to provide a regional forum for administrators, directors, managers, scientists, and technical staff in core and research biotechnology labs in government, academia, research, and commercial settings to meet, discuss, and collaborate on the many common issues that face this group.



Omar Danner, M.D.
Prof., Surgery

● Published “Sepsis Due to Deep Posterior Neck Abscesses Secondary to *Prevotella bivia*: Beware of Emerging Opportunistic Pathogens,” in the *Journal of Clinical Studies and Medical Case Reports* in July 2019.

● Appointed as vice chair of Injury and Violence Prevention by and for the state of Georgia Committee of Trauma in July 2019 for a three-year term.

● Participated as a panelist at the AAST National Conference in September 2018 for a presentation of the Effect of Gun Laws on Your Neighbor. The discussion was about the effect of guns flowing out of states with lax gun legislation for the session published in *General Surgery News* in January 2019.
● Lean Six Sigma Black Belt Certification after completion of Black Belt project on Improving Operating Room Turnover Efficiency in August 2018.



Jason DeBruyne, Ph.D.
Assoc. Prof.,
Pharm./Toxicology

● In April 2018, received a five-year \$1.8 million National Institutes of Health/National Institute of General Medical Sciences R35 grant to study the roles of protein degradation mechanisms within the circadian clockwork, and how they regulate a newly discovered female-specific circadian mechanism essential for the inherent resilience of females to obesity

and dyslipidemias.

● Awarded a three-year \$1.0 million from National Science Foundation to identify the elusive neuroanatomy and development of mammalian homeostatic sleep regulation, in collaboration with Dr. Christopher Ehlen at Morehouse School of Medicine and Dr. Daniel Hummer at Morehouse College.



Lillianne Lewis Debnam, M.D.
Asst. Prof., Pediatrics

● “Characterizing Environmental Asthma Triggers and Healthcare Use Patterns in Puerto Rico,” published in the *Journal of Asthma* in April 2019.

● “Health Communications: Provider Assessment of Asthma Control,” published in the *Journal of Asthma* in June 2019.

● “Community and Street-Scale Supports for Walking in the US Virgin Islands Before the 2017 Hurricanes,” published in the *American Journal of Public Health*.



Megan Douglas, J.D.
Asst. Prof.,
Comm. Health

● Serving as the chair of the Disparities Interest Group Advisory Committee for AcademyHealth as of Sept. 1, 2019.



Christopher Ervin, M.D.
Program Mgr.,
Family Med.

● Recognized by Park Cannon, GA-58 for work in advocating health and wellness in the Atlanta community on March 14, 2019, through a House Resolution.



Yun Mei Fung, M.D.
Director and Asst.
Prof., Simulation
Center

● Presented “Smart Educational Technology & Instructional

Design” (J. Zheng, L. Rigobert, N. Danavall, R. Sridaran, Y.M. Fung) at the Annual Conference of IT in Academic Medicine, June 5, 2019, San Diego, Calif. ● Presenting “Integrating Simulation in Basic Sciences Curriculum to Bridge Competency Gaps” (J. Zheng, L. Rigobert, N. Danavall, R. Sridaran, Y.M. Fung) at the American Association of Medical Colleges Learn Serve Lead Conference, Nov. 10, 2019, Phoenix, Ariz.



Anne Gaglioti, M.D.
Assoc. Prof.,
Family Medicine

○ “Racial Disparities in Breast Cancer Outcomes in the Metropolitan Atlanta Area: New Insights and Approaches for Health Equity,” published in *JNCI Cancer Spectrum*.

● Selected as a winner of reciprocal prizes of the 2018 annual meeting of the North American Primary Care Research Group by members of the Program Committee after rating the quality of her abstract on interpersonal primary care continuity among Medicaid enrollees in the top 10 percent of all abstracts submitted to the annual meeting. Dr. Gaglioti presented the research findings in the plenary most distinguished paper session on July 4, 2019, at the Society for Academic Primary Care in Exeter, England.

● Appointed to the 2019–2020 governance board of North American Primary Care Research Group.



Gemechu Gerbi, Ph.D.
Assoc. Prof.,
M.P.H. Program

○ “Factors Associated with Self-Reported History of Depression Diagnosis Among Cancer Survivors Aged 18 Years and Over in the United States,” in *Psych-Oncology* in 2018.

