

INSIDE

2 A FIRST IN SAUDI ARABIA

Johns Hopkins Aramco Healthcare helps launch Doctor of Nursing Practice program.

5 BEDSIDE PSYCHIATRIC EVALUATION

The Behavioral Intervention Team assesses patients' mental health status early on, improving outcomes.

7 STRESS, ALZHEIMER'S AND AGING

New research suggests that if you are caring for a spouse with Alzheimer's, you have a higher risk of developing the disease yourself.

INSIGHT

TELEMEDICINE GOES TO INDIA

An app built by Johns Hopkins students and a professor connects patients in rural villages with faraway doctors for care.

Dome

A publication for the Johns Hopkins Medicine family

Volume 68 • Number 2 • March/April 2017



Janice McKeithan, a member of Union Memorial Methodist Church, helps herself to a healthy meal, courtesy of the Johns Hopkins Office of Community Health. Its six-week Faith and Food nutrition program recently taught members of the West Baltimore church about foods their ancestors ate in the American South, the Caribbean and Africa.

MIKE CIESIELSKI

Returning to the Roots

Faith and Food program seeks to improve health by reclaiming African heritage.



Learn more about the strategic priority for people online at hopkinsmedicine.org/strategic_plan.

As the faithful file into the West Baltimore church basement for Wednesday evening Bible study, they leave their steaming covered dishes in the industrial kitchen. About 40 study group members seat themselves at Union Memorial United Methodist Church's colorful oil-clothed tables, their Bibles and workbook materials in front of them.

The aroma of home-cooked food drifts into the room. There will be no macaroni and cheese this evening, though. No hams, no potato salad, no lasagna. Instead, there's plenty of spinach, beans and healthy, whole-grain dishes, prepared from recipes gathered specially for this occasion.

For the past six weeks, Adrian Mosley, administrator of Johns Hopkins' Office of Community Health, has been a guest at Union Memorial's weekly Bible study meeting. She has introduced this group to Faith and Food, a nutrition education program aimed at helping them improve their health by connecting their faith with their cultural heritage. Members of the Harlem Park church are learning about, preparing and eating the wholesome foods their ancestors ate years—even centuries—ago in the American South, the Caribbean and Africa.

"You have to meet folks where they gather," Mosley says. "The people we're trying to reach are not going to come out

(continued on page 4)

Outreach Milestones

PRESIDENT, THE JOHNS HOPKINS HEALTH SYSTEM
EXECUTIVE VICE PRESIDENT,
JOHNS HOPKINS MEDICINE

April marks the second anniversary of the social turmoil that followed the death of Freddie Gray, a 25-year-old African-American man from West Baltimore, while in police custody.

Those events in the spring of 2015 prompted considerable soul-searching throughout the city. Efforts were begun to address the ongoing problems that exacerbated the grievances expressed by the residents of the city's impoverished areas.

Let me update you on what I think is the impressive, imaginative—and effective—outreach that Johns Hopkins Medicine has undertaken since then, from creating business and employment initiatives, to forming innovative task forces, to strengthening and expanding our community involvement. We are energetically engaged in making a difference, of which all of Johns Hopkins Medicine can be proud.

Soon after the April 2015 civil disturbance, I had the opportunity to lead a coalition of Baltimore City hospitals to create a new hospital-based employment program, the Baltimore Population Health Workforce Collaborative, which addresses health issues that result from poverty while also providing job opportunities. It focuses on specific categories of workers, such as certified community health workers and certified nursing assistants, who are trained to serve the health care needs of their communities.

In September 2015, Johns Hopkins University President Ronald Daniels and I joined forces to launch HopkinsLocal, an initiative to promote economic growth in Baltimore by leveraging the purchasing power and employment clout of The Johns Hopkins University and the Johns Hopkins Health System.

We set goals to do more business with local enterprises, particularly minority- and women-owned businesses. We also established higher benchmarks for the inclusion of more minority-owned firms in construction projects on the Johns Hopkins campuses.

In April 2016, HopkinsLocal—which is making significant progress—led to an inspired spinoff: BLocal. With Johns Hopkins Medicine among them, 25 businesses pledged \$69 million over a three-year period to hire local minority- and women-owned businesses for both construction projects and the purchase of goods and services.

As part of BLocal, an educational program called BUILD College was launched to support small, local, minority- and women-owned construction companies. After spending 13 weeks learning the best ways to expand their businesses and networking with fellow small entrepreneurs, industry experts and some of the largest organizations in the city, including Johns Hopkins Medicine, the first class of 15 graduated last September.

On another front, Paul Rothman, dean of the medical faculty and CEO of Johns Hopkins Medicine, and I convened six task forces in the summer of 2015 to meet with community members to discuss how Johns Hopkins Medicine could work with them for a stronger, more unified Baltimore.

The task forces, overseen by Landon King, executive vice dean for the school of medicine, included faculty members, staff members and students from across Johns Hopkins Medicine. They have developed five comprehensive recommendations.

These include a set of proposals for increasing Johns Hopkins Medicine's external and internal outreach and communication with communities citywide. For example, we have established the Wellness Walks program, which has implemented regular walks that also facilitate interactions between Johns Hopkins Medicine leadership and the surrounding Baltimore community.

Another task force is focused on creating more jobs and work training programs. These include the new Johns Hopkins Medicine Supply Chain Institute, a free, two-month program offered in partnership with Baltimore City Community College to prepare city residents for careers in the supply chain industry.

Other task forces focus on establishing efforts to include "community" among the goals of the Johns Hopkins Medicine Strategic Plan, strengthening our partnerships with local schools and helping create an East Baltimore recreation center.

