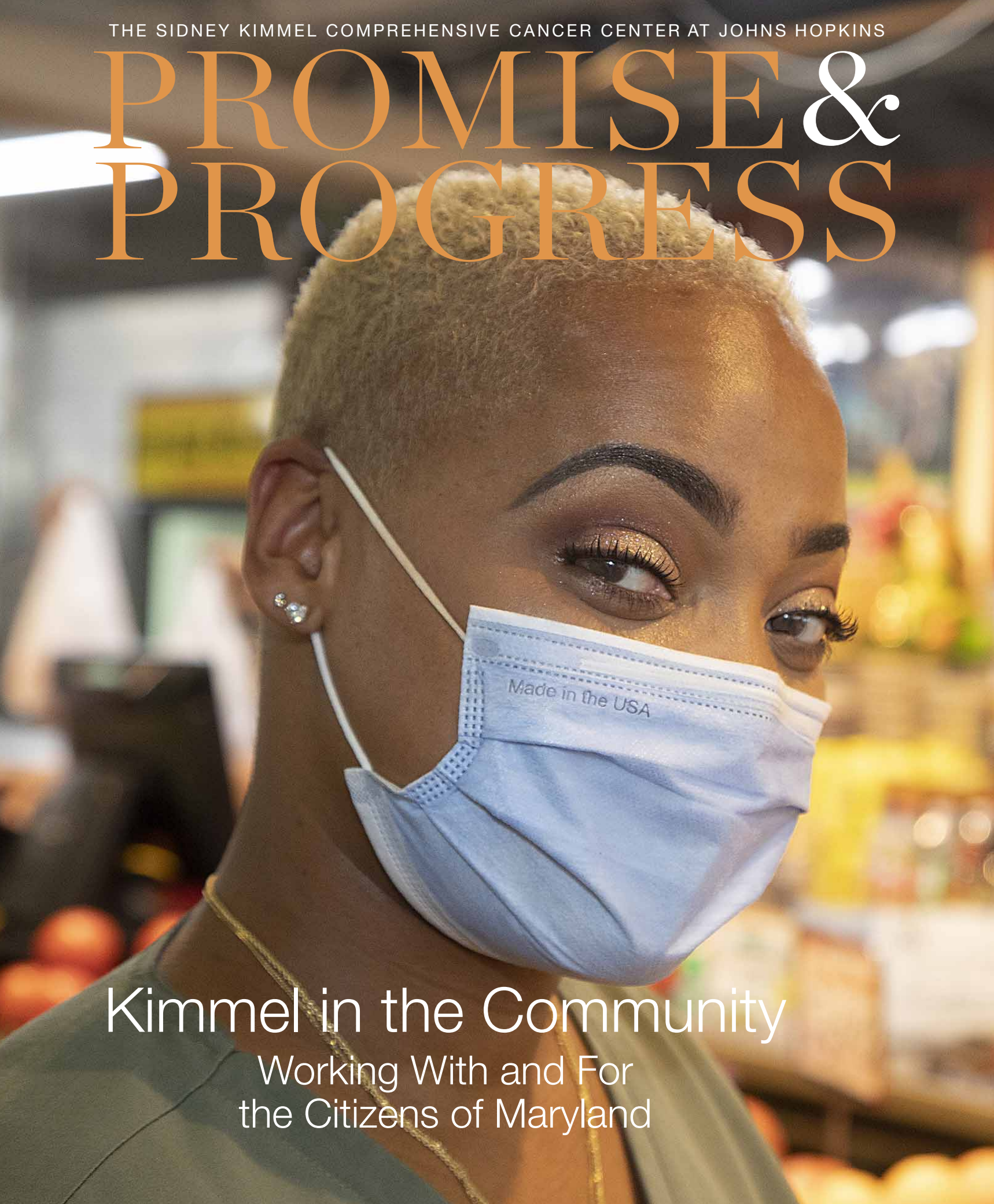


THE SIDNEY KIMMEL COMPREHENSIVE CANCER CENTER AT JOHNS HOPKINS

PROMISE & PROGRESS



Kimmel in the Community

Working With and For
the Citizens of Maryland

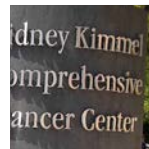
PROMISE&PROGRESS

2021/2022

Kimmel in the Community Working With and For the Citizens of Maryland



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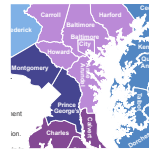
Director's Letter

Learning from COVID-19 to Address Disparities



The Breast In a Paper Bag

Looking into the Eyes of Despair and Disparity



What We Know

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Staying Quit

A No-Shame, No-Stigma Clinic Serving Smokers



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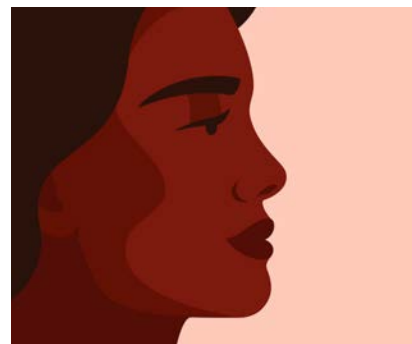
Fitness Can Conquer Cancer

The Impact of Fitness on Cancer



Prevent HPV, Prevent Cancer

Vaccine Use and Availability in Rural Areas



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Leadership Gift Launches Program in Baltimore and Washington, D.C.



Unity, More than a Clinic

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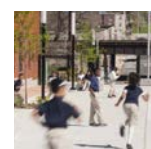
Training

Fueled by Passion for Public Health

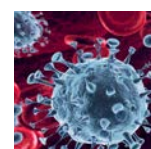


Education

Closing Disparity Gaps

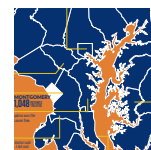


A Community Working Together for Good

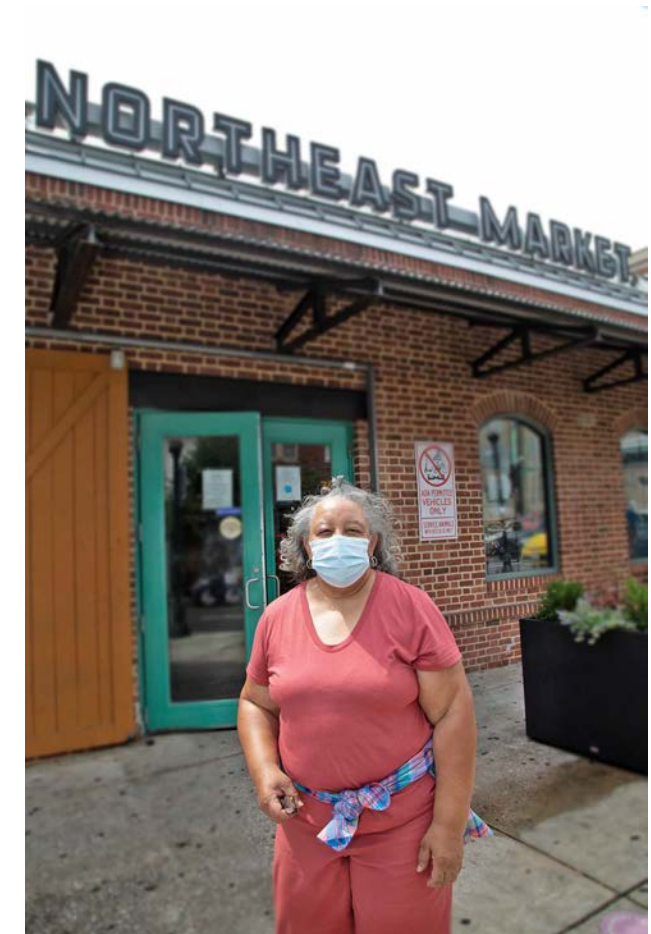
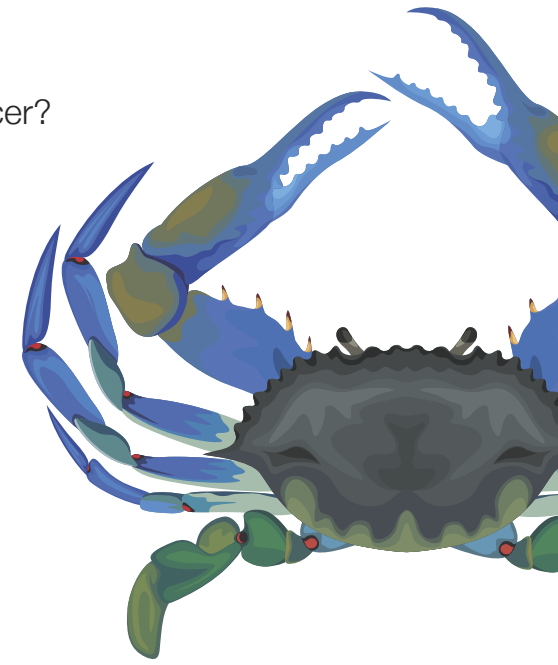


Our COVID-19 Response

Amid Challenges, There Were Triumphs



Caring for All Marylanders





Otis Brawley, M.D., Associate Director of Community Outreach and Engagement (left), and William Nelson, M.D., Ph.D., Johns Hopkins Kimmel Cancer Center Director.

2021/2022

P&P

THE SIDNEY KIMMEL
COMPREHENSIVE
CANCER CENTER AT
JOHNS HOPKINS

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Learning from COVID-19 to Address Disparities

WHEN THE COVID-19 pandemic took aim at minority Americans, the poor and the uninsured, the possibility that some of its virulence might be attributed to preventable or treatable conditions, like obesity, high blood pressure, high body mass index and diabetes, provided an urgent rationale to address these risk factors. Racial and ethnic disparities in the outcomes of chronic diseases, like cancer, diabetes, cardiovascular disease and kidney failure, are driven by the same influences. A more vigorous public health approach could reduce disparities for both acute and chronic health threats.

Aggressive COVID-19 mitigation may unintentionally endanger vulnerable populations, leading to increased ill effects and death from delayed or deferred treatment for cancers, heart attacks and strokes.

Increased COVID-19 testing, along with contact tracing, will identify clusters of COVID-19 cases to best direct isolation and quarantine tactics. COVID-19 tests will likely become available at most health care and assisted living facilities, at drive-through convenience locations, and even at home. Smart thermometers that provide body temperature measurements at home and deliver aggregated data at the community level may also help with COVID-19 control. Nonetheless, special attention will be required to ensure that minority populations have ready access to tests and other technologies needed for COVID-19 monitoring.

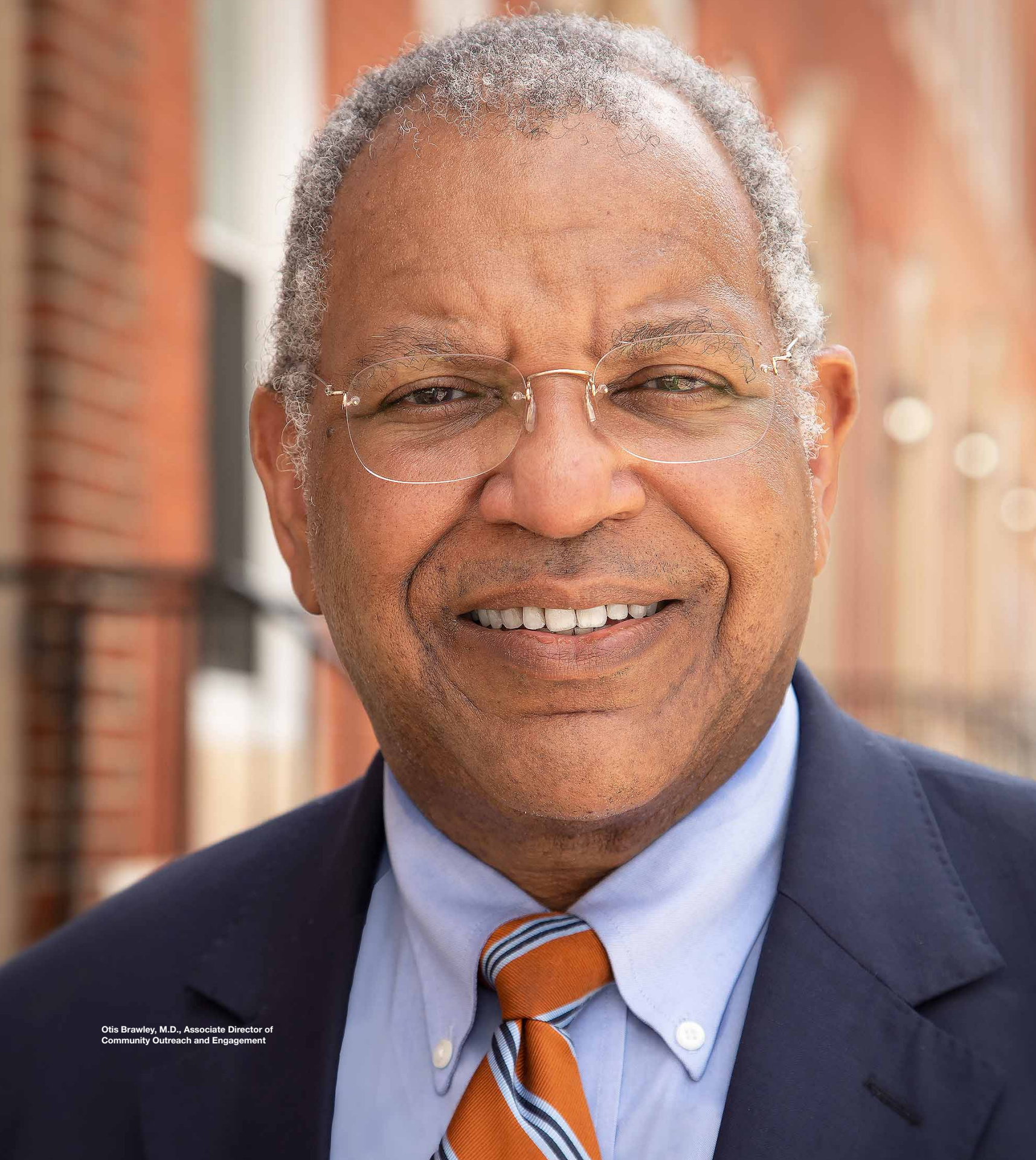
Smart technologies for measuring blood pressure, blood sugar and body weight could also be more widely introduced into the home and better deployed in minority communities. A Pew Research survey reported that more than 80% of Americans have a smartphone. Smart-

phone apps can even help with cigarette smoking cessation. In this issue, we share stories about a remote weight loss study using smartphone technology and an innovative smoking cessation clinic that engages and aids smokers in their efforts to quit through texting. Distributing phones or watches capable of collecting health metrics to all could allow targeted interventions to improve the general health of the whole U.S. population, leaving none of its citizens behind.