○ “The Prevalence of Adverse Childhood Experiences and Their Associations with Engagement in Risky Behaviors for HIV Infection Among Adults in the United States,” published by the ARC

Journal of Public Health and Community Medicine in 2018.

○ “Factors Associated with Human Papillomavirus Vaccination Among Women in the United States,” in the *ARC Journal of Public Health and Community Medicine*.
○ “Predictors of Not Always Using Seatbelts Among Adults in the United States: Findings from the 2016 Behavioral Risk Factor Surveillance System,” in the *ARC Journal of Public Health and Community Medicine* in 2019 (with Stephanie Miles Richardson).



Sarah Greene, Ph.D.
Assoc. Prof.,
Pathology

● “The Use of Anatomical Dissection Videos in Medical Education,” in press in *Anatomical Sciences Education*, and “Sharing Personal Information About Anatomical Body Donors: What First-Year Medical Students Want to Know and How It Affects Emotional Responses to Dissection,” in *Clinical Anatomy*.



Janice Herbert-Carter, M.D.
Chair and Prof.,
Medical Education

● Named to a three-year term on the Accreditation Review Commission for the Education of Physician Assistants, the accrediting body for all physician assistant programs in the United States. Selected as a 2019 Liaison Committee on Medical Education Faculty Fellow.



Kisha Holden, Ph.D.
Prof., Psychiatry

○ Kisha Holden, Ph.D., M.S.C.R.; Elizabeth Ofili, M.D., M.P.H.; Camara Jones, M.D., Ph.D., M.P.H., and David Satcher, M.D., Ph.D., served as guest co-editors for the academic journal *Ethnicity & Disease* for a special issue titled “Collaborative Health Policy Research.” The supplement

highlights scholarly outcomes of the MSM Transdisciplinary Collaborative Center for Health Disparities Research that was funded by the National Institute of Minority Health and Health Disparities (NIMHD).



Jammie Hopkins, Dr. PH.
Asst. Prof.,
Comm. Health

● Selected for the 2019–2020 cohort of the Leadership and Diversity Training Program (LDTP) with the American College of Sports Medicine. The purpose of the ACSM Leadership & Diversity Training Program is to train ACSM professional members from minority groups underrepresented in the sciences, who hold a terminal degree to become ACSM leaders and fellows. Dr. Hopkins, an exercise physiologist by training with a doctorate in public health, was selected for LDTP Level 3 Research, the highest distinction in the program, eligible to junior faculty members.



Angelita Howard, Ed.D.
Director, Online
Programs

● Logan University College of Health Sciences Board of Advisors; Clayton State University Alumni Board.
● “Using Technology to Enhance Student Learning,” Drexel University Conference Proceedings at IUPUI, Indianapolis, Ind., and “Systematically Assessing Instructional Effectiveness and Faculty Impact on Health Sciences Student Performance,” with Mark Howse, Ph.D., MSM director, outcomes and assessments, Drexel University Conference Proceedings at IUPUI, Indianapolis, Ind.
● Women in Technology “Women of the Year” honoree, 2018.



Lilly Immergluck, M.D.
Assoc. Prof.,
Microbiology

● “Clindamycin Versus Trimethoprim-Sulfamethoxazole Versus Placebo for Uncomplicated Skin and Soft Tissue Infections,” published in the *New England Journal of Medicine*. Dr. Immergluck served as Atlanta’s site principal for a multicenter study to address the growing problem of antibiotic resistant bacterial infections in children and adults.



Yvonne Kirkland
Admin. Assistant,
Satcher Institute

● Proposal entitled “Improving Employment Outcomes for People with Disabilities: Research Outcomes of Effective Collaborative Partnerships,” accepted to the National Council on Rehabilitation Education (NCRE), fall 2019 seminar.



Mary Langley, Ph.D.
Prof., Comm. Health

● Presented “Strategies to Address the Opioid Epidemic in Black and Hispanic/Latino Communities,” a national webinar hosted by Substance Abuse and Mental Health Services Administration (SAMHSA) on Aug. 28, 2019, with over 500 registered attendees. The presentation highlighted Morehouse School of Medicine’s work in Albany, Ga. (Dougherty County), to address the emerging opioid use disorders crisis among African Americans in this metropolitan community.

● A manuscript accepted by John Hopkins University Press scheduled to be published in spring 2020. The title of the book is *Deeply Rooted: The Morehouse School of Medicine Model for Community Engagement and Health Equity*. The forward is written by Dr. Valerie Montgomery Rice, president and dean of Morehouse School of Medicine.