We can be proud of Johns Hopkins Medicine's continuing dedication to improving the health and economic well-being of every Baltimore community.



First-of-Its-Kind Program Opens Doors for Nurse Leaders in Saudi Arabia

Johns Hopkins Aramco Healthcare and Johns Hopkins charter Doctor of Nursing Practice program.

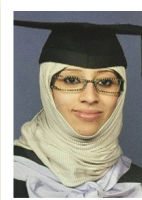
OPPORTUNITY. THAT WORD IS often repeated by the 13 nurses from Johns Hopkins Aramco Healthcare who are enrolled in a new Doctor of Nursing Practice (D.N.P.) program.

The program—developed by Johns Hopkins Aramco Healthcare and the Johns Hopkins University School of Nursing—is the first of its kind to be offered in Saudi Arabia. The program enhances nurses' clinical skills, develops their leadership skills and solidifies their role as an essential complement to physicians in delivering health care.

Not only will this new program change the career paths of the students, but it also has great potential to strengthen the delivery of patient-centered care at Johns Hopkins Aramco Healthcare and to develop the profession in the kingdom and across the region.

"This program is my dream," says Leena Al-Mansour, a D.N.P. student who has been a clinical nursing specialist in wound care since 2002. "I want to improve my leadership skills and my clinical practice. This is a golden opportunity."

To earn a D.N.P.—the highest degree possible in the profession—students must complete two years of academic, clinical, management and



"THIS PROGRAM IS MY DREAM."

—LEENA AL-MANSOUR

leadership studies, culminating in an independent research project.

While most coursework is done in the kingdom, the students come to Johns Hopkins' Baltimore campus for two weeks each semester for required academic and clinical training. In Baltimore, the students take classes taught by experts from across Johns Hopkins' institutions, as well as through shadow days, during which they can see best practices being implemented in real time.

"We see advanced practices while we are at Johns Hopkins," says Maisa Al-Raban, a D.N.P. student who is a clinical educator at Johns Hopkins Aramco Healthcare. "I am very eager for this opportunity because I get a lot of ideas from The Johns Hopkins Hospital that we can apply at Johns Hopkins Aramco Healthcare."

—Kristen Pinheiro



A group of 13 Doctor of Nursing Practice program students visit The Johns Hopkins Hospital to fulfill part of their nurse leadership coursework. Also pictured are Johns Hopkins Aramco Healthcare nurses, school of nursing instructors and John Hopkins Medicine supporters of the program.

2017 Employee Engagement Survey

ONCE AGAIN, THE JOHNS HOPKINS HEALTH SYSTEM wants to know just how engaged its employees feel about their workplace. Participate in the Employee Engagement Survey from **Monday, March 6, through Sunday, March 26,**

to share honest opinions about your work environment. Distributed to all employees of the health system, the survey includes 31 questions on accountability, career growth, respect, safety and diversity. The survey is administered by Gallup, which will email an invitation to employees with a random survey access code that ensures confidentiality. Following the survey, results will be distributed to work groups charged with developing action plans to improve engagement.



Learn more and find resources at bit.ly/hremployengage.

Johns Hopkins HealthCare Decision Support Services team members Chanene Jackson and Aaron Wolff.

Q9 |



My associates or fellow employees are committed to doing quality work.



When Technology Fails

Disaster drill helps Johns Hopkins Medicine prepare for a systemwide outage.

MATERNAL-FETAL MEDICINE NURSE Barbara Kennedy-Kosick realized how much she depended on the technology system of The Johns Hopkins Hospital in October when it went down for several hours. Without a central fetal monitoring system, she says, “you couldn’t see what was going on in the rooms unless you were there.”

Three months later, Kennedy-Kosick and three others in her department were among roughly 250 leaders and information system specialists participating in an enterprisewide simulation of a technology outage.

The Jan. 24 discussion-based exercise included staff members from The Johns Hopkins Hospital, Johns Hopkins Bayview Medical Center, Howard County General Hospital, Suburban Hospital, Sibley Memorial Hospital, Johns Hopkins Home Care Group, remote outpatient clinics and Johns Hopkins Community Physicians, all linked through teleconferencing. The event was led by the Office of Critical Event Preparedness and Response (CEPAR), the Office of Emergency Management, and the

“IT WAS A GREAT OPPORTUNITY FOR SO MANY OF THE ENTITIES TO VIDEO LINK, RESPOND TO A MOCK DISASTER IN A VIRTUAL FORMAT AND LEARN FROM EACH OTHER”

—CINDY NOTOBARTOLO
A SUBURBAN HOSPITAL
ADMINISTRATOR



Department of Clinical Informatics.

“Since many of our business systems and medical records are now centralized, it was a great opportunity for so many of the entities to video link, respond to a mock disaster in a virtual format and learn from each other,” says Cindy Notobartolo, administrative director for emergency medicine, trauma, safety, security and employee health services at Suburban Hospital.

The exercise was prompted, in part, by a technology outage that affected much of Johns Hopkins Medicine for several hours on Oct. 14, 2016, as well as a ransomware attack on the computer networks of

MedStar Health hospitals in March 2016.

Electronic systems manage virtually all aspects of daily operations at Johns Hopkins Medicine. As dependency on technology increases, so does vulnerability to system breaches and failures.

“After the October outage, we heard feedback that we needed to make improvements in our preparedness,” says Carrie Stein, director of clinical informatics at Johns Hopkins Bayview. “Exercises like this help us practice our business continuity plans and evaluate gaps.”