As part of the New Deal during the Great Depression, President Franklin D. Roosevelt created the Works Project Administration (WPA) with an executive order on May 6, 1935. Over the ensuing eight years, the WPA employed millions of Americans to improve the nation's infrastructure, building schools, hospitals, bridges, roads and sewer systems. Eighty-five years later, the need may be for employing millions of Americans to improve the nation's public health, conducting COVID-19 screening and testing; measuring blood pressure, blood sugar, blood cholesterol and body mass index; and aiding in the treatment of the conditions that drive poor outcomes from COVID-19, cancer and other chronic diseases.

William G. Nelson, M.D., Ph.D.
Marion I. Knott Professor and Director
*The Sidney Kimmel Comprehensive
Cancer Center at Johns Hopkins*

Otis W. Brawley, M.D.
Bloomberg Distinguished Professor
and Associate Director of Community
Outreach and Engagement
*The Sidney Kimmel Comprehensive
Cancer Center at Johns Hopkins*



Otis Brawley, M.D., Associate Director of Community Outreach and Engagement

The Breast In a Paper Bag

Looking into the Eyes of Despair and Disparity

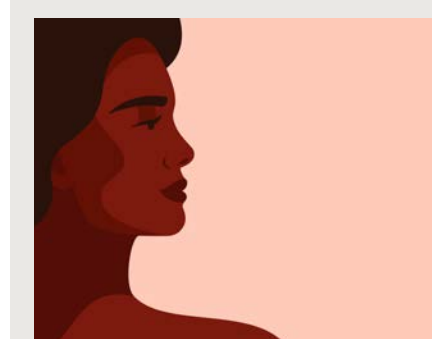
As a young oncologist in Atlanta, **Otis Brawley, M.D.**, will never forget an African American woman in her late 40s who came into the emergency room at Grady Hospital. She clutched a small paper bag. There was a form patients filled out that listed a “chief complaint” or main reason for coming to the emergency room. She wrote: “My breast fell off. Can you reattach it?” Dr. Brawley was the oncologist on call, and he was paged to see the patient.

That day, he said, he looked directly into the eyes of health disparities and the despair they bring to the lives of far too many in our country.

When the woman met with Dr. Brawley in an exam room, she gently opened the paper bag, revealing the precious content she had carefully wrapped in a moist towel. Cancer and infection had ravaged her breast, eating through the tissue until one morning, it literally fell from her body.

She had first noticed a lump when her son was in second grade. She didn’t want to use sick time to take time from work to see a doctor. She might need that time to care for her son if he got sick, she said. Ten years passed between the time she felt the lump and the consequential day that brought her to the emergency room.

Dr. Brawley was forever changed by that experience. He had many questions that, to this day, form his approach to medicine. How do race, income and ZIP code influence life and death? What roadblocks stop people from seeking and receiving care?



Action Plan for Combating Disparities

- **Early intervention, collaborating with investigators as studies are designed to identify barriers to participation**
- **Research to track reasons patients decline participation to develop targeted interventions to improve participation**
- **Research to study whether covering transportation or parking costs to clinical trial visits improves trial participation**
- **Mandatory cultural competency training**

Understanding and Overcoming

In this case, the woman was college educated and had a job, but fear of the diagnosis and prioritizing her son over her own well-being were some of the factors that stopped her from getting care. There were likely other reasons too. Dr. Brawley has dedicated his career to understanding and overcoming obstacles to cancer care, particularly among poor and underserved communities.

He recently surveyed 60,000 Maryland residents to better understand and identify concerns across Maryland communities, with age, race, ethnicity and income taken into consideration. Employment and crime were reported as the most significant concerns, followed closely by health. Among health concerns, addiction and mental health were the greatest concerns reported, followed by cancer, infectious disease, diabetes, and heart disease.

“These are surprising results considering the survey was done at a time when 60,000 people were dying from the coronavirus each month,” says Dr. Brawley. “It really emphasizes the value of bidirectional communication. We can’t make assumptions. We have to engage communities and listen to what they have to say.”

As chief medical and scientific officer of the American Cancer Society for more than a decade, Dr. Brawley is recognized as a leading authority on cancer screening and prevention, and **William Nelson, M.D., Ph.D.**, wanted that expertise at the Kimmel Cancer Center. Maryland has the highest per capita income in the nation, but the state has areas of poverty with disproportionately high cancer death rates.

“ZIP code may be more important than genetic code in predicting health outcomes,” says Dr. Brawley.

Seeking expertise to help close the racial, economic and social disparities in these areas, in 2019, Dr. Nelson recruited Dr. Brawley to Johns Hopkins to lead Community Outreach and Education.



“The field of community health education is an important field that has not gotten adequate attention. There has not been enough emphasis on risk reduction and cancer prevention.”

—Otis Brawley, M.D.

He was charged with a broad interdisciplinary effort at the Kimmel Cancer Center and Bloomberg School of Public Health to understand and combat cancer health disparities, and direct community outreach among Maryland's underserved communities.

Since joining the Kimmel Cancer Center, Dr. Brawley, a Bloomberg Distinguished Professor of Oncology and Epidemiology, has worked to quantify the human toll of cancer disparities. His research found that of the 600,000 people who die from cancer each year, 130,000 deaths are related to disparities in care.

"It is a problem in Maryland and a problem in all 50 states," he says. Black people are most likely to suffer from health disparities, but the problems extend beyond race, he points out. About 80,000 of the annual disparities-attributed deaths are in white people. Dr. Brawley looks beyond the numbers to the humanity.

"Every person brings a story, a life with them. We have to listen so we can learn, understand and help," he says.

Dr. Brawley works with **Dina Lansey, M.S.N., R.N.**, who also leads efforts to increase minority participation in clinical trials. He also collaborates with community partners throughout the state, including the Maryland Department of Health, bringing community educators, smoking cessation and cancer screening initiatives, and other efforts to communities in need throughout Maryland. The goal is to narrow and ultimately eliminate cancer disparities in the state.

Dr. Brawley also engaged other leaders at Maryland universities in conversations about health care equity. "We need to take care of those who need us the most," he says.

Together, they are working to educate doctors about disparities, pushing them to acknowledge and reexamine their perceptions. The discussion brings things out in the open, allowing longheld myths and preconceptions to be dispelled.

Outreach and Education

Another project launched this summer is a collaboration with Johns Hopkins Community Physicians (JHCP) to provide health, wellness and cancer prevention at all JHCP sites. The JHCP network of community practices serves more than 900,000 patients a year at 40 locations through Maryland and Washington, D.C., making it the largest primary care group in Maryland.

In collaboration with **Steven Kravet, M.D., M.B.A.**, who heads JHCP, community health educators recruited by Dr. Brawley and Ms. Lansey will travel among the JHCP sites and other locations throughout the state to engage communities with information about healthy living and cancer risk reduction.



Moderate exercise can be as simple as walking around the block, dancing, riding a bike, playing baseball or softball, mowing the lawn, or gardening or yardwork.

Here are some steps you can take:

- **Eat 5 to 9 servings of fruits and vegetables each day.**
- **Maintain a healthy weight.**
- **Limit red or processed meats, including fast foods.**
- **Limit alcohol.**
- **Stop smoking.**
- **Add exercise like walking into your weekly routines.**

"The field of community health education is an important field that has not gotten adequate attention," says Dr. Brawley. "There has not been enough emphasis on risk reduction and cancer prevention."

These conversations, he says, should start in childhood. His long-term plans include sending community health educators to middle and high schools to educate students and parents about healthy foods, exercise and the importance of not smoking. Healthy living that starts at a young age lowers the risk of cancer in later years, he says.

For example, he says, girls who eat a diet heavy in carbohydrates when they are children grow faster, begin menstruating at an earlier age and are at higher risk of developing breast cancer, compared with girls who grow and menstruate normally. What's worse, when they develop breast cancer, it is often a more aggressive type, says Dr. Brawley.

In addition, he says, poor diet leads to prediabetes, which is common among people who are overweight. These people have high levels of insulin circulating in their blood that helps fuel cancers. Insulin, Dr. Brawley explains, is a growth factor that helps supply cancers with blood vessels that nourish tumors.

"Too many 50- or 60-year-olds diagnosed with coronary artery disease or diabetes are referred to a dietician and given instructions for healthy eating. They wish they had been given this information and help 40 years earlier," says Dr. Brawley. "We want to give these resources to all of our JHCP offices so it can be shared with patients in their 20s and 30s. Any patient interested would have an opportunity to speak to one of our community health educators for guidance on healthy habits that reduce cancer risk."

Community health educators would also be available to go to churches, community groups and PTAs, he says. "We will be available to anyone who wants our help," says Dr. Brawley.



Dina Lansey, M.S.N., R.N., Deputy Associate
Director of Community Outreach and Engagement

Not One or the Other

Ms. Lansey appreciates that access to the best therapy is just one part of the disparities equation. Working with Dr. Brawley, she feels like they have the whole package to offer patients now.

"It's not one or the other," she says. "We are thinking about clinical care, research, and outreach and engagement."

The health and wellness component is key to their long-term goals. It's not enough to educate people about healthy diets if they don't have easy access to fresh fruits and vegetables. These are also barriers that lead to disparities, she says.

"It's exciting to think about the new directions we are heading in with Dr. Brawley. Our Community Advisory Board members throughout the state, community health educators, state and local health departments, and other academic institutions are partnering with us as we forge new relationships and new projects," says Ms. Lansey.

She points out that solutions cannot be developed by medical institutions, providers or researchers without giving community members a seat at the table.

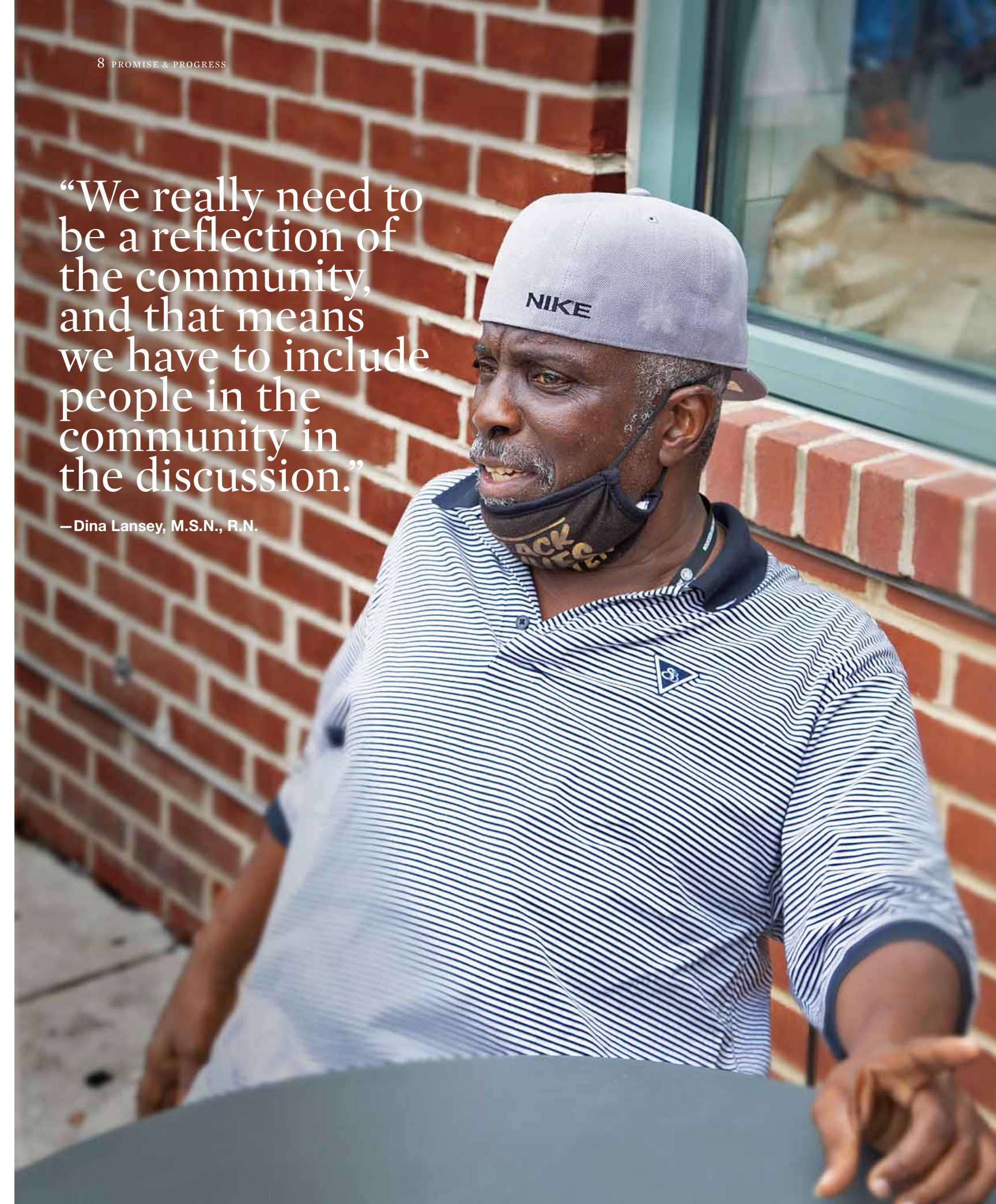
"We really need to be a reflection of the community, and that means we have to include people in the community in the discussion," she says. "Our community advisors advise us and lead with us. What we think will work may not, or what works in Baltimore City may not work on the Eastern Shore. They know their communities best."