Arletha Williams Livingston, Ph.D.
Director,
Family Medicine

● *Atlanta Business Chronicle* Healthcare Hero Award in May 2019.



Dominic Mack, M.D.
Prof., Family
Medicine

● “Morehouse Choice Accountable Care Organization and Education System (MCACO-ES): Integrated Model Delivering Equitable Quality Care,” published in *International Journal of Environmental Research and Public Health*.
● Selected as chairman for the 2018–2019 Georgia Health Information Network Board.



Veena Rao, Ph.D.
Prof., OB/GYN

● “A Provocative Molecular Link Between Mammographic Density and BRCA1-Loss Associated TNBC,” published in the *International Journal of Human Genetics and Genetic Disorders*. This study highlights the need for not only frequent breast screening and use of digital mammogram but also screening for potential mechanism-based biomarkers that can predict TNBC early in women with high mammography density and BRCA1 mutation, thus reducing the mortality associated with these aggressive cancers.



Shyam Reddy, Ph.D.
Prof., OB/GYN

● “ETS-Related Gene (ERG) and Friend leukemia integration-1 (FLI-1) Transcription Factors in the Precision Treatment of Pulmonary Arterial Hypertension and Pulmonary Fibrosis,” in *Journal of Cancer Epidemiology & Treatment*.



Kmarie Reid, M.D., M.S.
Prof., Surgery

● Society for Surgery of the Alimentary Tract Board of Trustees; Society of Black Academic Surgeons, program chair, 2019–2021; Society of American Gastrointestinal and Endoscopic Surgeons, co-chair, Advocacy and Health Policy Committee; HPB/Solid Organ Task Force Committee; and Program Committee.
● Continuing: *American Journal of Surgery* editorial board; *Journal of Gastrointestinal Surgery* editorial board.



Latrice Rollins, Ph.D.
Asst. Prof.,
Comm. Health

● Selected to participate in one of the Robert Wood Johnson Foundation’s Culture of Health Leaders Program. Designed for people from all sectors—from technology and business to architecture and urban planning—Culture of Health Leaders fosters cross-sector collaboration and enables participants to remain in their homes and jobs and directly apply everything they learn to improving policy and practice in their communities and organizations. The three-year program provides

participants with an annual stipend of up to \$20,000. Dr. Rollins will focus on creating and leading the advancement of health equity for African American fathers by exploring African American father engagement strategies in education, practice, research, and policy.



Gianluca Tosini, Ph.D.
Prof., Pharm./
Toxicology

● Awarded Ro1 EY026291-04S1, as principal investigator for research titled “Circadian Regulation of RPE Functions \$132,213 (Supplement).”

● Named editor-in-chief at the *Journal of Pineal Research* (impact factor 15.2) in January 2019.



Henrie M. Treadwell, Ph.D.
Prof., Comm. Health

● Co-edited *Oral Health in America: Removing the Stain of Disparity*. *Oral Health in America* details inequities to an oral health care system that disproportionately affects underrepresented and underserved communities, such as the poor, those without insurance, the disabled, and senior citizens. David Satcher, M.D., Ph.D., 16th surgeon general of the United States, and Louis W. Sullivan, president emeritus of Morehouse School of Medicine and former Secretary of the U.S. Department of Human and Health Services are contributors to the book, among the various perspectives representing the work and commitment of health care providers, philanthropic leaders, corporate commitments, individual policy analysts, and other decision makers.



Kayellen Umeakunne, R.D.
Research
Bionutritionist,
Clinical Research Ctr.

● Published book chapter: “Whole Plant Foods and Optimal Gut and Host Health in Promoting Biodiversity,” in *Food Systems* in October 2018; CRC Press.
● “Nutrition in Sickle Cell Disease: Recent Insights,” published in *Nutrition and Dietary Supplements*, May 2019.
● Presented “Effect of a Traditional DASH Diet and 100% Plant-Based DASH Diet on Gut Microbial Profile, Blood Pressure, Body

Composition, hsCRP and Glucose in Pre-hypertensive Obese African American Females: Translating Gut Microbiota into Nutrition Assessment and Personalized Nutrition,” at the Georgia Clinical and Translational Science Alliance Scientific Conference at Callaway Gardens in March 2019.