The exercise imagined a simple scenario with far-reaching impact: An electrical shortage in the Mount Washington data center severed service to technologies throughout the institution, including email, the Epic electronic medical record system and Kronos workforce management software. “Basically, most technology we use at Johns Hopkins Medicine is down, folks,” explained Dianne Whyne, CEPAR’s director of operations, at the start of the exercise. She led participants through the imaginary unfolding scenario, pausing frequently for discussion.

“As much as possible, we want you to behave as if this event is really happening,” she said.

Because emergencies come in many forms, Johns Hopkins locations regularly simulate disasters, such as large-scale motor vehicle accidents, earthquakes and pandemics. Last month’s exercise, which took the better part of a day, was the first of several planned to help Johns Hopkins Medicine better prepare for a temporary loss of technology.

As the exercise came to a close, Kennedy-Kosick praised the experience. “The October outage caught us off guard,” she says. “The simulation helped me break down what happened so I can prepare.”

—Karen Nitkin



STAYING PREPARED

Like death and taxes, crises are inevitable, and Johns Hopkins Medicine wants to be prepared. Much of the wisdom comes from analyzing events, like the blizzard that brought Baltimore to a halt last winter or the civil unrest that followed the Freddie Gray verdict in 2015. “Every event is a learning experience,” says Howard Gwon, senior director of emergency management for Johns Hopkins Medicine. Valuable lessons also come from exercises and drills, like recent ones that were based on the fictitious scenarios below.

A Pretend 100-Car Pileup: On Dec. 10, 2015, the Office of Critical Event Preparedness and Response led a drill at Al Rahba Hospital in Saudi Arabia, which is situated just yards away from a major highway. Participants transported and treated about 60 mock victims and then received a formal assessment.

An Imagined Disaster in a Public Space: On Dec. 7, 2016, Johns Hopkins All Children’s Hospital partnered with the Tampa Bay Rays as well as city and federal officials to simulate the hospital’s response to an imagined terrorism act: an individual crashing a plane into Tropicana Field and dispersing radioactive material during a baseball game. In the hospital’s Emergency Center, “patients” were triaged and moved to departments for treatment.

A Fictional Patient with Ebola: On Dec. 15, 2016, an exercise tested how a patient with highly infectious Ebola virus disease would be transported from Johns Hopkins Bayview Medical Center to the Biocontainment Unit at The Johns Hopkins Hospital. During the event, participants donned and doffed personal protective equipment, performed blood tests, and gave CPR.

IDEAS THE EXERCISE SPARKED:

■ Know in advance how you will communicate. Who will be in charge of keeping track of the situation, and how will others in the department be alerted and receive updates?



■ Make sure everyone knows how to do their jobs manually. That’s particularly important for younger staffers who may have never worked without computers.

■ Set up binders with all the forms and documents that will be needed; include written instructions for working without computers.



■ Place laminated instructions where they will be easy to find.

■ Keep a physical list of phone numbers and other contact information for equipment suppliers and anyone else who may need to be reached.

■ Stock up on prescription pads, pens and paper.



■ Have a plan in place for bringing in additional staff members.

■ If outages last longer than a day, develop a system for prioritizing services, such as imaging, lab tests and surgeries.

■ Keep all paper documents that were used during the outage in a secure location. The information will need to be entered into the electronic medical record system when the outage ends.

Returning to the Roots

(continued from page 1)

on a cold night just to learn about healthy food. But if they're already coming to a Bible study meeting, then that's where we'll try to reach them."

The cooking class curriculum was developed by Oldways, a nonprofit organization in Boston that aims to combat obesity and the toll it takes on health by promoting recipes and heritage foods from Mediterranean, African, Caribbean and Latin American cultures. Since last year, Mosley has incorporated faith into the program's nutritional discussions in order to reach the large community of African-American churchgoers in Baltimore.

A 38-year Johns Hopkins employee, Mosley is a social worker who works with researchers and clinicians on issues of health disparities in the neighborhoods and communities that surround the Johns Hopkins Hospital campus. A recent project was Safe in the Salon, a program aimed at helping beauty salon workers identify victims of domestic violence among their clientele.

Supported by the Elizabeth B. and Arthur E. Roswell Foundation and offered free to churches, Faith and Food combines Oldways materials with the faith-based approach of a healthy eating program at the Center for a Livable Future at the Johns Hopkins Bloomberg School of Public Health.

Sade Anderson, Oldways' African Heritage and Health program director, says that Faith and Food has "really broken new ground." She expects that churches in New York and Chicago will soon follow suit.

'Selling Ourselves Out'

The Johns Hopkins program is booked through the spring at St. Joseph Freewill Baptist Church in East Baltimore before returning to the west side at Central Baptist Church. Part of its success is due to the skills of Baltimorean Nneka Shoulds, a certified Oldways instructor pursuing a career in community nutrition, and the Rev. Harold L. Knight, who serves as the Johns Hopkins program's pastor.

Before the Bible study begins at Union Memorial, for instance, Shoulds leads a review of a workbook chapter on fruits and vegetables. As she talks, she chops fresh cabbages, scooping up the crisp leaves and dropping them into a shiny, 8-quart stock pot on a gas burner. She adds a little olive oil, some sea salt, onions, ginger and garlic. Finally, she tosses in a pinch of cayenne pepper and stirs it all together.

Meanwhile, Knight discusses Bible passages related to temptation. "The devil looks for the weakness in each of us," he says, "and food is a way that he looks for a weakness." The pastor offers "supersizing" as an example of a food-related temptation. He points out that for about 40 cents, a fast food customer can



Johns Hopkins social worker Adrian Mosley, a Food and Faith administrator, measures church member Janice McKeithan to determine whether the African Heritage diet has had a slimming effect. Preparing healthier meals "just requires a little planning," says McKeithan. "But it's worth the effort."