The advisory board includes pastors, an urban radio executive and a Morgan State professor, who is an expert on Black history in Maryland and helps provide perspective on historical causes of barriers and disparities.

Dr. Brawley says, "In order to serve our communities, we have to understand our communities."

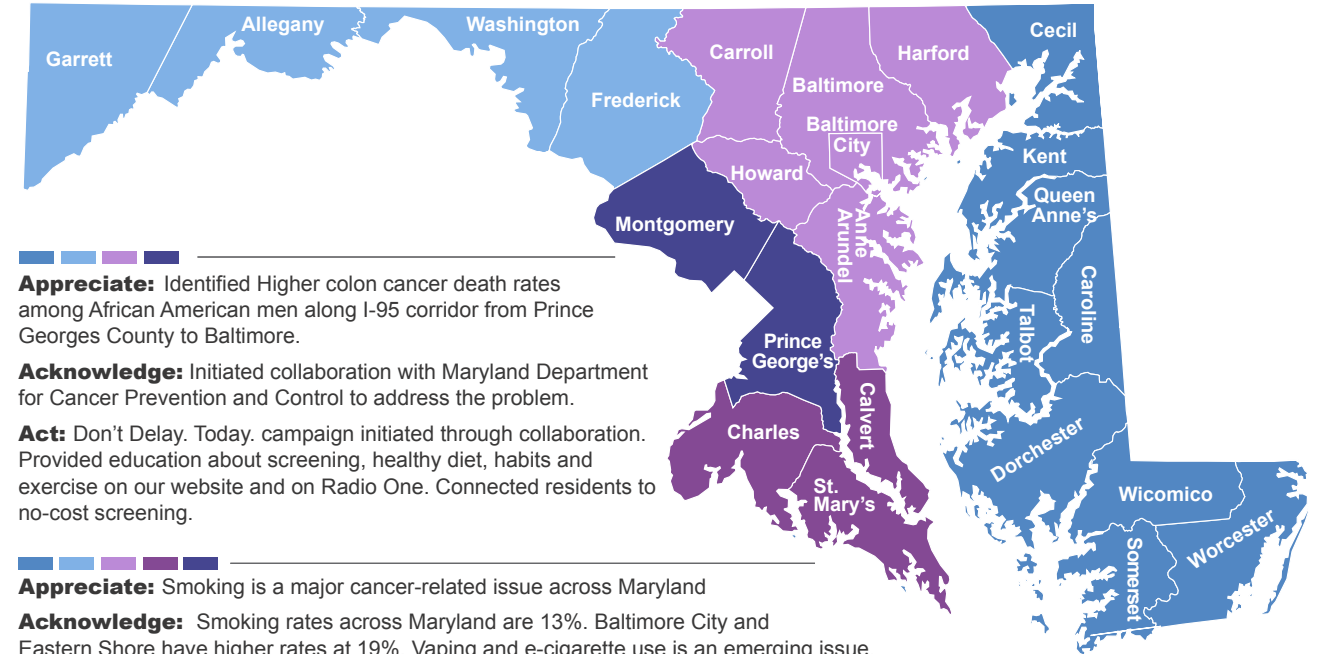
“We really need to be a reflection of the community, and that means we have to include people in the community in the discussion.”

—Dina Lansey, M.S.N., R.N.



What We Know

Appreciate, Acknowledge, Act.



Appreciate: Identified Higher colon cancer death rates among African American men along I-95 corridor from Prince Georges County to Baltimore.

Acknowledge: Initiated collaboration with Maryland Department for Cancer Prevention and Control to address the problem.

Act: Don't Delay. Today. campaign initiated through collaboration. Provided education about screening, healthy diet, habits and exercise on our website and on Radio One. Connected residents to no-cost screening.

Appreciate: Smoking is a major cancer-related issue across Maryland

Acknowledge: Smoking rates across Maryland are 13%. Baltimore City and Eastern Shore have higher rates at 19%. Vaping and e-cigarette use is an emerging issue.

Act: Created a six-hour course on the treatment of tobacco addiction. Some 174 healthcare professionals trained, and 24 tobacco use cessation clinics opening across the state

Appreciate: Being overweight or obese is a risk factor for developing cancer but also increases the risk of recurrence among survivors and hinders cancer detection and treatment.

Acknowledge: Approximately 36% of Marylanders are overweight, and an additional 30% are obese.

Act: Remote weight lost programs for cancer survivors developed and deployed across Maryland, aimed at weight loss and maintaining normal body weight.

Appreciate: Cancer screening rates are highly variable throughout Maryland.

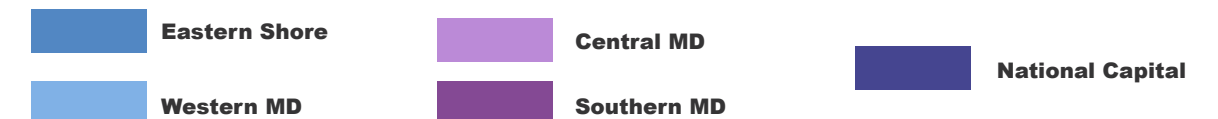
Acknowledge: Identified that cancer screening rates in Western are much lower than national rates.

Act: Developed partnership with community practitioners and consult with them on prevention and outreach to improve screening.

Appreciate: Between 2013 and 2019 HPV vaccination among teens improved from 50% to 69%, and we want to support that trend.

Acknowledge: Survey of rural county and urban practitioners revealed HPV vaccine hesitancy and concerns impeding vaccination.

Act: Education program for parents and grandparents to explain and promote HPV vaccination. Identifying and addressing gaps in vaccine access points.





Panagis Galiatsatos
in the Greektown area
of Baltimore City.

Staying Quit

A No-Shame, No-Stigma Clinic Serving Smokers

Pulmonologist **Panagis Galiatsatos, M.D.**, grew up in the Greektown area of Baltimore City. One of his fondest childhood memories was accompanying his father, a painter, to union meetings. “Cigarettes were handed out like candy,” Dr. Galiatsatos recalls. As he got older, he was saddened to see so many of these people, who had become like family to him, develop serious health problems and even die from diseases related to smoking.

This childhood experience helped inspire his career path. As a lung doctor, these memories remain his reality, as smoking is a common cause of disease in the patients he sees. As a result, he has focused his career on understanding the biological and social causes of tobacco use and nicotine addiction, and helping people overcome this addiction to live healthier lives.

“Smoking robbed the men and women who built this city from enjoying their lives. That makes me angry,” he says.

He’s clear, however, that his ire is aimed at cigarettes, not at the people who use them. “I’m anti-smoking but pro-smoker,” says Dr. Galiatsatos, who established and directs the Johns Hopkins Tobacco Treatment Clinic, a unique

clinic that combines compassion, medicine and counseling to help patients quit smoking for good.

He came to Johns Hopkins in 2010 as an intern at the Johns Hopkins Bayview Medical Center campus, joined the faculty in 2018 and started the Tobacco Treatment Clinic the same year. He was humbled by the gravity of the nicotine addiction problem, and in some ways, working at Johns Hopkins feels like a mix of coming home and giving back. His father painted buildings at Johns Hopkins and built him his first desk from a pile of discarded wood he found on the job.

He has a personal vendetta against cigarettes, which continue to plague the health of Marylanders, and his clinic is one way he gives back to his hometown communities.

“Nicotine may be the most addictive molecule known to man, and cigarettes are designed to be highly potent nicotine delivery systems,” he says. “When you see someone return to smoking after a lung transplant, which was needed because of smoking, or hear someone describe cigarettes as her best friend, you realize the full grip of this



Galiatsatos shares the benefits of healthy lifestyle choices with school-age children.

addiction. That people can continue to smoke even as it causes them harm is an indication of the power of nicotine addiction, he says.

He is committed to helping smokers, beginning with a no-shame, no-stigma approach, something many of his patients experience for the first time when they come to his clinic. He has seen patients break down in tears in his office when their smoking habit is met with compassion and a plan to help. So many smokers are accustomed to being judged, blamed and looked down upon. Oftentimes, he is the first doctor they have met who understands and is sympathetic to their addiction.

Dr. Galiatsatos reserves his acrimony for the product. It fuels the palpable enthusiasm for his work he does and his empathy for those suffering with nicotine addiction.

This sympathetic approach is all too rare when it comes to smoking. For too many doctors, the earned disgust for the product spills over to the patient, or smokers are simply advised to quit with very little, if any, support or guidance.

“What other type of disease do we tell patients to stop having it?” asks Dr. Galiatsatos. “We don’t tell someone to stop having diabetes. In our clinic, we treat tobacco dependence like any other

medical condition that needs to be controlled. We provide support, an encouraging environment and a team to help ensure treatment and strategies are affective, without any fear or guilt placed on the patient.”

The successes are mounting, and they are life-changing. Patients like Darlene, 58, who smoked for 40 years and continued to smoke after a throat cancer diagnosis in 2012, believes Dr. Galiatsatos, or Dr. G., as she calls him, saved her life.

Darlene says she continued to smoke even after the cancer spread to her lungs and brain. She wanted to quit and tried many times over the years.

“In our clinic, we treat tobacco dependence like any other medical condition that needs to be controlled. We provide support, an encouraging environment and a team to help ensure treatment and strategies are affective, without any fear or guilt placed on the patient.” —Panagis Galiatsatos, M.D.

“It’s so hard,” she says.

When her doctor reviewed imaging of her lungs with her during an appointment, he told her she had to stop smoking—that it was a matter of life and death, she recalls.

“I looked at the ceiling and said, ‘God, please help me. This time I really need it,’” she says.

Her doctor referred her to Dr. Galiatsatos’ clinic, which she says was the answer to her prayer, and she has not had a cigarette in six months. Darlene says she is feeling better and her cancer is shrinking.

“Dr. G. is so proud of me,” she says. Darlene says she found his text messages

particularly helpful and encouraging. “Dr. G. would text me, and I would text him back to let him know how I was doing. I always felt like I could tell him the truth.”

Following the precision medicine model, Dr. Galiatsatos and his smoking clinic team, which includes doctors, nurses and a certified tobacco treatment specialist, develop a unique plan for each patient, including behavioral and medical interventions. They work with patients at their own pace, with some remaining in treatment for two years.

“Quitting is easy. People do it thousands of times. It’s staying quit that’s hard,” he says. His clinic is currently working with more than 200 patients at their own pace to help them identify the reasons they smoke and slowly wean off of cigarettes.

Every story is different, he says. There are unique reasons that drive people to smoke. He spends 30 minutes or more with every person who comes to his clinic identifying these reasons. For some, there are mental health benefits, others use it as stress relief and then there are those who have habitual patterns, such as smoking when they drive or first thing in the morning with a cup of coffee.

Understanding what motivates each individual to smoke allows Dr. Galiatsatos and his team of experts to find the most successful combination of treatments that will help patients quit and “stay quit.”

FDA-approved medications, such as patches, lozenges, gum and other pharmaceuticals, help people overcome nicotine addiction, but Dr. Galiatsatos recognizes that their cost is a problem. People who come to his clinic resist the idea of medications because of the cost. His goal is to remove barriers to quitting, not create more, so all medications costs are covered by the clinic.

The timing of when these medications are given is important too, he says, pointing out that inefficient timing is one of the least understood and most common saboteurs of a quit plan. “For every decade a person smokes, it takes that many weeks for the medications to

kick in. Once that begins to happen, then we can begin the weaning off process,” he says. Most people aren’t told that, and they expect immediate results. When they don’t get them, they develop a misconception that the medications don’t work and stop using them, he explains.

In addition to medications that help with nicotine cravings, everyone who comes to the clinic also receives counseling, check-in calls from nurses and the opportunity to attend support groups.

He also facilitates a low-dose screening CT scan for those who should receive lung cancer screening based on current guidelines. He gets patients in for their screening CT scan, most on the same day they come to his clinic. Many are amazed at the efficiency and remark that they feel like VIP patients. It is working so well for lung cancer screening that he is currently coordinating same-day mammography to help women who come to the clinic and also need breast cancer screening.

Dr. Galiatsatos also recognizes that just like other therapies, there are ups and downs, and adjustments are part of the plan. Those whose bodies are naturally predisposed to slower metabolism of nicotine may find it easier to quit. Others will find challenges to quitting in social situations. It’s a different path for each patient, and he and his team are careful not to set unrealistic goals. He’s honest with all of his patients, letting them know it’s not an easy road, but with a promise to walk the journey with them.

“Life happens, stuff happens and we have to adapt our plan to these things,” he says. Medications and the strategies he gives them help people quit smoking, but it doesn’t mean they won’t feel the urge to smoke at times. With Dr. Galiatsatos, it’s personal, and he runs his clinic that way. Patients call or text him when they are struggling with urges to smoke, and he texts back with strategies to get through the craving.