Gloria Westney, M.D.
Asst. Prof., Internal
Medicine

● “Improving the Quality of Family Participation in ICU Rounds Through Effective Communication and Telemedicine,” in the *Journal of Critical Care Medicine*.



Jinjie Zheng, Ph.D.
Asst. Prof.,
Medical Education

● In collaboration with several MSM colleagues will deliver presentation about MSM online curriculum development and innovative teaching approaches in the digital era scheduled for seven national health education conferences, including the American Public Health Association, American Association of Medical Colleges, American Educational Research Association, and IT in Academic Medicine. On Nov. 9, Dr. Zheng will serve as a panelist alongside faculty members from Harvard and Stanford universities and the medical dean from Case Western Reserve University in discussing “Technology Trends in Medical Education: Capabilities and Crucial Considerations for 2030” at the AAMC LearnServe-Lead 2019, Phoenix, Ariz.

An Emerging Voice for Health Equity

How CDC fellow and MSM Master of Public Health student Tyra Montour found her calling to help vulnerable populations throughout the world

After meeting Tyra Montour, a second-year Master of Public Health student at Morehouse School of Medicine, it doesn't take long to understand her mission in life: service to others to advance global health equity. Of Haitian descent, Montour is both an idealist and pragmatist with a personal philosophy of spreading kindness to others while challenging herself to constantly improve.

Montour's journey to the M.P.H. program and her interest in health communications started early in life. She says she has always had an intense interest in communications, health, and health professions. As an undergraduate student on a volleyball scholarship, she earned her Bachelor of Arts degree in communications from Gardner-Webb University in North Carolina. She says a conversation with a mentor led her to explore public health as a way of combining her interests.

"My experience here at Morehouse School of Medicine has opened my eyes to so much,"

Montour says. "I have been surrounded by many men and women who look like me and have shown me multiple avenues to success: as a leader, advocate, student, and so much more. This institution has made me seek more out of life and is preparing me for the real world with love and understanding, but also by placing me in situations that enable me to learn through my time in the community and as a full-time student."

MSM's Master of Public Health degree program requires 360 hours of practicum experience. Montour's experience was unique in that she was a fellow with the Centers for Disease Control and Prevention's Public Health Library Communications Fellowship Program, in the Library Science Branch (LSB). The branch is in the Division of Public Health Information Dissemination within the Center of Surveillance, Epidemiology, and Laboratory Services. Her fellowship included her involvement in patron engagement, communications, and

developing marketing strategies, including website content, Listserv management, and public relations activities related to employee outreach and scientific event organization.

This past fall, Montour continued in the Student Worksite Experience Internship Program (SWEP) as a marketing and communications intern with the LSB, working directly with the senior health communications specialist.

After earning her master's degree, Montour said she plans to pursue a doctorate in global health with a concentration in risk communications and emergency preparedness.

"If I can be a voice for vulnerable populations worldwide and/or immigrants in the U.S., then I will be happy," she says. "If I can help people with access to or knowledge about resources that will help achieve health equity, then I have done my job." **M**

MSM student Tyra Montour, pictured outside the Centers for Disease Control and Prevention, has applied a long-standing interest in communications and public relations to her work in public health.







Coca-Cola Foundation Provides Relief from Student Debt

Adam Muñoz was one of six students from MSM's 2019 entering class who received critical scholarship funding to alleviate the burden of tuition

ADAM MUÑOZ didn't put on blinders or live in an academic bubble when he was an undergraduate student at Georgia State University. He joined a research project that studied post-traumatic stress disorder in the impoverished and, often, mentally ill population in downtown Atlanta. He was keenly aware of the people outside of his school community, and he very quickly realized he wanted to help them by pursuing a career in medicine.

But Muñoz was keenly aware of something else too. He knew that medical school would saddle him with a significant amount of debt—the kind of debt that is not easily paid when you want to do more charitable, and likely lower-paying, work in health care.

"I would hate to come out of medical school with so much debt that I'd have to take on work I don't believe in," Muñoz says. "I want to be able to take a job that might not pay the most but could help a lot of people."

Muñoz is just one of many medical students facing this conundrum. The majority of medical school students graduate with debt averaging about \$200,000, according to the Association of American Medical Colleges (AAMC). Graduates of public medical schools carry an average debt burden totaling \$243,902, with graduates of private medical schools carrying debt averaging \$300,000 or more.