MIKE CIESIELSKI

upsized a meal, overloading it with calories, sugar and cholesterol.

"When we supersize, we're basically selling ourselves out for 40 cents," Knight tells the group, as many nod in agreement. "We let the physical overcome the spiritual in making the decisions for us."

"PEOPLE ARE ALREADY COMING TO A BIBLE STUDY MEETING. THAT'S WHERE WE'LL TRY TO REACH THEM."

—ADRIAN MOSLEY
JOHNS HOPKINS SOCIAL WORKER

'A Better Way to Eat, for Sure'

According to 2014 statistics from the Centers for Disease Control and Prevention, the leading causes of death for African-Americans are heart disease, cancer and stroke. Life expectancy for black Americans is nearly four years shorter than for whites. And while Americans of all ethnicities have high rates of obesity, the percentage for African-American women stands at nearly 57 percent. Hypertension and diabetes are also disproportionately prevalent among African-American adults.

Central to Mosley's Faith and Food program is the African Heritage Diet Pyramid, which Oldways describes as "a healthy eating model that celebrates the traditional eating pattern of African-American ancestors." Those ancestors, says Mosley, ate a plant-based diet with far fewer animal products and no processed food.

At the pyramid's base are fruits, vegetables, grains and nuts. Fish, chicken, moderate dairy products and occasional sweets top the diagram. Noticeably absent from the pyramid are red meats, fried foods and sweetened beverages.

Sade Anderson of Oldways says that while many of the foods in the pyramid are familiar to black Americans, the key to health lies in their preparation.

"For example, we know about greens," she says. "Collard greens and other types of greens are traditional for African-Americans. But we're teaching people how to prepare them without using fat or boiling all the nutrients out of them."

As Knight finishes his Bible study presentation, Shoulds spoons the braised cabbage into small bowls, which Mosley distributes. The cabbage is perfectly wilted and seasoned, the ginger and cayenne leaving behind a pleasantly spicy zip. A few members fan themselves, to chase away the pepper's heat.

Later, some of the Bible group's members allow Mosley to weigh them and take blood pressure readings, seeking to compare before-program and after-program numbers. One woman steps off the scale and gives her hips a little celebratory shake. "Look at me—I'm 6 pounds lighter!"

Weight loss isn't the only goal, says Mosley. "We also pay attention to blood sugar, sodium, fiber—all kinds of things that can get lost when you're not mindful of what you eat."


As Helen Copeland gets her blood pressure checked, her daughter Briana says they've taken to heart what they've learned each week from Mosley, Knight and Shoulds.

"It's a better way to eat, for sure," she says. She and her mother have tried new cooking methods as a result of the program.

"We've eaten a lot of broccoli," Briana says. "Now we probably eat broccoli three times a week. We broil it until it browns a little bit. We both love it."

How does Helen's blood pressure look? "Pretty good," she smiles. "Must be the broccoli!"

—Patrick Smith

 Learn more about the work Johns Hopkins Medicine does to benefit the communities it serves: bit.ly/jhmcommbenefitreport.

BRAISED CABBAGE

Serves 6 /// Braising and steaming are two easy cooking techniques that you can apply to any of your favorite vegetables. Braising is a slow-sauteing method of cooking, usually to caramelize onions. Caramelizing onions means cooking them until they're brown and sweet. By caramelizing vegetables, you bring out their natural sugars, so if you have diabetes or are watching your blood sugar, don't use this technique very often.

Ingredients:

- 2 medium-sized yellow onions, halved and thinly sliced
- 2 garlic cloves, minced
- 1 tablespoon fresh ginger
- 2 tablespoons extra-virgin olive oil (palm or coconut oil will work, too)
- 1 bird chili pepper, whole (also called cayenne pepper, finger chili or Guinea pepper)
- Sea salt to taste
- 1 tablespoon water
- 1 medium-sized green cabbage, shredded

1. Chop the onions, mince the garlic and cut two small rounds off of the ginger root.
2. Heat the oil in a large pan, skillet or pot on medium heat.
3. Add the onion, garlic, ginger, chili pepper and salt. Cook, stirring occasionally, until the onion starts to brown.
4. Add the shredded cabbage and the water. Cook for 15 to 20 minutes until the cabbage is soft, stirring occasionally.
5. Serve hot.



Calories: 100, Fat: 5g, Saturated fat: 1g, Sodium: 45mg, Cholesterol: 0mg, Carbohydrates: 13g, Fiber: 5g, Sugars: 7g, Protein: 3g /// Courtesy of Oldways, oldwayspt.org

Taking a Psychiatric Pulse

By assessing the mental health of newly admitted patients to The Johns Hopkins Hospital, the Behavioral Intervention Team improves outcomes.

ONE DAY LAST WINTER, Pat Triplett received an urgent page: A patient who'd been on a medical unit for two weeks started lashing out at everyone in his path. By the time the Johns Hopkins psychiatrist arrived, it was too late to connect with the patient. Security staff members had already restrained him. "It exacted a huge toll on the unit," says Triplett, "and stuck in my mind as just what we are trying to avoid."

That incident—and others—moved Triplett to fast-track a plan to screen all newly admitted inpatients—not just those headed for psychiatric units. The idea, he says, is for a psychiatrist, nurse practitioner or psychiatric social worker to assess medical unit patients for mental health concerns early on, "before they escalate."