Otis Brawley, M.D., director of community outreach and engagement at the Kimmel Cancer Center, is working

with Dr. Galiatsatos to expand his clinic sites. Currently, there is one at Johns Hopkins Bayview and another on the East Baltimore campus. Support from the Maryland Cigarette Restitution Fund at Johns Hopkins facilitated a collaboration with the Baltimore City Health Department to take his smoking cessation clinic to public housing communities, although it is currently on pause because of the COVID-19 pandemic. Dr. Galiatsatos has also begun teaching his cessation methods to health care professionals and community health care workers, and with additional funding, he and Dr. Brawley hope to deploy these smoking clinics throughout the state.

“We have to educate smokers and doctors alike,” he says.

Too often, the disdain for the ills that are caused by smoking spill over into the treatment of patients who are smokers, Dr. Galiatsatos finds. His mission includes helping physicians and other health care professionals better understand the nature of nicotine addiction and how to help their patients who smoke.

He has trained 174 local physicians and other health care professionals through his six-hour course on tobacco addiction.

After one of his courses, a physician shared with Dr. Galiatsatos that he had blamed his father, a smoker, for years for choosing cigarettes over his family. The course helped him understand that it wasn’t his father’s fault.

For those who have never smoked, he says, he helps them “get it”—understand the nature and science of the nicotine addiction. It helps doctors and other health care professionals form an empathetic bond with their patients who are smokers, he says.

“Like any other form of medicine, we want to make a real impact in our patients’ lives,” he says.

“To do that, we have to get to know our patients to understand their disease. Smoking is no different.”

For more information or to schedule an appointment, call 410-550-0571 or [email tobacco@jhmi.edu](mailto:tobacco@jhmi.edu).

ASPIRE to Inspire

Remote Program For Better Health Through Weight Loss

ASPIRE is a free program that is taking weight loss education and coaching into the community. Using technologies like smartphones, smartphone apps and email, the Kimmel Cancer Center and Bloomberg School of Public Health now offer a remote weight loss program for overweight and obese cancer survivors throughout Maryland.

Being overweight or obese is linked to the risk of developing cancer and cancer recurrence. “We know that losing weight can help prevent recurrence in cancer survivors,” says



Jessica Yeh, Ph.D., who is principal investigator for the ASPIRE study, with support from the

Maryland Cigarette Restitution Fund at Johns Hopkins. She adds that weight loss has many other benefits for better overall health, including heart health, which also impact many cancer survivors.

“This is very important because people with cancer are living longer and longer. We know a lot of cancer survivors don’t die from their cancer but from other illnesses like cardiovascular disease and diabetes,” she says.

Cancer survivors participating in ASPIRE have three program options: self-directed weight loss, app-directed weight loss or coach-directed weight loss. All three programs are provided remotely, which means survivors throughout the state, no matter where they live, can participate. Remote program delivery has been invaluable during the COVID-19 pandemic, allowing survivors to continue their weight loss journey without having to come in person to a clinic or meeting.

Participants in all three weight loss programs are emailed a set of 12 learning modules with weight loss education and strategies for building healthy lifestyle

habits developed by Johns Hopkins experts specifically for cancer survivors. The first 100 eligible participants in each program also receive a scale. Self-directed participants can use the learning modules at their own pace and key in on what they find helpful. App-directed participants receive the learning modules and information on the using the free weight loss app Lose It! to track food eaten, exercise and weight loss progress. They also receive additional support via weekly email weight loss tips. Coach-directed participants receive weekly one-on-one telephone coaching from weight loss experts and are encouraged to use the learning modules and smartphone app to set individualized goals that support healthy weight loss. Weight loss data for all three programs is collected wirelessly every three months.

“We want to help as many people as possible, and people have different levels of readiness,” says Dr. Yeh. “We work with survivors at their comfort level. Some prefer not to work with technology and prefer the written materials. Others appreciate the technology and the help of coaches. We wanted to provide options to fit everyone.”

Juaría is a thyroid cancer survivor who enrolled in the ASPIRE study after receiving an email through her electronic medical records MyChart account. She completed her last coaching session in August and is down 26 pounds since joining the study last January.

She says she had been trying to lose weight for several years but could not get the scale to budge.

“I almost gave up,” she says before learning about ASPIRE. She admits she was skeptical given her experience with other weight loss attempts. “It really works,” she says. “I was surprised by the results. The app keeps you on track and



accountable, and when I had questions, my coach was just a telephone call away.”

She says tracking calories with the app helped her see places she could easily cut calories. She added exercise into her daily routine, and learned helpful tips from reading about other people’s experiences in the educational materials provided.

Although she completed the study, Juaría plans to stick with the plan as she works toward her goal weight.

“We are demonstrating that we can successfully do this remotely, and we want to help patients in every region of Maryland,” says Dr. Yeh. She and her team are reaching out to cancer survivors groups around the state and a growing number of participants from Maryland’s Eastern Shore, western Maryland and southern regions. Word is spreading, she says.

Learn more about the ASPIRE team and weight loss programs at aspirehopkins.org



Fitness Can Conquer Cancer

Can being fit help fight off cancer? Kimmel Cancer Center and Bloomberg School of Public Health researcher **Catherine Handy Marshall, M.D., M.P.H.**, wanted to find out. The Maryland Cigarette Restitution Fund at Johns Hopkins-supported researcher conducted one of the first, largest and most diverse looks at the impact of fitness on cancer. She found that the most fit adults have the lowest risk of developing a lung, colon or prostate cancer diagnosis. The physically fit also have a better chance of surviving a lung or colon cancer diagnosis than those with low fitness levels. She says her findings may also apply to prostate cancer and likely many other cancer types. Dr. Marshall is designing a clinical trial of an exercise intervention in men with prostate cancer and is conducting another clinical trial of a minimally invasive weight loss procedure to see if obese patients diagnosed with prostate cancer benefit from losing excess pounds. The procedure was pioneered at Johns Hopkins, and this is the first time it has been studied in prostate cancer.

Prevent HPV, Prevent Cancer

We think of childhood vaccines as a way to prevent diseases like polio, measles, chicken pox and tetanus, but many do not realize that there is a childhood vaccine that prevents cancer.

HPV causes essentially all cervical cancers and a subset of other cancers, including head and neck cancers. A three-dose HPV vaccine, called Gardasil, available to boys and girls between the ages of 10 and 17 years old, prevents HPV infection and the cancer it causes later in life, explains epidemiologist **Anne Rositch, Ph.D.**, who studies the causes of disease and ways to stop or prevent them in populations at risk.

Dr. Rositch is studying vaccine availability and use in rural areas of Maryland where cervical cancer rates are high and HPV vaccination is low.

HPV infection is very common in the U.S., with over 20 million Americans infected. Vaccines are the best way to prevent the cancer-causing infection, Dr. Rositch explains. About 60% of U.S. children eligible for the vaccine have been vaccinated. Public health experts like Dr. Rositch are hoping to increase that to 80%.

“National data shows that rural populations are less likely to be vaccinated. This is a truly addressable rural disparity, and we want to understand it,” says Dr. Rositch. She wants to determine if the low vaccination is due to lack of access to the vaccine—known as a vaccine desert.

Through a pilot study funded by the Maryland Cigarette Restitution Fund, Dr. Rositch will first focus on two rural Maryland counties where Johns Hopkins has strong established relationships with local health departments and providers in the area—Wicomico County on the Eastern Shore and Washington County in western Maryland. She will begin by mapping out all places that give pediatric vaccines, including pedia-

trician’s offices, family medicine practices and pharmacies.

She wants to find out if these places are stocking the HPV vaccine and recommending it to parents bringing their children in for care. The HPV vaccine is different than other childhood vaccines, so she also wants to learn if parents are receptive to it. HPV is not contagious in the same way as measles or other viruses; people are infected through sexual contact. As a result, this could be a contributor to parents’ reluctance to have children vaccinated and another cause of a vaccine desert. It could also be that rural offices and pharmacies do not have the capacity or cannot afford to stock the three doses of the vaccine, she says. If access is a problem, pharmacies are key to helping increase availability because there are generally more of them.

“The first step is to better understand why vaccination for HPV is low and to find out if it goes beyond access,” she says.

Dr. Rositch has learned things from her research in low-resource countries that she can apply in rural Maryland. Vaccine campaigns that promote vaccination during a specific time frame allow pharmacies and doctor’s offices to plan better, eliminating the need and associated costs for stocking the vaccine all year long.

“There are many evidenced-based solutions we can try to improve HPV vaccination rates once we understand the problem better,” she says. “You can educate people about the benefit of vaccination all day long, but if they don’t have access to a vaccine, it’s not going to be helpful.”

What she learns in Wicomico and Washington counties will be used throughout rural areas of the state to improve HPV vaccination rates.

Another HPV vaccination study she

is conducting looks at two urban areas of the state—Baltimore City and Baltimore County—to better understand parents’ reluctance to have their children receive the HPV vaccine.

Dr. Rositch will administer in-depth surveys and telephone interviews with willing parents who have not initiated HPV vaccination for their age-eligible children to hear their concerns and offer suggestions that might make them more comfortable with the purpose and safety of the vaccine.

She says the number one reason parents typically give for not choosing vaccination for a child is safety concerns, particularly side effects. With more than 10 years of data about the safety of the HPV vaccine, she may be able to reassure some parents by sharing this information.

“We want to better understand parents’ sticking points. What concerns are preventing them from having their children vaccinated?” she says.

She also hopes to find out if pediatricians, family medicine providers and nurse practitioners are treating the vaccine differently than other childhood vaccines. Are they offering it to parents as they would other vaccines against infectious diseases, such as meningitis and Tdap (tetanus, diphtheria and pertussis)? If they aren’t, it sends a signal to parents that the vaccine is outside the norm, she says, and could be influencing vaccination decisions.

What she learns from the rural counties and Baltimore-based outreach will help her develop strategies aimed at improving HPV vaccination rates throughout our state.

“The HPV vaccine has the potential to prevent 90% of cervical cancers and about half of other HPV-associated cancer. That’s enormous,” says Dr. Rositch. “This is relevant to cancer and to the health of the citizens of our state.”

How Can We Help? Asking Questions and Community Networking Remove Barriers to Care

Do you have enough food to eat? Are you having trouble paying bills? Do you have transportation? Do you have furniture? Do you need help with child care?

This is just a sampling of questions **Anna Beavis, M.D., M.P.H.**, assistant professor of obstetrics and gynecology, and **Anne Rositch, Ph.D.**, associate professor of epidemiology and oncology, are piloting through a study aimed at eliminating barriers that interfere with patients receiving care.

The questions will be part of the standard check-in paperwork all patients complete when coming to Johns Hopkins for an appointment. With funding from the American Cancer Society, Drs. Rositch and Beavis will begin with ob/gyn patients but hope to make the questionnaire standard of care throughout Johns Hopkins.

When patients answer yes to any question, Hopkins Community Connection, a student organization designed to address essential needs, will address the needs via connections with community resources and benefit programs.

“We really serve the whole health picture—not just of the patient, but of the family,” says Kristin Topel, Hopkins Community Connection’s program manager. “Families could have questions about their insurance, where to get food or how to get the lights back on. And, no matter who they ask, they’ll be connected to a resource to solve the problem.”

The pilot study is a special project for Dr. Rositch, as she is collaborating with Dr. Beavis, who she mentored as a student and who has since earned a faculty position. Their work together is a model of the Johns Hopkins mission for mentorship and career progression.

In her fellowship training with Dr. Rositch, Dr. Beavis studied disparities in cancer care, and as a faculty member, she began addressing what she learned.

“It’s how we link research to having a real impact on patients’ lives,” says Dr. Rositch. “Dr. Beavis is now addressing as a faculty member what she learned in her training to become a clinician-scientist.”

Drs. Rositch and Beavis will monitor the impact of the help patients receive on their care. Their goal is to have this outreach fully integrated throughout Johns Hopkins.

“We know there are persistent racial disparities in patient care. For example, Black women are less likely to get follow-up care for cervical and other gynecologic cancers,” says Dr. Rositch. “We want to understand what gets in the way of patients completing care and intervene to remove those barriers.”

Anne Rositch, Ph.D.



RESEARCH

Why Do African Americans Develop Pancreatic Cancer?

Pancreatic cancer is rare. “If you stand in a room of 100 people, 99% of the time, none of them will get pancreatic cancer in their lifetime,” says **Alison Klein, Ph.D.**, director of the National Familial Pancreas Tumor Registry at Johns Hopkins. That’s the good news. Despite its rarity, however, pancreatic cancer is one of the leading cancer killers. An astounding 80% of pancreatic cancers are diagnosed after the cancer has already spread, leading to its high death rates.

Dr. Klein sees plenty of room for improvement. Like many cancers,

pancreatic cancer can be successfully treated when detected early. She is focused on identifying ways to recognize and help the people most likely to develop pancreatic cancer. Dr. Klein is revealing the path to pancreatic cancer, following genetic clues, tracking family history, scrutinizing lifestyle factors, and studying pancreatic cysts and other changes in the pancreas to chart the disease from its origin and pinpoint opportunities to stop the cancer.

“The first thing we need to do is intervene in the highest-risk populations,” she says.

Pancreatic cancer is widely recognized for its high death rates, but some

studies, Dr. Klein says, show that it’s even worse for African Americans, indicating they are 20% more likely to develop this often lethal cancer. But there are very few studies aimed at understanding the reasons, she says.

“We know that disparities in diagnosis and care are more prevalent among African Americans, and at least in some studies, African Americans who received quality care did better,” she says. Dr. Klein believes we also need to study potential genetic factors impacting African American patients with pancreatic cancer to address disparities. Although she has been working to study the genetics of pancreatic cancer for over 10 years,

these earlier studies did not include African Americans. This is essential, she says, to tease out increased risk factors caused by access to care from those with genetic causes and to ensure African Americans benefit from the targeted treatment and prevention studies guided by genetics.