"Debt can put a lot of pressure on you," Muñoz says. "It can interfere with your education."

So it has become more and more important for students to seek and receive scholarships. Most are not very large, with

a typical four-year award totaling about \$18,000, according to the AAMC.

Muñoz, however, was able to secure a bigger gift. In September, the first-year medical student at Morehouse School of Medicine was named a Coca-Cola Foundation scholarship recipient, granting him \$40,000 per year over four years. The Atlanta-based beverage giant's philanthropic arm is giving a total of \$2.08 million to scholarships at MSM.

Muñoz was among six students from the 2019 entering class named in September; another six will be named from the 2020 entering class of M.D.s. The current recipients are Muñoz, Breana Bess, Maria M. Fleiderman, Ka'Necia S. Martin, Lois J. Sharpe, and Carlton G. Smith.

The scholarship awards are based on financial need and academic merit for the duration of the students' medical school careers, according to the award letter by Helen Smith Price, president of the Coca-Cola Foundation. Students must maintain a 3.0 grade-point average to be eligible for renewal each year.

As a result of this gift, Muñoz will graduate with a lighter debt burden—one that will allow him to pursue his dream of providing psychiatric or primary care to underserved populations like the ones he saw and studied in the streets around Georgia State.

"I like that I will be free to control how I pursue a career in medicine," he says. "Helping the underserved will be emotionally rewarding." **M**

Two Activists, One Mission

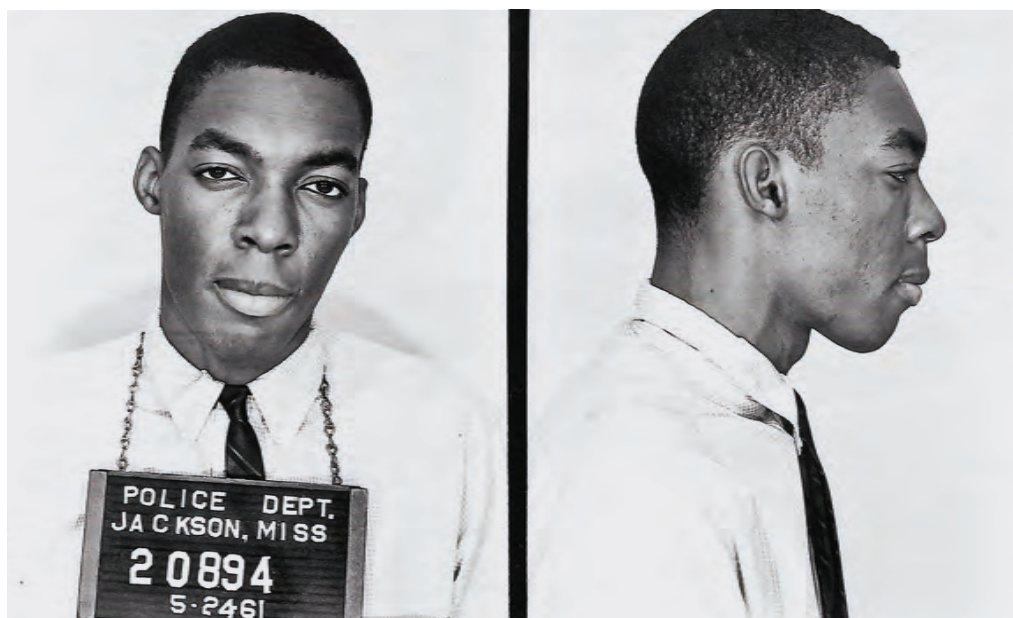
Activists, philanthropists, and business owners
Hank and Yvonne Thomas give their time,
treasure and talent to MSM

PICTURE THIS: It is 1961 in Anniston, Ala., and there is a Greyhound bus, tires slashed, smoke billowing through windows broken by rocks and rage and a firebomb, flames licking the roof. Nearby lies a man, his lungs choked with smoke, his crisp dress shirt stained with his own blood, a gash on his head from the strike of a bat. That's Hank. He is 19 years old, technically too young to join this crew of 13 Freedom Riders traveling from Washington, D.C., through the American South to peacefully protest racial segregation. He's tall and looks older, so he gets away with it, but he looks smaller here, lying crumpled in the grass.