The need is urgent, he adds. Roughly 38 percent of medical admissions to The Johns Hopkins Hospital have psychiatric disorders such as depression, bipolar disorder or schizophrenia. Also, up to 20 percent of the hospital's admissions are linked to opioid addiction. These patients can demonstrate disruptive behavioral problems as well as physical symptoms.

Now, however, with the debut of the hospital's Behavioral Intervention Team (BIT) last spring, at least one team member sees a patient, sometimes within hours of admission to a medical unit. "Not everyone will need psychiatric assessment," Triplett says, "but some will, and the sooner they're identified, the quicker they will be treated."

The Johns Hopkins BIT model is still a work in progress. Currently, the team covers three medical units—about 70 beds. Triplett aims to expand coverage by introducing two more teams.

Here's how the approach, developed by Hochang Lee, a former psychiatric fellow at the hospital, works: Every weekday morning, one BIT member meets to review patient charts that medical-surgical staff members have prepared. Afterward, all three BIT members—each trained in psychiatric evaluation—decide which patients will be seen and by whom.

Triage is tiered, says Triplett: Patients arriving after a suicide attempt, for example, are seen immediately; those who have schizophrenia as well as a medical condition with a poor prognosis, such as emphysema, are also assessed more rapidly.

BIT nurse practitioner Maureen Lewis begins each visit by scanning the electronic medical record for any history of psychiatric illness or substance abuse. When necessary, she arranges transfers to inpatient psychiatry.

Signs of depression on medical units aren't rare, often surfacing after a major medical event, such as a heart attack. But they can be subtle, says BIT



Behavioral Intervention Team nurse practitioner Maureen Lewis, left, demonstrates how to approach patients about potential mental health concerns. The program is directed by psychiatrist Pat Triplett and aided by psychiatric social worker, Deborah "Sunny" Mendelson, far right.

psychiatric social worker Deborah "Sunny" Mendelson. She describes an elderly patient admitted after a massive stroke. "Everything was swirling around for him," she recalls. Though he'd lost major abilities, "he felt especially vulnerable and sad about not seeing well enough to read the white board or adjust his bed. I told him that it takes a while for the brain to adapt, but you have the ability to communicate." The conversation cheered the man, as did the vision consult she recommended, which led to new eye-glasses.

Often, Mendelson digs deeper. She asks how patients cope with new perceptions of themselves, particularly if they'll need more surgery or have advanced cancer. Simply the chance to talk about their situations, she says, "can be liberating."

But challenges abound. Triplett notes that many inpatients have a complex mix of medical and psychiatric problems, such as those who develop delirium after joint replacement surgery. New medications can also make a huge difference in mood.

The BIT program has won praise from staff members for reducing psychiatric crises and length of stay. In addition, it has raised morale, especially among nurses. Having the psych team nearby frees nurses from concerns about patients' psychiatric needs and allows them to concentrate on their medical work.

The biggest payoff, says Triplett, is that the Behavioral Intervention Team approach improves patients' peace of mind.

Number of medical admissions to The Johns Hopkins Hospital who have a **PSYCHIATRIC DISORDER**

38%

Number of hospital admissions linked to **OPIOID ADDICTION**

UP TO 20%

New Center to Unite Outpatient Services

THE JOHN G. BARTLETT SPECIALTY PRACTICE, A NEW CLINIC AT THE JOHNS HOPKINS Hospital with more than two dozen exam rooms, will co-locate services for patients with an array of infectious diseases, including infections obtained after transplantation or on medical devices, HIV, and viral hepatitis. In addition to housing various multidisciplinary subspecialists, the facility will feature a nutritionist, an on-site pharmacy, phlebotomy services, and a full complement of social work and case managers. The clinic honors Bartlett, the former Johns Hopkins infectious disease division director, who spent more than 25 years leading efforts to improve and develop treatments for patients with infectious diseases, including HIV/AIDS. Located at 1717 E. Monument St., the renovated space in the Park Building (the former entrance to the Emergency Department) will officially open to patients on May 8. The building will be dedicated on May 1.

Learn more about the new clinics and services at bit.ly/infectiousdiseasescare.



Johns Hopkins Community Health Partnership

Four-year program aimed to improve community health and reduce health disparities.

A LOCAL WOMAN LIVING IN PUBLIC HOUSING WAS NOT adhering to medical care and needed thyroid surgery yet was distrustful of male doctors and the medical facility where she received her care. Beyond the health issues, a Johns Hopkins-affiliated community health worker who visited the woman at home noticed something: a significant fire hazard. The woman had electrical extension cords running from a single socket through the house and out the window to a neighbor's residence. Working with the woman, the health worker got the housing authority to fix the electricity, reassigned the patient to a female medical provider and got her surgery scheduled. With the woman's health care and housing needs met, she has since graduated from school as a certified medical assistant.

It's just one of many patient success stories achieved through the Johns Hopkins Community Health Partnership (J-CHiP). The four-year program, completed last year, brought multiple stakeholders together to improve community health and reduce health disparities for those receiving care at The Johns Hopkins Hospital, Johns Hopkins Bayview Medical Center and surrounding areas. Funded with support from a \$19.9 million

innovation award from the Centers for Medicare and Medicaid Services, the program—which included caregivers at Johns Hopkins; two grassroots, community-based organizations; and five neighboring skilled nursing facilities—enrolled over 80,000 residents, typically with complex health care needs. Johns Hopkins HealthCare was a close partner in this effort.