In collaboration with investigators at other cancer centers, Dr. Klein is leading a study of 2,000 African Americans to look for genetic differences among 1,000 pancreatic cancer patients and 1,000 healthy participants.

“We know genetics play an important role, and there may be some genes that are specific to populations. Can we drill down to a specific risk profile for African Americans?” Dr. Klein asks. For many diseases, the risk profiles developed in European populations often don’t work as well in African Americans. She will begin with whole-genome sequencing—a complete look at the DNA, the instruction manual for cells—of the 2,000 study participants. Dr. Klein points to the discovery that ATM gene mutations increase the risk of developing certain types of cancer, including pancreatic cancer, among people of European heritage. These mutations occur in about 3% of pancreatic cancers in European Americans. “We don’t know if this is true among African Americans,” she says. “These things don’t always translate, but we need to find out if these findings are relevant to African Americans.”

Other risk factors, she says, could be lifestyle related. Obesity is a risk factor for pancreatic cancer and for type 2 diabetes. African Americans have a higher rate of type 2 diabetes, which is also linked to a higher risk for developing pancreatic cancer. In a chicken-or-egg scenario, Dr. Klein is working to figure out when diabetes causes pancreatic cancer and when pancreatic cancer causes diabetes. She knows that at least a small subset of patients with diabetes are destined to develop pancreatic cancer. “It presents and looks like regular diabetes, but within three to six months of diagnosis with diabetes, we find pancreatic cancer,” says Dr. Klein. “If we could identify this type of diabetes and do advance screening, potentially we could change the outcomes.”



A Critical Goal

Early Utilization of Palliative Care for African Americans Using Culturally Informed Patient Navigation

Although most Americans wish to die peacefully at home, many die in pain and in the hospital. One-quarter of Medicare dollars—over \$100 billion—is spent for patients in their last year of life. Many are cancer patients. There is a desperate need for higher-quality, more affordable, better patient-centered care for severely ill and dying patients, says **Fabian Johnston, M.D.**, chief of gastrointestinal surgical oncology, associate professor of surgery, and assistant director for Diversity, Equity and Inclusion in Education and Training for the Kimmel Cancer Center. Dr. Johnston is funded through a RO1 Independent Investigator award from the National Cancer Institute and he is a co-investigator on multiple Patient-Centered Outcomes Research Institute awards.

Although he feels effective palliative care for dying and severely ill patients is key, he points out that improvements in the quality of U.S. health care have not equally benefited low-income and minority patients. They remain more

likely to have worse health care experiences and outcomes across the spectrum of clinical settings and diseases, he says. Patient navigator programs, where lay health workers help patients navigate the system, have shown promise for improving quality of care among specific patient populations, but their application is limited.

He has an idea for a less costly approach. The long-term objective, he says, is to improve health care quality, experiences and outcomes for underserved patients by developing and evaluating systems-oriented, family-engaged interventions that have the potential for a broad impact.

Dr. Johnston has undergone training to improve his knowledge and skills in patient navigation, participant-engaged program development and research, comparative effectiveness and stakeholder engagement, and dissemination and implementation science.

He assembled a team with expertise in health care quality research, disparities,

patient navigation, palliative care, stakeholder engagement and participant-engaged research. Ultimately, he will develop a culturally tailored navigation program for African American patients with advanced solid tumors aimed at advancing care planning, pain management and hospice referral.

Dr. Johnston's clinical trial based on a prior pilot study will assess feasibility, acceptability, cost and impact of patient navigation.

"Minorities are less likely to complete an advance directive, less likely to have their pain adequately managed and less likely to use hospice services," says Dr. Johnston. "Finding a way to address these disparities is an important—even critical—goal."

Gum Disease and Cancer

Data collected during a long-term health study provides evidence for a link between increased risk of cancer in individuals with advanced gum disease. Advanced gum disease, also called periodontitis, is caused by bacterial infection that damages the soft tissue and bone that support the teeth. Previous research has shown a link between periodontitis and increased cancer risk, although the exact mechanism connecting the two diseases is still uncertain.

The research team, led by **Elizabeth Platz, Sc.D.**, deputy director of the



Department of Epidemiology at the Bloomberg School of Public Health and co-leader of the Cancer Prevention and Control Program at the Kimmel Cancer Center, used data from comprehensive dental exams performed on 7,466 participants as part of their participation in the Atherosclerosis Risk in Communities (ARIC) study. She and a collaborator from Tufts University School of Medicine and Cancer Center then followed

the participants from the late 1990s until 2012. They found a 24% increase in the relative risk of developing cancer among participants with severe periodontitis compared with those with mild to no periodontitis. The highest risk was observed in cases of lung cancer, followed by colorectal cancer.

Among patients who had no teeth—which can be a sign of severe periodontitis or past periodontal treatment—the increase in risk was 28%, Dr. Platz noted.

The association is not strong enough to recommend screening for risk of particular cancers based on a periodontal disease diagnosis, says Dr. Platz, "but we see a modest to moderate risk increase in cancer that seems to be holding up across studies, so perhaps dentists should say to their patients that there are risks related to periodontal disease, and this is one of them."

The ARIC data was especially useful to study because, unlike previous research linking gum disease and cancer risk, periodontitis cases were determined from dental examinations performed as part of the ARIC study rather than participants' self-reports of the disease, says Dr. Platz. The dental exams provided detailed measurements of the depth of the pocket between the gum and tooth in several locations in the mouth. (In general, deeper measurements indicate more advanced periodontitis.)

Dr. Platz says the research team was also able to account for the impact of smoking among the patients, since people who smoke are more likely to get periodontal disease, and smoking raises the risk of lung and colon cancers. "When we looked at the people who had never smoked in this group, we still saw evidence that having more periodontal disease was related to an increased risk of lung cancer and colorectal cancer," she says.

Patients with little or no access to health care, including dental exams and cancer screenings, such as colonoscopy, and prevention programs, such as smoking cessation, also have an increased risk of both periodontal disease and cancer, Dr. Platz notes. "However, after taking into account socioeconomic

factors and access to and uptake of care, these factors did not appear to explain these associations between periodontitis and cancer risk," she says.

The researchers found no links between increased risk of breast, prostate, blood or lymphatic cancer and periodontitis, which may offer some clues about the mechanism by which cancer and gum disease are linked. "It may be that the bacteria that cause periodontal disease go from the mouth directly into the lungs or from the mouth into the colon," says Dr. Platz. "If they were to cause an inflammatory response, that could increase the risk of cancer formation."

The researchers also uncovered a small but not statistically significant increase in the risk of pancreatic cancer in patients with severe periodontitis, an association that has been seen in other similar studies. "The pancreas is not open to the mouth, but there are other ways that bacteria can end up in an organ. For instance, if bacteria could get into the bloodstream from bleeding gums, it might circulate and deposit in an organ, causing an inflammatory reaction," explains Dr. Platz.

The link between periodontitis and increased cancer risk was weaker or not apparent in African American patients from the ARIC study, except in cases of lung and colorectal cancer. "We don't know why, and that's an area that deserves more attention," Dr. Platz says.

The research involved collaborations between cancer researchers at Johns Hopkins and Tufts, and dental researchers at the University of North Carolina Adams School of Dentistry. The team plans to work together to explore other data related to the process of periodontal disease and the bacterium that cause the disease to better understand how they may directly relate to cancer risk.

"This study also points to the importance of expanding dental insurance to more individuals," says Dr. Platz. "Knowing more about the risks that come about with periodontal disease, not just the disease itself, might give more support to having dental insurance in the way that we should be offering health insurance to everyone."

COMMUNITY VOICES



Glynnetta Lewis

Glynnetta Lewis, Community Advisory Board Member

This is **Glynnetta Lewis'** first year on the Johns Hopkins Kimmel Cancer Center Community Advisory Board, but she is not new to community outreach or collaborating with Johns Hopkins. As a senior marketing executive for Radio One, she and the station have proven to be powerful community advocates.

Radio One's website makes it clear that its mission goes well beyond entertainment and news, to being a catalyst for uplifting Black communities in need. It says: "Our listeners trust us. We've proven to be a community partner; always providing a mic to amplify the voice of Black America. Our communi-

ties know our over 150 on-air talents not just as voices, but faces they see in the community engaging in the issues that impact Urban America."

"We are a mouthpiece for the Black community in this area," a responsibility she doesn't take lightly, says Ms. Lewis.

She has more than 28 years of radio experience, starting in her hometown of St. Louis, where she developed her interest and honed her skills in community outreach. It was there that she organized the first Survivor Soul Stroll to raise awareness about breast cancer and funds for research. When she came to Radio One five years ago, she introduced the Survivor Soul Stroll to the Baltimore/Washington audience and recruited the Kimmel Cancer Center as a title sponsor.

"The African American population



Kala Visvanathan, M.B.B.S., M.H.S., (left) and Dina Lansey, M.S.N., R.N.

in Baltimore is twice the size of St. Louis, so I knew there was a great need we could serve," she says. "Hopkins is world-renowned, and people come here from all over, but the history between Hopkins and the African American community has resulted in some broken relationships." As a community board member, she says she would like to "bring down those walls and reestablish better relationships to make this wonderful health care accessible to all of our communities."

With this aim in mind, the Kimmel Cancer Center joined forces with Ms. Lewis and Radio One on the DontDelay. Today campaign to raise awareness about colon cancer prevention and screening, and to guide listeners to screening services and, if needed, treatment.

**Kimmel Cancer Center
Community Advisory Board**

Mark Powell, Maryland Dept. of Agriculture-Marketing and Agriculture Development

Aleta Sly-Thompson, Baltimore City Community Advisory Group/Morgan State University

Dionne Beal, Prince George's Community Advisory Group/Doctors Community Hospital

Jimmy Slade, Prince George's Community Advisory Group (Chair)

Tiffany Mathis, Baltimore City Community Advisory Group The Journey Continues

Jennifer Ayana Harrison, Baltimore City Community Advisory Group (Chair)

Glynnetta Lewis, Radio One

Ken Lin Tai, Maryland Dept. of Health-Cancer Prevention and Control

Steven Kravet, M.D., M.B.A., Johns Hopkins Community Physicians

Rev. Dr. S. Todd Yeary, Douglas Memorial Community Church (Baltimore)

David Terry, Ph.D., Morgan State University

Blanche Mavromatis, M.D., UPMC Western Maryland

Amalia Deloney, Vice President Robert W. Deutsch Foundation

Michelle Ennis, Eastern Shore Community Advisory Group (Chair)

Rev. Terris King, Sc.D., CEO King Enterprise Group and Pastor Liberty Grace Church

Bishop Roy Edward Campbell, Archdiocese of Washington (includes Maryland suburbs of DC)

Rev. Deborah Hickman, Sisters Together and Reaching Inc. (STARS)

“We’ve done a good job with breast cancer awareness. The groundwork is established, so now we want to look at other cancer types, like colon cancer, impacting our community,” she says.

Ms. Lewis says she’s learning from the collaboration with the Kimmel Cancer Center, and that’s contributing to her ability to help the community.

“I’ve personally learned a lot since we started the DontDelay.Today campaign. I have close friends who have been diagnosed with stage 4 colon cancer. I wondered, did they get colonoscopies, and did they have any symptoms? This has become an even more personal mission for me,” she says. “We want to be ambassadors and make sure people understand the importance of getting a colonoscopy. We know there are people who don’t have the resources, and we are proud to work with Johns Hopkins to get information and help to the Black community.”

Her enthusiasm is unmistakable as she describes her desire to help the community. “As I get more involved, I become more inspired. It drives me,” says Ms. Lewis, who has personally experienced the pain of losing a loved one to cancer. “It’s crucial that we get these messages out.”

Future plans also include campaigns about preventing HPV infection, which is associated with most cervical cancers and a subset of head, neck and other cancers. She’d also like to help spread the word about clinical trials—research studies aimed at finding new and better cancer treatments. She wants to help people understand what they are, she says, so they know they are the way we get the medicines needed to treat and cure cancer and other diseases.

“Through the radio, we talk to more than 600,000 people each day,” says Ms. Lewis. “Working together, we have the potential to save a lot of lives.”