Hank could easily have stayed lying down. Instead, he stood up and kept going. He rejoined the Freedom Riders. He would go on to be arrested 22 times for civil rights activism, earn a Purple Heart as a U.S. Army medic in Vietnam, and help change the course of history.

Now picture this: It is 1964 in Columbia, S.C., and Yvonne's Girl Scout troop has just finished a meeting. She needs to get home to her parents, a hard-working couple who have raised her in a small community and taken great pains to shelter her from the harsh realities outside. Yvonne is running late, so she takes a forbidden shortcut through the campus at the University of South Carolina. There, she is pelted with rocks and racial epithets. She trips over her shoes and runs faster.

Yvonne could have kept running, running



As one of the original 13 Freedom Riders during the civil rights movement, Hank Thomas, a Vietnam veteran and recipient of the Purple Heart, was arrested 22 times for “civil disobedience.”

from this harsh reality, keeping to herself and avoiding paths of resistance. But she did not; she kept going. Yvonne vowed to attend and graduate from the University of South Carolina—to show herself and other women what was possible, despite the odds. She did just that and went on to become a successful businesswoman and philanthropist.

Since these early days, the two—Henry

“Hank” Thomas, an outspoken and visible activist, and Yvonne Thomas, quiet and determined—have united, stood up, and kept going. Together they became successful entrepreneurs, owning multiple franchises and empowering others with employment and opportunity at McDonald's restaurants, Marriott Hotels, Fairfield Inns, and TownePlace Suites. Now retired, the Thomases still stand up, still keep



Married for more than 30 years, Hank and Yvonne Thomas are the epitome of a power couple, as successful entrepreneurs and stalwarts of the community.

going by generously and consistently giving of their time, treasure, and talent to institutions like Morehouse School of Medicine.

Their donations to the school have been significant, with more than \$528,000 in gifts to the Hank and Yvonne Thomas Honors Scholarship, Women with Heart, and the President's Innovation Fund.

"The word 'audacity' is not one we take

lightly at Morehouse School of Medicine," says President and Dean Valerie Montgomery Rice, M.D. "We take to heart its meaning: bold, daring, intrepid, brave, unflinching. These words describe our founders, our work, our impact, and our goals, so it makes sense that we would look to the Thomases, and their own audacity, for inspiration and support." [M](#)

Paying it Forward—with a Purpose

MSM alumnus Sam Sheikali, M.D., '19, donates his first month's salary to his alma mater



THE PINK POST-IT NOTE seems innocuous enough, stuck on a check written in August to Morehouse School of Medicine. But take a closer look at the careful handwriting:

"MSM believed in me and saw my potential when no other schools did. As a small gesture of my appreciation for all MSM has done for me, I would like to donate my first paycheck to the school that got me to where I am."

The note is signed Sam Sheikali, M.D., '19, an emergency medicine resident at Emory University.

He credits MSM with helping him achieve a goal he set when he was just 15 years old, stranded with his family in southern Lebanon, listening to the sound of missiles hitting nearby towns.

Though Sheikali was born in New York and grew up in Peachtree City, Ga., his family would visit southern Lebanon every other year to reunite with cousins, uncles, aunts, and grandparents. The countryside there became almost as familiar a place to him as his hometown in the United States.

But during the family's trip in 2006, rural Lebanon became almost unrecognizable to Sheikali. The July War broke out. The airport was bombed. Roads were destroyed. His family could not leave.

Sheikali saw people who had been burned from blasts, people whose limbs had been crushed by collapsed buildings. They could not get adequate health care because they were poor and lived too far from a major hospital. Instead they went to small, ill-equipped clinics in the countryside—if they got help at all.

"I became very focused on the idea of providing health care to the underserved," Sheikali says.

Eventually the Sheikali family was able to hire drivers who knew the back roads and could get them to Beirut, where they boarded an American military ship that took them from Lebanon to a military plane in Cypress. From there they traveled to Germany and then on to the United States.

The sounds and sights of war would begin to fade into the background for Sheikali, but his desire to help others would not. He enrolled at the University of South Florida in Tampa and shadowed mentors in medicine.

"I fell in love with the field," he says.

When it came time to further his education, Sheikali was immediately drawn to Morehouse School of Medicine.

"I chose Morehouse School of Medicine because of the mission. A lot of schools say they're here to serve," he says. "MSM truly puts its money where its mouth is."

So Sheikali decided to follow suit with his gift to the institution.