J-CHiP included both community- and acute care-based interventions to improve health. The community-based component targeted local Medicare and Medicaid residents with average annual health care costs totaling between \$30,000 to over \$55,000 prior to enrollment. Among this population, 69 percent had six or more chronic conditions, at least 32 percent had depression or another mental health condition, and 45 percent of the Medicaid patients had substance use disorders.

Each patient enrolled was assigned to a team that included a primary care provider, clinic-embedded case manager and community health worker. Some also had a health behavior specialist or a neighborhood navigator. Initial patient contacts, often done in participants' homes, noted barriers to care. J-CHiP provided low-cost bus tokens, cab or shuttle support to about 550 patients in need of transportation to medical appointments; a pharmacy assistance program to make medications more affordable for nearly 400 patients; and cellphones preprogrammed with provider phone numbers to 113 patients to keep them engaged.

Some of the program's ambulatory efforts will be sustained through the Johns Hopkins Medicine Alliance for Patients, an accountable care organization, and much of the program components will continue through other hospital initiatives and the Community Health Partnership of Baltimore. Through this new initiative, supported by the Health Services Cost Review Commission, six Baltimore hospitals, including The Johns Hopkins Hospital and Johns Hopkins Bayview, will collaborate with Healthcare for the Homeless and continue to work with community organizations, such as Sisters Together and Reaching and the Men and Families Center, to improve care for high-risk Medicare and Medicaid patients in Baltimore.

—Karen Blum

“THE NEARLY 200,000 RESIDENTS OF EAST BALTIMORE, WHERE LIFE EXPECTANCY CAN BE AS MANY AS 20 YEARS SHORTER THAN NEARBY, MORE AFFLUENT BALTIMORE NEIGHBORHOODS, FACE MANY CHALLENGES TO HEALTH AND WELL-BEING.”

—SCOTT BERKOWITZ
SENIOR MEDICAL
DIRECTOR, ACCOUNTABLE CARE



J-CHiP BY THE NUMBERS

80,000

Baltimore residents enrolled



2,000

of whom were assigned a community health worker to coordinate care



How J-CHiP Addresses Barriers to Care:



preprogrammed cellphones



pharmacy assistance



cab or shuttle support



low-cost bus tokens

IN BRIEF



Upgraded Handbook for Patients and Their Families

For most people, even a short hospital stay can feel overwhelming. A patient handbook can help ease that stress by providing the information patients and their families need about services, policies and how to reach departments. But, as Podge Reed discovered as an inpatient, the long-standing Johns Hopkins Hospital handbook wasn't exactly user-friendly. Reed, who now directs the Johns Hopkins Hospital Patient and Family Advisory Council, took notes and recommended updates to Jane Hill, the hospital's patient relations director. Those efforts, aided by the Johns Hopkins Medicine Marketing and Communications Department and volunteers on the advisory council, informed the updated, visually engaging Johns Hopkins Hospital Patient and Family Handbook. The 33-page booklet features easy-to-digest lists, diagrams, and a chart explaining the care team's roles and the color of their scrubs. Other features include a central phone directory, an illustrated guide to a typical hospital room, and instructions on preventing infections and falls.



View the handbook at bit.ly/jhhpatientfamhandbook.

Religious and Cultural Observances Toolkit

Building a culturally competent workforce and ensuring a high-quality patient care environment require educating staff members about the diverse cultural and faith traditions of patients, employees, faculty members and students. To support those efforts, the Office of Diversity and Inclusion and the Department of Spiritual Care and Chaplaincy have created a Religious and Cultural Observances Toolkit. The resource provides general information about cultural and religious observances, and how they may affect interactions with colleagues, students, and patients and their family members.



Learn about upcoming observances at bit.ly/reliculttoolkit. You can also download the 2017 Multicultural Calendar at bit.ly/multiculturalcalendar.

Stress, Alzheimer’s and the Aging Brain

Johns Hopkins research explores the cognitive effect of caring for a spouse with Alzheimer’s disease.

AS A MEDICAL STUDENT, ZACHARY Corder was struck by a study co-authored by Johns Hopkins psychiatrist Peter Rabins indicating that spouses of Alzheimer’s disease patients were at a twofold risk of developing the condition themselves.

“The spouses were facing an incredible amount of stress day in and day out providing care, but exactly how that led to an increased risk of Alzheimer’s disease was entirely an open question,” says Corder.

When he joined Johns Hopkins’ M.D./Ph.D. program and the lab of stress expert Kellie Tamashiro a couple of years later, he decided to investigate the effects of stress on the aging brain using mouse models.

Lab mice live for about two years, says Corder. To simulate the unpredictable stressors faced by spousal caregivers of Alzheimer’s disease patients, he and Tamashiro exposed both young adult and aged mice (18 months old) to two weeks of chronic, variable stress: One day, the lights might be left on overnight, or another day, the mice might be placed in an overcrowded cage. Memory tests given to the mice after the two-week period demonstrated that while stress exposure led to some cognitive impairment in all of the mice, the aged mice were profoundly more affected.

The work, published in *Translational Psychiatry*,

also found that stress exposure was associated with increased expression of a gene called beta-secretase, or Bace1, which is involved in the development of plaques that build up in the brain during Alzheimer’s disease. In young mice, there was a 1.5- to twofold increase of Bace1 in the hippocampus, the center of learning and memory; in aged mice, Bace1 was increased not only in the hippocampus, but also in the prefrontal cortex and amygdala, areas that regulate thoughts, actions and emotional behavior.

“Our work suggests that the aging brain

appears to be more susceptible to the cognitive effects of stress, and stress may increase the risk of Alzheimer’s disease, especially in aging individuals,” says Corder, now a psychiatry intern at Johns Hopkins Bayview Medical Center.