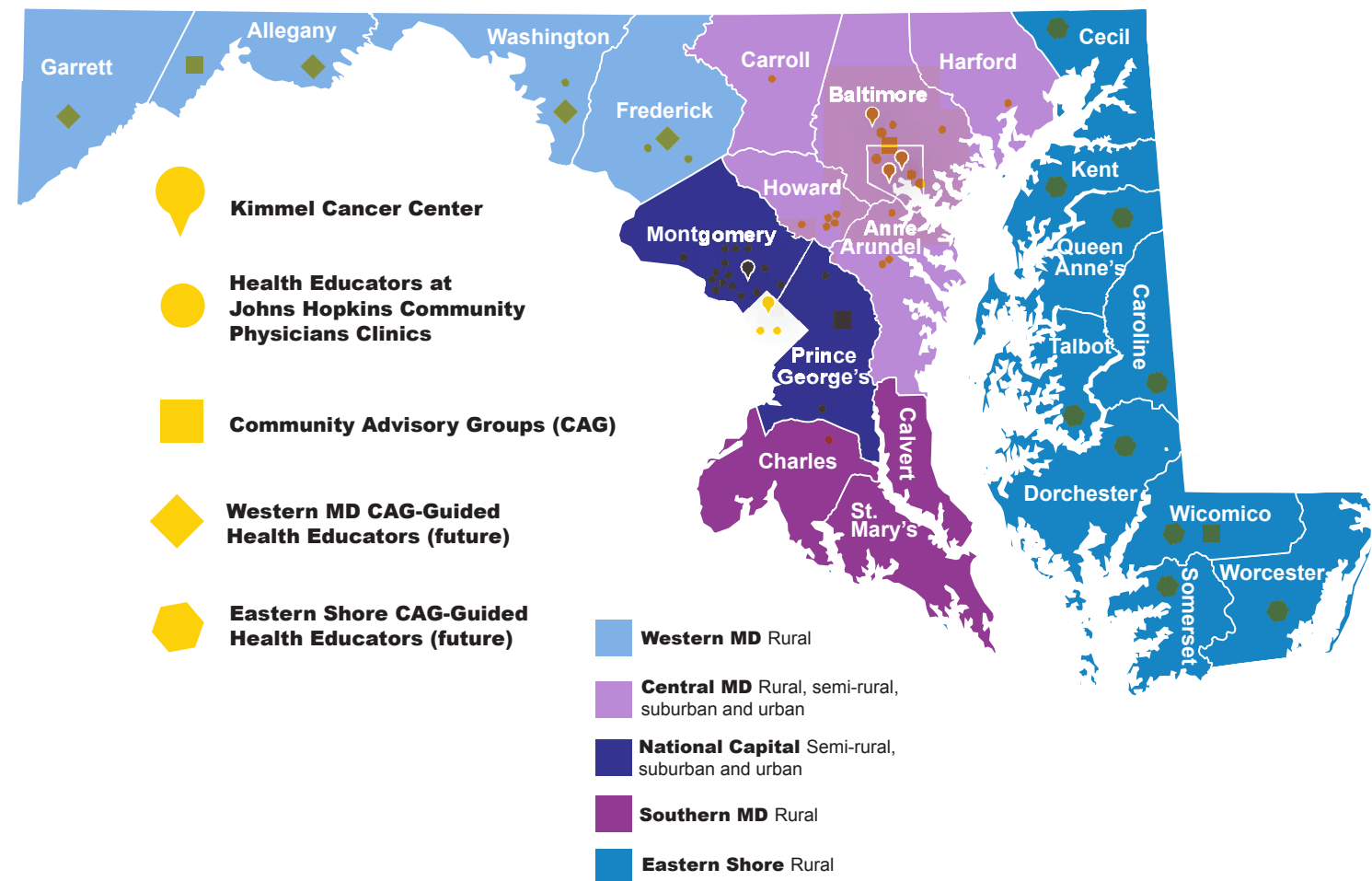
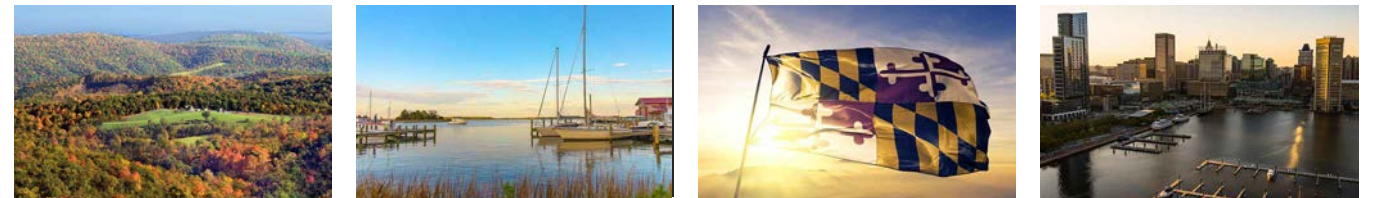


Theron Scott, Assistant Director of Community Education.

Theron Scott oversees the training of Community Health Educators and coordinates their efforts throughout the State.

Where We Are Kimmel in Your Community

At Johns Hopkins, we recognize our obligation to serve and educate and to ensure that new discoveries and knowledge are available to everyone.





**Barbara Bates-Hopkins,
Community Health Educator**

Barbara Bates-Hopkins started Day at the Market in 2007 at Northeast Market, bringing Johns Hopkins and other experts to the community. Baltimore's historic public markets are part of the oldest continuously operating public market system in the U.S.

When it comes to connecting Johns Hopkins experts to the community, one can bet that **Barbara Bates-Hopkins** is at the center of it. A dynamo of activity, she makes connections that are improving the lives and health of the citizens of Baltimore.

Health fairs, job fairs, farmers' markets, food distribution, flu and COVID-19 vaccine clinics, voter registration, insurance help—this is a small sampling of the regular outreach she makes to help members of the community. If there is a way to bring messages of hope, health and improved living to the community, Ms. Bates-Hopkins and her growing group of volunteers and collaborators think of it and make it happen.

"We have to be out in the community to help the community," she says. "I grew up in the community." Many of her ideas for outreach are built upon her lifelong experiences.

"I love to help people," says Ms. Bates-Hopkins, a sentiment that is apparent beyond her words. She has a long history of community outreach. Before coming to Johns Hopkins, she worked in community engagement for the Historic East Baltimore Community Action Coalition, a community-based nonprofit that supports healthy, thriving households and neighborhoods.

For the last 15 years, she has worked to bring Johns Hopkins to the community. It's a bidirectional relationship, she points out. "We bring resources to the community, but we also listen and learn from people living in the communities to bring them the practical help they need," she says.

In 2007, she started the Day at the Market program under the auspices of the Center for Urban and Environmental Health. It is held twice a month at Northeast Market in East Baltimore,

which brings Johns Hopkins nurses and doctors, other professional staff and students to offer tips on cancer prevention, screening, detection, treatment and healthy living to the market.

The program, which is supported by the Kimmel Cancer Center, Departments of Epidemiology and Environmental Health and Engineering, Johns Hopkins Government Affairs, and the Johns Hopkins Institute for Clinical and Translational Research, has been recognized by the Maryland Department of Health and Mental Hygiene and the Maryland Cancer Collaborative, the group that implements the Maryland Cancer Control Plan.

At each Day at the Market, experts are on-site to engage with community members shopping or eating at the market to share information about cancer prevention and screening, the benefits of healthy eating, exercise and more.

They don't just tell; they also show. Ms. Bates-Hopkins works with the vendors in the market to offer healthy cooking demonstrations, nurses are on-site taking blood pressures, and doctors and nurses explain cancer risk factors, ways to live a healthier lifestyle, cancer screening tests, how to get screened and clinical trials. Ms. Bates-Hopkins thinks of everything, recruiting bilingual volunteers to make sure no vendor or community member is excluded because of language barriers.

Most importantly, she listens, to make sure she delivers the services the community needs.

"We have information we want to share with the community, but we also have to hear from the community," she says. "We listen to them and bring the resources they request."

Help finding jobs is one of the most frequent requests she gets. She connects people to HopkinsLocal, a hiring and diversity and inclusion initiative aimed at increasing the number of city residents employed at Johns Hopkins institutions. Since so much of the job application process is done online now, Ms. Bates-Hopkins has volunteers ready to walk through the application process and help with resumes, which volunteers save to flash drives and provide to job seekers so they can go to their local library or computer cafe, plug in their flash drive, and apply for jobs.

Sometimes, someone approaches her with a unique situation—a need for a cancer procedure or help scheduling an appointment with a doctor. She listens and guides them through the process. Another time, a woman approached her about her upcoming breast cancer surgery. Ms. Bates-Hopkins held her hand as they talked. Just having someone who listened was uplifting for the woman, who left feeling better about the upcoming surgery.

"People used to whisper when they talked about cancer. We are working to change that. We want to be approachable and use friendly terminology so people

feel comfortable asking questions about cancer and research," she says. "Nothing can top people coming to Day at the Market and telling us what they learned from us at an earlier event saved their lives."

The experts who come to each Day at the Market and the information provided may vary, but Ms. Bates-Hopkins is a consistent presence and at the heart of its success.

People leave Day at the Market feeling better and more relaxed, empowered with information they need to improve their health and well-being, and they come back because they know she will be able to guide them to whatever resources they may need that day.

Dina Lansley, M.S.N., R.N., deputy associate director of Community Outreach and Engagement, describes Ms. Bates-Hopkins as the best of the best. "The connections and relationships she has built are so broad and so deep, it is a testament from the community to their connection to her and their respect for what she does."

The Day at the Market has a prime location at the Northeast Market, located in a large space at the entrance. Baltimore's historic public markets are part of the oldest continuously operating public market system in the U.S., and even through management changes, the Day at the Market program is earning its own place in the market's history.

Ms. Bates-Hopkins is a relationship builder, and she worked closely with the manager of the market system to build the program. When the market changed management in 2021, she was worried things might change. The new manager, however, was eager to keep the program going and is continuing to work with her to expand it from Northeast Market to several other public markets in Baltimore City, including Lexington Market, with partners at University of Maryland, Broadway Market, and Cross Street Market. Expanding to other markets knits the Kimmel Cancer Center into a citywide venture, she says.

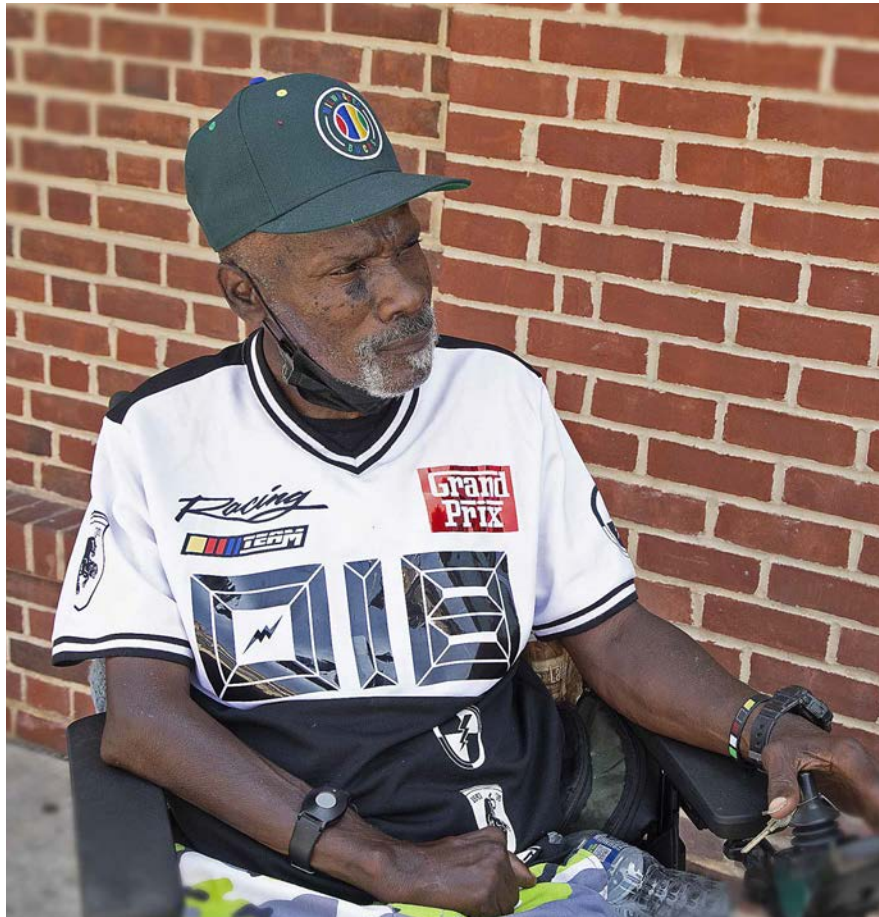
With additional funding, she hopes to take this kind of outreach to other places within the community and throughout the state, including schools, housing developments, and local health departments and clinics.

"Our mission is to help," says Ms. Bates-Hopkins. "We do that by listening to the needs voiced by citizens and connecting them to the people and resources that can help."



**Ayana Harrison
Baltimore City Community
Advisory Group Chair**

Ayana Harrison became a Community Advisory Board Member after her mother passed away in 2003 after what was supposed to be a routine medical procedure. "I want to improve the lives of people of color," she says. "A lot of people in the community do not know how to access the medical system. We have to be more innovative in our approaches to meeting the underserved where they are. I am their voice."



Closing the Gap in Prostate Cancer Leadership Gift Launches Program to Improve Lives in Baltimore and Washington, D.C.

A new program at the Brady Urological Institute will combine research, education and community partnership to advance the understanding and outcomes of prostate cancer in Black men.

Set in motion by a \$5 million commitment from the Fredrick D. and Karen G. Schaufeld Family Foundation, the Schaufeld Program for Prostate Cancer in Black Men aims to reduce the impact of the disease in African American men, particularly in the Baltimore and Washington, D.C., areas.

“We fashioned and imagined a program that would be community facing

and serving, scientifically based, and focused on promoting education, all integrated around the clinical work we do in Baltimore City and in the national capital region,” says **Mohamad Allaf, M.D.**, director of the Schaufeld Program. “It’s a targeted approach to partner with the community to close a gap in a disease that afflicts one in eight Americans.”

“Without partnering with philanthropists like Karen and Fred Schaufeld,

the resources necessary to jump-start a program like this do not exist,” he adds. “We as a society, not just as academicians, really depend on and are thankful for the generosity of those who have done well, are looking to give back and are helping us impact change in a positive way in our communities.”

Fred and Karen Schaufeld were introduced to Dr. Allaf and his team at Brady when Mr. Schaufeld underwent his own treatment for prostate cancer. As he started to understand more about the disease, Fred says he was struck by its particular outcomes in Black men.

“Johns Hopkins as an institution is such a blessing for men of all races with prostate cancer throughout the world. But let’s face it: Home base is here in Baltimore. This is an opportunity to increase this blessing to men who conveniently happen to be represented in this local community,” Fred says.