"One of the big things behind it is the fact that MSM saw me as more than a number and gave me the opportunity to succeed and be where I am today," he says. "MSM saw me as a human being, with principles. They really nurtured my success. I felt like I needed to give something back for all that they had done to contribute to my success."

Sheikali gets a bit sheepish when he talks about the donation.

"In the grand scheme of running a medical school, it's a drop in the bucket, but it's a gesture of my gratitude," he says. "The mission of MSM is huge for me."

These days most of his time is spent in the emergency room at Grady Memorial Hospital, tending to patients from underserved populations.

"I learned at MSM that it's about serving the underserved, about understanding that my mission as a physician is to establish health equity and to treat people no matter their background," Sheikali says. "I treat them as if they are my own family, the way human beings deserve to be treated. These are the principles that MSM instills in its students, and we get to carry that forward." **M**

Serving the Underserved

Woodrow W. McWilliams III, M.D., '01, stays true to his roots—and to MSM



THE LITTLE BOY WAS SICK, and his doctor—investigating the case like a detective—was the only one who could determine the cause: old fish sticks, fished from the garbage and eaten on the sly. It was this scene from a late-1980s television show, along with a lifelong love of science and math, that got then-12-year-old Woodrow W. McWilliams III on the road to a career as a physician—and a life as an active and generous alumni of Morehouse School of Medicine.

The show was *Empty Nest*, about a widowed pediatrician whose adult daughters move in with him, and McWilliams liked to watch it when he wasn't helping out with children at his church.

"At the end of the show, they showed that he had stayed up all night babysitting the patient," says Dr. McWilliams, now 44. "I saw the amount of care. So I decided to become a doctor too, and help people."

A military kid whose father was an officer, McWilliams bounced from city to city and coast to coast before landing in Columbus for high school. After graduating, he was certain he wanted to go to college. The inspiration for that idea came from television too; shows like *A Different World* showed him what it could be like to attend a historically black university. So he enrolled at Paine College in Augusta.

As graduation neared, he applied to medical schools. His last interview was with Morehouse School of Medicine.

"The mission of the cancer center is to take care of everybody, whether they live under the bridge or own it."

— Woodrow W. McWilliams III, M.D.

"There were only 35 students then, for the class," he says. "I knew they would be dedicated to supporting the students. MSM fosters something. Most of us have a desire to have a purpose and serve the community, but MSM really encouraged that mentality."

He never intended to go back to Columbus after finishing his studies. But the more often he visited home, the more he realized that there was a lot of good he could do in the city. "Studying community health at MSM taught me that you really need to see what's going on with people," he says. "I realized I needed to go back home."

So, after finishing his residency in 2010, he returned to Columbus.

"Morehouse School of Medicine does a very good job of encouraging students to pursue not just altruism but to see and understand the need," McWilliams says. "In Columbus, it may be the second-largest metro area in Georgia, but there's a big gap between Columbus and Atlanta."

McWilliams is now a radiation oncologist and physician at the John B. Amos Cancer Center in Columbus.

"We take care of folks in the community. We've even cared for a couple of my teachers. I've taken care of my friends and my parents," he says. "I've made a real investment in bringing care to Columbus."

He has also made a real investment in MSM, serving as a trustee since 2014 and remaining an active donor with wife Venus McWilliams.

"The mission of the cancer center is to take care of everybody, whether they live under the bridge or own it," McWilliams says. "That's what MSM stands for too." **M**

The Change Within



By Valerie Montgomery Rice, M.D.

THE FLOOD OF TEXT MESSAGES came one after the other as news quickly spread about a single act of philanthropy. In an unprecedented gesture, Robert F. Smith had just rid 396 Morehouse College graduates of an estimated \$40 million of student loan debt.

As president of Morehouse School of Medicine, many mistakenly think that our independent medical school is still part of Morehouse College. So, when the news broke, my cell phone lit up.

“Congratulations,” the text messages exclaimed minutes after Mr. Smith’s 10:45 a.m. announcement Sunday, May 19. Mr. Smith made good on his commitment in September, paying \$35 million of graduate loan debt.

The 44-year history of Morehouse School of Medicine is inextricably tied to our mother institution, Morehouse College. Founded in 1975 by then Morehouse College President Hugh Gloster, Morehouse School of Medicine

was charted in 1981 as a free-standing medical school, effectively separating from the prestigious all-male liberal arts college. Yet with each passing year, it becomes clearer to me how connected our institutions still are—in both name and deed—and why it matters to America.