In a second set of experiments, Corder and Tamashiro exposed two additional groups of young adult and aged mice to environmental enrichment—such as increased bedding, toys to play with or tunnels to crawl through—a week before and during a two-week chronic variable stress period.

“What we found was we were able to prevent all of these negative effects of stress on learning and memory through environmental enrichment,” says Corder. “The tricky part is there is probably a lot going on in the brain from environmental enrichment, and exactly how that prevented the effects of stress in our study is a big question,” he says. Studying this is his next step.

—Karen Blum

“OUR WORK SUGGESTS THAT THE AGING BRAIN APPEARS TO BE MORE SUSCEPTIBLE TO THE COGNITIVE EFFECTS OF STRESS, AND STRESS MAY INCREASE THE RISK OF ALZHEIMER’S DISEASE, ESPECIALLY IN AGING INDIVIDUALS.”

—ZACHARY CORDER



ANDREW COLIN BECK / MARLENA AGENCY



New Community E-Newsletter

When The Johns Hopkins Hospital opened 128 years ago, its goals were to serve the community and, to quote its founder, provide care for “the indigent sick of this city and its environs.” That part of the hospital’s mission hasn’t changed—except to expand those efforts in East Baltimore and across affiliate hospitals. Now, a new e-newsletter showcases just how Johns Hopkins Medicine supports the communities it serves. Called Connections, the quarterly online publication, compiled by staff members in the Dean’s Office, the Office of Government and Community Affairs, and the Marketing and Communications Department, provides community engagement updates and opportunities. The debut issue features Howard County General Hospital’s efforts to help those devastated by a flood last summer and Sibley Memorial Hospital’s focus on impoverished areas east of the Anacostia River, among other stories.



View the newsletter at bit.ly/JHMCConnections.



New Senior VP



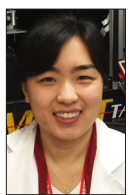
Peter Hill, M.D., associate professor of emergency medicine, has been appointed senior vice president for medical affairs for the Johns Hopkins Health System and vice president of medical affairs for The Johns Hopkins Hospital. An Emergency Department faculty member since 1998, Hill has served in multiple leadership positions, including as medical director of the emergency acute care unit, which he co-founded, and as clinical director and then vice chair of clinical affairs for the department. In his role with the health system, he will work closely with each hospital's leadership and medical staff to strengthen efforts to provide safe, efficient, cost-effective health care. Hill will also serve as The Johns Hopkins Hospital's chief medical officer.

National Capital Region Surgical Oncology Appointment



Nita Ahuja, M.D., professor of urology, surgery and oncology, has been appointed director of surgical oncology for the national capital region, encompassing Sibley Memorial Hospital, Suburban Hospital and Howard County General Hospital. Ahuja remains chief of surgical oncology for The Johns Hopkins Hospital, director of the Sarcoma and Peritoneal Surface Malignancy Program, and co-director of the Gastric Cancer Program. Ahuja also heads a cancer research laboratory and has made breakthrough discoveries in early detection of pancreatic cancer and in treating both it and colorectal cancer. A graduate of Duke University School of Medicine, she completed her surgical training at The Johns Hopkins Hospital and joined the faculty in 2003.

Damon Runyon Award



Xintong Dong, Ph.D., a neuroscience fellow, has been awarded a 2017 Damon Runyon Fellowship from the Damon Runyon Cancer Research Foundation. She is among 16 recipients of the four-year, \$231,000 fellowship that will underwrite her studies of how injury and pathogen invasion trigger a chain of inflammatory and repair responses that result in defects in wound healing.

Healthy Community Partnership Recognized

Johns Hopkins Bayview Medical Center's Healthy Community Partnership has received the Baltimore City Health Department's Health Equity Leadership Award. The award is presented to individuals and organizations working to combat health disparities in Baltimore City. The Healthy Community Partnership aims to improve the health of the community by working with faith-based organizations to offer educational programs on health topics, equip individuals with the needed resources and tools to become stronger advocates for good health and medical care, and address health care disparities.

Howard County General Hospital Honor

Howard County General Hospital has received a 2017 Distinguished Hospital Award for Clinical Excellence from Healthgrades, a Denver-based hospital and physician rating and comparison company. The award recognizes Howard County General's high-quality care across a wide range of procedures and for multiple conditions. The hospital is one of 258 the company ranked as being in the nation's top 5 percent of health care institutions.

Sibley Memorial Hospital Voted Best Local Hospital to Give Birth

Bethesda Magazine readers have voted Sibley as the best local hospital at which to have a baby. A total of 3,412 women gave birth at Sibley last year—45 of them delivering twins. With the September 2016 relocation of the Center for Babies and Families to two floors in the new patient tower, childbirth capacity has grown substantially. It includes 18 labor, delivery and recovery rooms; three C-section rooms; 50 postpartum rooms; 18 private, special care nursery rooms, including six rooms for twins; a dedicated lactation area; eight private triage rooms; and services for high-risk pregnancies.

EAST BALTIMORE



Felicia Hill-Briggs, Ph.D., professor of medicine and senior director of population health research and development for Johns Hopkins HealthCare, has been named president-elect of the American Diabetes Association. She will assume the presidency in 2018. Hill-Briggs is also a member of the Welch Center for Prevention, Epidemiology and Clinical Research, where she studies diabetes self-management, behavioral intervention trials, health disparities, neuropsychology and functional impairment disability.