“When I was in college, my father died at a young age from prostate cancer, so we know how devastating this can be to a family,” he adds. “When we learned that statistically, Black families suffer dramatically worse effects from aggressive prostate cancer, it became obvious we could show our gratitude in a focused and effective way. While we are specifically targeting improving the lot of Black men, and particularly those in the Baltimore and Washington areas, we realize this work can also improve the lot of white men or men of any race in any geography, and we want that too. We’re trying to create a better situation for everybody.”

Prostate cancer is about twice as common in Black men as other populations and 2.5 times more lethal. Access to care plays a major role in the heightened mortality rate, the program’s chief adviser, **Otis Brawley, M.D.**, says.

“If they are treated at a major American facility, once we look at stage, race doesn’t matter. Yes, Black men are more likely to get the disease,” he explains. “But in the United States as a whole, Black men who are stage 2 have an increased risk of dying from prostate cancer when compared with white men who are stage 2.”

Potential biological differences may also play a role in the disparity, says

Tamara Lotan, M.D., the program’s co-director. Her lab studies molecular biomarkers—genetic changes that happen in the prostate tumor.



“We’re trying to better understand the contribution of both of those components. From a biological perspective, prostate cancer arising in men of African descent has been really understudied,” she says, adding that Johns Hopkins has a significant number of archived prostate cancer specimens. “Having resources to carefully study these cases is a significant advancement on the research side of this program.”

The Schaufeld Program will also partner with departments across Johns Hopkins to bolster the next generation of physicians and scientists. Postbaccalaureate students will work in labs to gain research experience, with the goal of better understanding prostate cancer in Black men. They’ll also be exposed to important questions around increasing the diversity of the types of patients studied, Dr. Lotan says.

“The educational component of this program will tap into an amazing resource

of more diverse scientists and scientific trainees,” she adds.

For Dr. Allaf, the opportunity to partner with members of the Baltimore and Washington communities is the program’s most exciting facet. That partnership won’t just facilitate greater access to prostate cancer prevention and treatment; it will also enable patients to have a better understanding of their diagnosis and make more informed decisions about their care.

Communication around treatment options can be challenging, particularly for patients without ready access to a primary care provider. The program’s community partnership will give providers the opportunity to determine how to best deliver complex information.

“Our goal is that—regardless of race, socioeconomic status or geography of where they live—all men have the information they need so they feel empowered to make an informed decision about their own care.”

—Dina Lansey, M.S.N., R.N.

“Our goal is that—regardless of race, socioeconomic status or geography of where they live—all men have the infor-

mation they need so they feel empowered to make an informed decision about their own care,” says **Dina Lansey, M.S.N., R.N.**, the program’s senior adviser, “whether that is prostate screening or choosing the best cancer treatment option for them.”

Karen Schaufeld, who experienced the challenges of discussing prostate cancer firsthand following Fred’s diagnosis, echoes the ripple effect of clear and open communication.

“If we make sure that people are more comfortable talking about prostate cancer, they’ll be more aware,” she says. “They’ll take the time to focus on preventive care; they’ll take the time to get tested. It’s important to have a conversation and just say, ‘You’re at risk. Let’s

make sure that you get the best possible outcome.”

The Schaufeld Program, which launched in July, has the long-term goal of inspiring co-investors and attaining extramural funding from government and other sources to ensure all men have equal access to prostate cancer care.

“This program is an important step in understanding why prostate cancer is so common in Black men. The work will also take steps to improve health equity for this disease,” says Paul B. Rothman, M.D., dean of the medical faculty and CEO of Johns Hopkins Medicine. “As we have seen during the pandemic, not everyone in this country has equal access to high-quality health care. We are working to remedy that, and this program is part of our effort.”

For more information on the Schaufeld Program, visit hopkinsmedicine.org/urology/schaufeldprogram.



Karen and Fred Schaufeld

Unity, More than a Clinic

Building Healthier Communities



Judy and Peter Kovler



Rajput

A unique collaboration with Unity Health Care to bring cancer screenings, evaluation and navigation to underserved communities in Washington, D.C., is getting much-needed support from **Judy and Peter Kovler**, longtime philanthropists to Johns Hopkins.

This new clinical program supplements Johns Hopkins' supported programming underway for the communities of Wards 5, 7 and 8 in Washington, D.C.,

which has some of the highest cancer rates in the country. Based at Unity Parkside Health Center in Ward 7, a nurse practitioner and nurse navigator have been working across Unity's Health Centers located throughout Wards 7 and 8 to evaluate patients for cancer. The team also provides urgent care visits to address cancer- and treatment-related side effects close to these patients' homes.

A newly recruited nurse navigator and patient navigator, funded through the Kovlers' gift and based at Sibley Memorial Hospital, further support patients and families from these underserved communities by being by their side during their care at the Kimmel Cancer Center at Sibley Memorial Hospital.

The Kovlers were inspired to get involved to ensure that everyone has equal access to excellent health care. As active members of the Sibley Memorial Hospital Foundation Board of Trustees and Kimmel Cancer Center National Advisory Board, the Kovlers joined with Cancer Center leadership to make outreach to underserved communities a priority.

"We and other family members have been treated at Hopkins and Sibley throughout our lifetimes. Our grandchildren were born at Sibley. We are so grateful for the excellent care our family members have received and feel it's only fair that everyone should have access to that kind of treatment," says Dr. Judy Kovler, who is also chair of the Sibley Memorial Hospital Foundation Board of Trustees.

"Why can't everyone have this kind of care?" she asks.

As they learned more about cancer disparities, increased incidence and poorer survival plaguing minority communities, the Kovlers, who have lived in Washington D.C., for more than 50 years, wanted to help.

They were impressed that **William Nelson, M.D., Ph.D.**, director of the Kimmel Cancer Center, had not just recognized the need in communities but worked to put in place experts that could address these needs. Among those Dr. Nelson recruited to develop a plan to reduce cancer disparities among low-income, minority communities was **Otis Brawley, M.D.**, former chief medical and scientific officer of the American Cancer Society and a leading authority on cancer screening and prevention. Dr. Brawley joined the Kimmel Cancer Center in 2019 as a Johns Hopkins University Bloomberg Distinguished Professor.

Additionally, **Ashwani Rajput, M.D.**, a recognized surgical oncologist and translational investigator, was recruited to lead the Kimmel Cancer Center in the national capital region. His leadership has grown engagement, including establishing collaborative programs throughout Washington, D.C., designed to improve access for patients and families living in Wards 5, 7 and 8.

"The concept for change is only the beginning. You need the right people," says Mr. Kovler. "Dr. Brawley is the world's most distinguished figure in medicine, particularly in understanding the needs of minority communities. We were also impressed with Dr. Nelson's leadership in bringing the Kimmel Cancer Center into D.C. and Dr. Rajput's ideas for elevating care throughout the city. It was the perfect team at the perfect time—a great combination of good ideas and talented people."

Educated about the need, impressed by the team and confident in the solutions proposed, the Kovlers were committed to providing the support that would lay the groundwork for building healthier communities.

The Kovlers have a history of stepping up to combat challenging problems at difficult times. Within days of the 9/11 attacks and impending threats of anthrax attacks, they made gifts to bioterrorism researchers at the Johns Hopkins Bloomberg School of Public Health and other local hospitals in and around Washington, D.C. Similarly, when the COVID-19 pandemic hit, they again made donations to support local communities and hospitals in need.

They also have a long history of supporting cancer research at Johns Hopkins, including two endowed professorships.

"We want to be a building block. We hear of a problem, and we want to get involved," says Peter Kovler. "This is only the beginning. We are in the first or second inning. We have a lot to accomplish to reverse inequality and the enduring problems it has caused. We have to rise to the occasion."

TRAINING

Fueled by Passion for Public Health

Isaac Kinde, M.D., Ph.D., says he knew by fifth grade that he wanted to work in medical research. His path was greatly inspired by his father, a veterinarian, and his mother, a math teacher, and oddly enough, by a bout with diarrhea. "My dad took a stool sample from me and took it to his lab. He was able to determine that I did not have a run-of-the-mill infection—I had salmonella," recalls Dr. Kinde. "It was pretty cool that my dad was able to figure something out about my health status by taking a sample from me." Fast forward about 15 years, and the first research project that he did as a graduate student working in the Kimmel Cancer Center was working on a way to detect colon cancer from stool. "It was full circle," he says.

He describes his training advisors and mentors—**Bert Vogelstein, M.D.**; **Ken Kinzler, Ph.D.**; **Nickolas Papadopoulos, Ph.D.**; **Luis Diaz, M.D.**; and **Shibin Zhou, M.D., Ph.D.**—as world-renowned experts in cancer genetics and therapeutics. Dr. Kinde helped them invent a biomarker technology called Safer Sequencing System, or SaferSeqS, which reduces the error rate of DNA sequencing. In 2012, he was honored among *Forbes'* 30 Under 30 in science and health care.

"Being able to work with the best people in the field and to hear them talk about how we go about saving lives from cancer deaths—my path was clear," says Dr. Kinde. When he was about to start interviewing for residency programs, he instead decided to start a company called PapGene. "Continuing to work



Kinde

with the people that I admired the most on a problem that was absolutely a passion of mine and was literally an extension of the work I had done in graduate school—choosing to start PapGene was actually a pretty quick decision for me. I was excited to work on applying this technology because I could visualize quite easily what the impact would be. I just wanted to get started," he says.

Today, he is co-founder and head of research and innovation at Thrive, an Exact Sciences Company (PapGene's precursor), a biotech startup launched in May 2019. Dr. Kinde is working to bring to market the technology he helped invent. Thrive plans to commercialize a liquid biopsy test initially developed by Kimmel Cancer Center researchers called CancerSEEK, which uses SaferSeqS, to help detect cancers earlier through a routine blood draw. Dr. Kinde is driven by how to get reliable results in physicians' hands quickly. This drive is fueled by his passion for public health and a nearly lifelong interest in science and technology.

EDUCATION



A CURE for Cancer Researcher Seeks to Address and Close Disparity Gaps

At an early age, **Jelani Zarif, Ph.D.**, had an interest in science. He participated in his annual school science fair and wondered how and why many things around us worked.

His interest in cancer and cancer research was sparked in high school, when he began working as a certified nursing assistant at a nursing and rehabilitation center in Chicago. “Some patients recovered from therapies without relapse of disease, and some, unfortunately, did not,” he recalls. “These experiences inspired me to want to understand cancer and how we can treat cancer better.”

He is now a CURE K22-funded and Maryland Cigarette Restitution Fund at

Johns Hopkins-supported researcher working within the Cancer Immunology Program to identify ways to circumvent cancer immune evasion and to activate anti-tumor immune responses in advanced cancers. “The goal of our research is to identify novel immuno-therapeutic targets and approaches for treating advanced prostate cancer, specifically bone metastatic prostate cancer, for improving patient survival,” he says.

As a CURE (Continuing Umbrella of Research Experiences) scholar, Dr. Zarif is among an elite group of scientists who are from the populations who suffer from cancer disproportionately—the same populations that are traditionally underrepresented in science careers—and are working to produce research

that can successfully reduce that burden.

He was also a member of the steering committee that contributed to the American Association for Cancer Research’s inaugural Cancer Disparities Progress Report, described as a collective effort of a number of the world’s foremost thought leaders in cancer health disparities research and a guide for how research questions can help address and close these gaps. Kimmel Cancer Center Director **William Nelson, M.D., Ph.D.**, was also a steering committee member.

“Many cancer disparity gaps have persisted for decades,” says Dr. Zarif. “We hope this report will serve as a guide for how research questions can help address and close these gaps.”



“We want to give these resources to all of our JHCP offices. Any patient interested would have an opportunity to speak to one of our community health educators for guidance on healthy habits that reduce cancer risk.”

—Otis Brawley, M.D.

A Community Working Together for Good

Controlling Colon Cancer: African Americans die disproportionately from colon cancer. Maryland Cigarette Restitution Fund at Johns Hopkins researcher **Norma Kanarek, M.P.H., Ph.D.**, identified a higher death rate among African American men living along the I-95 corridor from Prince George's County to Baltimore. Collaborating with Kimmel Cancer Center community outreach and engagement

M.D., Ph.D.; Akila Viswanathan, M.D., M.P.H., director of radiation oncology and molecular radiation sciences; **Otis Brawley, M.D.**, director of community outreach and engagement; and **Ashwani Rajput, M.D.**, medical director of the Kimmel Cancer Center for the national capital region, led discussions and an interactive exchange on urgent issues of race in medicine.



director **Otis Brawley, M.D.**, Bloomberg Distinguished Professor; the Maryland Department of Health Center for Cancer Prevention and Control; and Radio One, the DontDelay.Today campaign for colon cancer prevention and early detection among African Americans was initiated. The initiative, promoted by Radio One, directly addressed a problem identified in the community, provided information on the importance of colon cancer screening, and connected people to no-cost screening and information on healthy diet, habits and exercise.

Dialog on Race in Medicine: The Johns Hopkins Kimmel Cancer Center presented a three-part virtual series addressing access to cancer care, social determinants of health and ethnic composition of cancer physicians. Kimmel Cancer Center Director **William Nelson,**

Diversity in Radiation Oncology: **Curtiland Deville, M.D.**, Proton Therapy Center medical director and clinical director of radiation oncology at the Johns Hopkins Kimmel Cancer Center at Sibley Memorial Hospital, is working to increase racial diversity among radiation oncologists, serving as a mentor and speaking at universities and before student organizations. He also studies how racism and social injustice manifests into health inequities. He is excited about partnering with other doctors in the community and other local institutions, such as United Medical Center, Howard University and Children's National Hospital. "These clinical collaborations enhance our impact on patients in the broader national capital region and beyond, providing convenient access to unique care and world-class treatments, such as the most advanced

radiation therapies and clinical innovations," says Dr. Deville.