As the immensity of Mr. Smith’s gift spread nationally, I was reminded of the recent visit of Microsoft CEO Satya Nadella to the Atlanta University Center, home of both Morehouse College and Morehouse School of Medicine. During my interview of Mr. Nadella, I asked him what in his early childhood and education in India accounted for his position atop one of the world’s most successful companies. What he said struck me. He spoke of the freedom to explore and be “curious ... to fall in love with things without necessarily being good at them.” He traced his success to the intellectual freedom of curiosity.

What if students had that freedom at the beginning of their college careers? What if they

had no financial challenge and were able to pursue things simply because those things gave them passion and purpose? I asked myself these questions as I thought about the lack of black males matriculating in U.S. medical schools, especially those born in the United States.

Of the more than 21,388 students in U.S. medical schools last year, only 257 of them were black men born in the United States, with a total of only 572 black men across the diaspora, including from African and Caribbean nations. That’s only 1.2 percent of U.S.-born black men in medical school, a nearly 6 percent decrease from the previous year.

Though the numbers are still far too low for black women, there is a widening gender gap that is troubling. Last year, there were 384 U.S.-born black women in medical school and a total of 1,505 black women of the diaspora, a 3:1 black female/male ratio. No other demographic group—whites, Hispanics, or Asians—has this gender disparity attending U.S. medical schools.

Our Reach



The dearth of black men in medicine threatens our ability to build diversified health care teams that can adequately address the complex health needs of all Americans, particularly the most vulnerable among us. This need is dramatically compounded by the millions of new Americans—many from disadvantaged groups—with health care access since the Affordable Care Act. The research is clear that physicians who are members of underrepresented minority groups disproportionately chose primary care fields that have the greatest impact on vulnerable populations and creating health equity.

So you may ask, as we did, why this disparity of black males in medicine exists. What we discovered is a systemic pipeline problem beginning in elementary school that influences middle school progression and high school graduation. Yet even in college, black males are equally or more interested in pursuing medicine than their female counterparts, and they typically pursue science as a major at a

higher rate. Black males also take the MCAT at a higher rate and score better. Yet black women outpace them 3:1 in matriculation in U.S. medical schools.

While we could focus on the multitude of structural biases, in the wake of Mr. Smith's gesture I choose to focus on what we can change for college students within our reach. Those who have stepped into the learning environment of higher education, a place where curiosity and the pursuit of passion should be married.

In 2017, there were 298,138 students attending historically black colleges and universities (HBCUs), and 38.7 percent (115,324) were black males, according to the National Center for Education Statistics. If our estimates are accurate, about 40 percent of those black males—more than 46,000—pursued STEM degrees, and 70 percent—more than 80,000—have at least thought about being a physician.

An ominous barrier, however, is the buckling weight of student loan debt. HBCU graduates

have disproportionately high loan debt compared to their counterparts at other colleges, according to a recent report. That helps explain why 62 percent of black students enter medical school with college debt compared to 35 percent of white students.

I venture to believe that relieving the financial burden of students' college education gives them the freedom to align their purpose with their passion. I hope that's true for the 396 recent graduates of Morehouse College. I hope their financial relief allows them to place value solely in careers that ignite their curiosity and passion. And perhaps some will choose the field of medicine, which is in desperate need of their presence. **M**

Valerie Montgomery Rice is president and dean of Morehouse School of Medicine.



A Daring Retreat



The MSM Leadership Council held its annual leadership retreat this past summer and made a commitment to lead courageously.

Stemming from the *New York Times* bestselling book *Dare to Lead*, by author Brené Brown, MSM leaders read, discussed, and affirmed a commitment to undergo a year-long curriculum based on Brown's tenets of courageous leadership, rooted in being authentic and owning vulnerabilities. Only then, the author asserts, can leaders truly put their employees before themselves.



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Each year, Morehouse School of Medicine hosts its annual Community Engagement Day, bringing together MSM faculty and staff and the community members whom they serve. This year, the event was held Oct. 12 at the Andrew and Walter Young YMCA. The roughly 300 attendees took advantage of free HIV tests, blood pressure and glucose screenings, flu shots, and more through MSM's Mobile Health Clinic. Pictured here, an MSM student prepares to administer care to a community resident.