Namandje Bumpus, Ph.D., pharmacologist and associate professor of medicine, was recently named science commissioner and the newest member of the Science Advisory Board in Washington, D.C. The board provides scientific oversight for the district's Department of Forensic Science and advises the department's director, the mayor and city council on matters relating to the department.

Daniel O'Connor, Ph.D., assistant professor of neuroscience, is among 102 winners of Presidential Early Career Awards for Scientists and Engineers. The award is the highest honor bestowed by the federal government on science and engineering professionals in the early stages of their independent research careers. O'Connor's research focuses on neural circuits for touch perception, and his lab is working to reveal the neural circuit foundations of sensory perception and provide a framework to understand how circuit dysfunction causes mental and behavioral aspects of neuropsychiatric illness.



YOUNG JEDI: Five-year-old Jamari Hall brandishes a lightsaber during Stars Wars day in the Johns Hopkins Children's Center. Jamari, who has chronic lung disease, joined other Children's Center and Harriet Lane Clinic patients to dance and high-five with R2-D2, Jedi Masters, stormtroopers, a biker scout and an X-Wing pilot. The Feb. 3 event, made possible by local volunteers and the Star Wars: Force for Change platform of Lucasfilm, was therapeutic as well as fun, says Patrice Brylske, director of child life for The Johns Hopkins Hospital: "Children who haven't gotten out of bed in days were motivated to come downstairs to interact with the Star Wars characters." Watch a video about Star Wars characters' visit to the Children's Center: bit.ly/starwarshopkins.



Peter Pronovost, M.D., Ph.D., director of the Armstrong Institute for Patient Safety and Quality, senior vice president of patient safety and quality for Johns Hopkins Medicine, and professor of anesthesiology and critical care medicine, has been awarded an honorary Doctor of Medicine from Newcastle University in the U.K. for his outstanding work in critical care medicine.



Dorry Segev, M.D., Ph.D., professor of surgery, was named to *Foreign Policy Journal's* list of 100 Leading Global Thinkers for his work on HIV-positive to HIV-positive organ transplants. Also recognized for such efforts was Peter Stock, of the University of California, San Francisco. Those who make the list are considered to have made great impacts within their fields and around the world. In 2011, Segev's research showed that HIV-positive individuals, previously banned from donating organs to HIV-positive transplant patients, could do so. In 2013, he successfully lobbied Congress to change the law.

JOHNS HOPKINS BAYVIEW MEDICAL CENTER



Wendy Houseknecht, B.S.N., M.S.N., has been named the new director of nursing for ambulatory services. Houseknecht had been acting as an interim director for several months. Nationally certified in electronic fetal monitoring and as an obstetrics nurse, she has many years of ambulatory care experience and will be responsible for overseeing the clinical nursing functions in ambulatory care and ensuring safe and efficient patient care practices.



Kerri Huber, M.S.N., R.N., C.I.C., has been named director of nursing for the Department of Interprofessional Practice and Patient Safety. Huber will provide oversight of clinical practice, education and patient safety activities. She came to Johns Hopkins Bayview in 2007 as a registered nurse in the Burn Center. In 2011, she joined infection control as an infection prevention expert, becoming the manager of infection control in 2013.

IN BRIEF

Dancing with the Hopkins Stars Returns

Riding on the success of two years of fierce competition and fundraising for United Way, Dancing with the Hopkins Stars returns on Wednesday, March 29, at 5:30 p.m. in Turner Auditorium on the East Baltimore campus. This year's cast of seven couples will represent The Johns Hopkins Hospital and Health System Corporation, the Johns Hopkins University School of Medicine, Johns Hopkins Bayview Medical Center, Johns Hopkins Community Physicians and Johns Hopkins Home Care Group. Each couple will perform an elaborate dance routine before a live audience, competing for the mirror-ball trophy—all in support of United Way. Visit hopkinsmedicine.org/unitedway/dwth to meet the couples, learn their stories and find out which United Way program they've chosen to support at this year's event.



Dome

Published seven times a year for members of the Johns Hopkins Medicine family by Marketing and Communications.

The Johns Hopkins University School of Medicine
The Johns Hopkins Hospital
Johns Hopkins Bayview Medical Center
Howard County General Hospital
Johns Hopkins HealthCare
Johns Hopkins Home Care Group
Johns Hopkins Community Physicians
Sibley Memorial Hospital
Suburban Hospital
Johns Hopkins All Children's Hospital

Editor
 Linell Smith

Contributing Writers
 Karen Blum, Neil A. Grauer, Judy F. Minkove, Karen Nitkin, Kristen Pinheiro, Linell Smith, Patrick Smith

Copy Editors
 Abbey Becker
 Judy F. Minkove

Graphic Designers
 Kristen Caudill, Abby Ferretti, Rachel Sweeney

Photographer
 Keith Weller

Dalal Haldeman, Ph.D., M.B.A.
Senior Vice President,
Johns Hopkins Medicine
Marketing and Communications

Send letters, news and story ideas to:
 Editor, *Dome*
 Johns Hopkins Medicine
 Marketing and Communications
 901 S. Bond St., Suite 550
 Baltimore, MD 21231
 Phone: 410-502-9602
 Email: lsmit103@jhmi.edu

Read *Dome* online at
hopkinsmedicine.org/news/publications/dome

For *Insight*
 Email letters, news and story ideas to:
insighteditor@jhmi.edu

© 2017 The Johns Hopkins University and The Johns Hopkins Health System Corporation.

Follow Johns Hopkins Medicine

Facebook:
facebook.com/JohnsHopkinsMedicine

Twitter:
twitter.com/HopkinsMedicine

YouTube:
youtube.com/user/JohnsHopkinsMedicine