Listen to our "Cancer Disparities" podcast to hear more from Dr. Deville: cancer-matters.blogs.hopkinsmedicine.org.



Dr. Kenneth Kinzler, inaugural Barry Family Professor of Oncology, with his wife, Cheryl, and youngest daughter, Tara, during the ceremony.

A New Professorship

We are grateful to Amy and Michael Barry for their commitment to naming **Kenneth Kinzler, Ph.D.**, as the inaugural Barry Family Professor of Oncology during a virtual installation in June. As co-director of the Ludwig Center at the Johns Hopkins Kimmel Cancer Center, Dr. Kinzler is focused on deciphering the genetic underpinnings of human cancer and has identified several key genes that appear to drive tumor formation, including APC, the gene that initiates virtually all colorectal tumors. He developed approaches that helped launch the field of liquid biopsies and early cancer detection, including broad-based, multicancer blood tests that may soon be available in doctors' offices around the country as a noninvasive way of detecting cancer very early in a curable stage. Dr. Kinzler has co-authored more than 400 peer-reviewed articles on the molecular analyses of cancer, holds more than 125 patents, and serves as a member of the National Academy of Sciences, the National Academy of Medicine, the American Academy of Arts and Sciences, and the National Academy of Inventors.



Understanding Cancer

Ashani Weeraratna, Ph.D., was recognized by the National Cancer Institute (NCI) as part of its commemoration of the National Cancer Act 50th anniversary. She was recognized for research that is "accelerating our understanding of cancer into the future." Dr. Weeraratna found that there are age-related differences in how people respond to certain cancer treatments. In profiling her, NCI characterized this research as "a groundbreaking finding now reshaping clinical practice." As a skin cancer researcher, Dr. Weeraratna has led public health initiatives to install sunblock dispensers in public places and to teach children about the dangers of sun exposure. A Sri Lankan who grew up in Lesotho in southern Africa before emigrating to the United States, Dr. Weeraratna is a fierce advocate for the contributions of immigrant scientists. She has spoken passionately about her experiences with racism and harassment in this country, and about her belief in the American dream. Dr. Weeraratna, the E.V. McCollum Professor and Chair of Biochemistry and Molecular Biology at the Bloomberg School of Public Health, a Bloomberg Distinguished Professor (cancer biology), professor of oncology, and co-director of the Cancer Invasion and Metastasis Program at the Kimmel Cancer Center, is a champion of and mentor for junior faculty members, women and people of color in science.

A Teaching Moment

Elmer A. Henderson: A Johns Hopkins Partnership School (Henderson-Hopkins) is a Baltimore City Public School operated by the Johns Hopkins University School of Education and serves approximately 600 students in pre-K through eighth grade. The school hosted a health and wellness fair to mark the opening of its new track and field facility in the fall. The hope is that the facility will help spark a health and wellness movement within the school and the larger community.



Breaking News >>

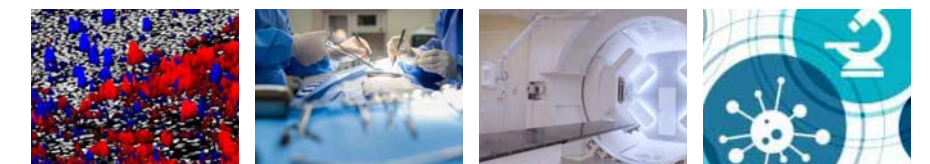
Two Kimmel Cancer Center researchers – **Ashi Weeraratna, Ph.D.** and **Nilo Azad, M.D.** – were among the seven scientists appointed to the National Cancer Advisory Board by President Joe Biden.

More on the Web

Cancer Disparities with Dr. Otis Brawley: Subscribe to the blog: cancer-matters.blogs.hopkinsmedicine.org.

Your Health, Our Priority: The Johns Hopkins Kimmel Cancer Center is in the community. We have an obligation to serve and educate the community, and to ensure that new discoveries and knowledge are disseminated at the community level. Visit our website: hopkinsmedicine.org/community_outreach_engagement.

Follow us on social media: facebook.com/KimmelCOE





Our COVID-19 Response

Unquestionably, 2020 and 2021 have been framed by the COVID-19 pandemic and the human and financial toll it has taken in Maryland and around the country and the world. Amid these challenges, there were triumphs.

Cancer doctors and researchers were among the Johns Hopkins experts who led efforts to understand and contain this novel virus. Around the country and here at home, cancer experts sprang into action, rapidly launching projects that advanced testing and proposed lifesaving therapies.

During this time, our doctors and nurses cared for many patients transferred from other hospitals and clinics throughout the state who could not care for COVID-19-positive patients. We worked collaboratively with Maryland elected officials and our colleagues at the University of Maryland to construct a field hospital to address the additional strain the virus placed on Maryland.

Our providers implemented innovative measures to ensure the safety of our patients, their families and care teams. Even during these challenging times, our drive to better understand and treat cancer and to continue our research on its prevention has not wavered. We continued to provide care for patients

receiving active therapy and those already enrolled in clinical trials. When possible, trials were modified to decrease the total number of visits to the Cancer Center, and care was delivered remotely and safely via telemedicine appointments.

Working together, our providers created guidelines for treatment to prevent cancer patients from contracting COVID-19 and to help those infected with the virus safely continue cancer therapy. These guidelines were shared and adapted by other cancer care providers across the nation and the world.

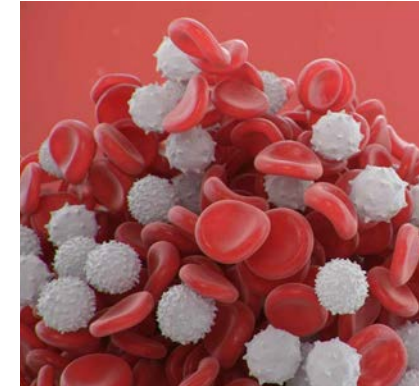
Our leadership and experts also turned their attention to new challenges resulting from the pandemic. As is often the case, the most vulnerable—the poor and disenfranchised—suffer the most. Recognizing that some have missed cancer screenings and delayed addressing symptoms, our community outreach and engagement team is collaborating with our partners in the community,

state and local health departments, and other national thought leaders in cancer health disparities research, working together to save lives through screening and early detection.

Progress Through Pandemic Protecting Patients While Continuing Care:

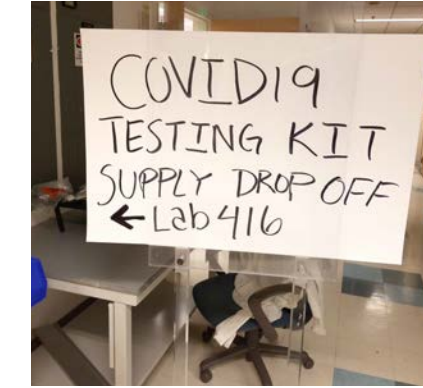
The Kimmel Cancer Center opened a Curbside Shot Clinic—a drive-up treatment delivery system—for outpatients and a special Urgent Care Bio Clinic for cancer patients infected with COVID-19.

Testing Kits: A trained team made tens of thousands COVID-19 testing kits in a Kimmel Cancer Center lab uniquely outfitted to meet special quality control standards required for manufacturing pharmaceutical products. Research laboratories throughout the Cancer Center donated supplies needed to complete the kits.



Radiation Oncology: Biocontained simulation and treatment rooms were established for adult and pediatric patients at all five of our Kimmel Cancer Center radiation oncology sites. These rooms were set up with special air flow and filtering to care for patients with infectious diseases, keeping them safe and cared for while preventing the spread of infection to other patients. Our experts are caring for many patients transferred from other hospitals and clinics that do not have the infection control capabilities to care for COVID-19-positive patients.

Preventing Lethal Outcomes: Experts worked to identify which COVID-19 patients would need medical interventions to save their lives versus those likely to recover naturally. Although most people recover from COVID-19, some patients take a dramatic downhill course that is often lethal. A new analysis of white blood cells is being developed to identify individuals who need intervention at an earlier stage to prevent the acceleration of their COVID-19 disease.



COVID-19 Therapy Explored: Researchers found that the drug prazosin, an alpha blocker most commonly used to treat high blood pressure and prostate enlargement, could prevent an inflammatory process called cytokine storm syndrome, which is often associated with an overproduction of immune cells that causes lung inflammation and serious respiratory problems. The cytokine storm syndrome disproportionately affects older adults with underlying health conditions and is associated with severity and death in COVID-19.

Giant and Hyundai Aid COVID-19 Response

Giant Food and Hyundai Hope on Wheels, longtime supporters of pediatric cancer research and treatment at the Kimmel Cancer Center, stepped up to support COVID-19 testing, patient care, the community, and our doctors and nurses during the pandemic.

Their donations helped Johns Hopkins experts develop and process COVID-19 tests, provided 600 meal deliveries for faculty and staff, and provided 23 pallets of hand sanitizer and bath tissue distributed throughout the community by our Community Outreach and Engagement Program and to patients and families staying at our Hackerman-Patz Patient and Family Pavilion during treatment.



“Across the scope and severity of the pandemic, our ability to protect our patients has required reimagining the way in which we conduct clinical care,” says **Donald Small, M.D., Ph.D.**, director of pediatric oncology and the Kyle Haydock Professor of Oncology. “The support of Giant Food, Hyundai and others has made it possible to devise innovative ways to safely care for patients.”

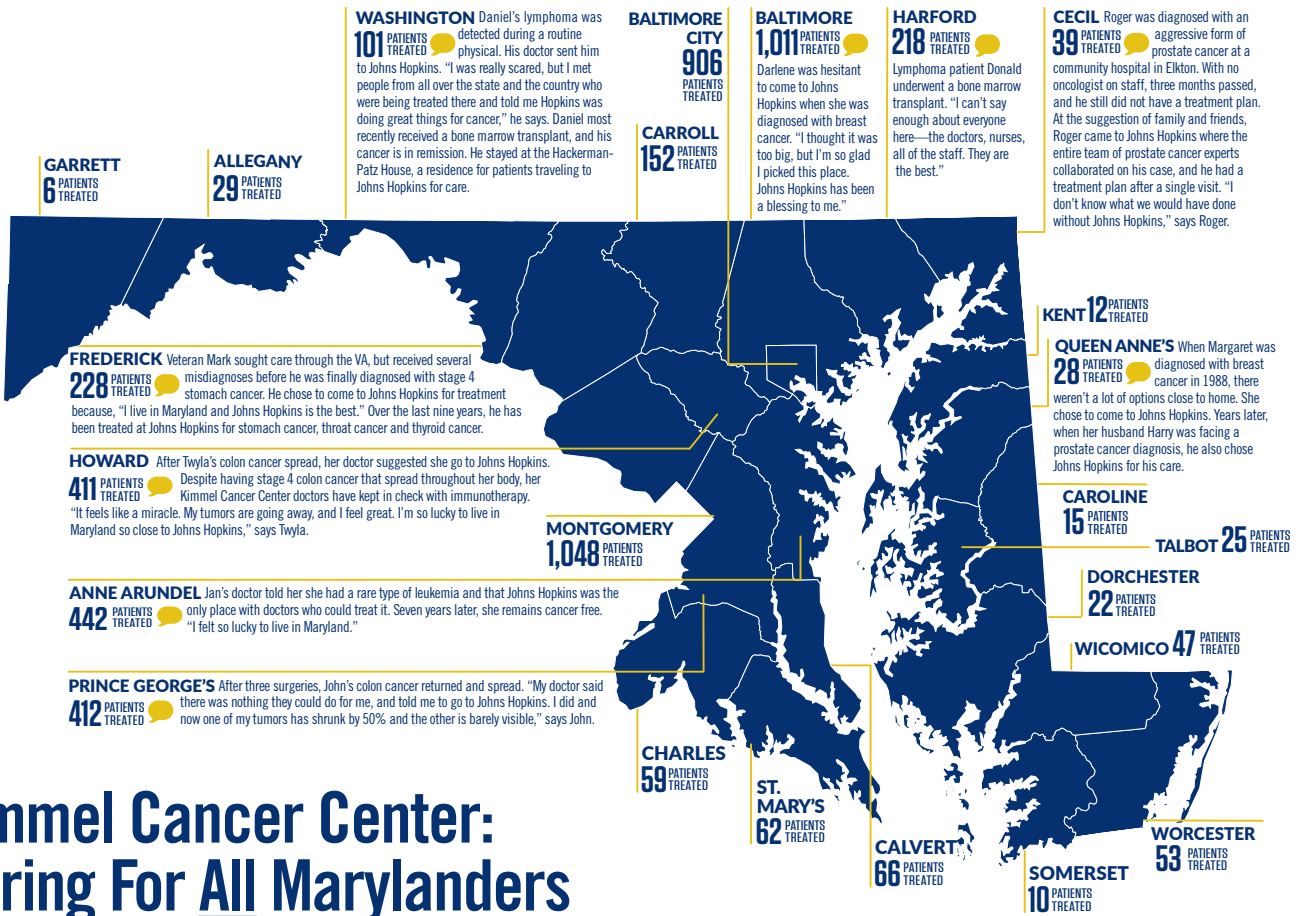
Dr. Small credits their support of patient care in helping Johns Hopkins to advance the tools of telemedicine. “It has provided us with the tools necessary to continue delivering personalized care in an environment conducive to ensuring that our young patients stayed safe from the threat of SARS-CoV-2, despite awaiting vaccine approval, while also experiencing immune system vulnerability stemming from their treatment plans,” he says.



Hyundai Hope On Wheels®
Helping Kids Fight Cancer Since 1998



Giant



Kimmel Cancer Center: Caring For All Marylanders

The Kimmel Cancer Center treats patients from every county in Maryland.

Patient numbers are from 2018. Patient testimonials are for care provided 2001-present.



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