

WINTER 2020

A Publication of  
**ROBERT WOOD JOHNSON  
UNIVERSITY HOSPITAL**

# healthy *together*

**TWO TALES OF  
KIDNEY  
DONATION**

**SIMPLE WAYS  
TO STAY FIT  
THIS WINTER**

**BREATHE  
BETTER**

**CRITICAL CARE  
WHEN EVERY MOMENT COUNTS**





## SAVING LIVES IS OUR LIFE'S WORK

At RWJBarnabas Health, we take the trust people place in us to heart. It's the bedrock of our commitment to your care, from preventive services to life-saving emergency treatment.

For urgent situations, we have two world-class trauma centers, one in Jersey City and one in New Brunswick, as well as the only burn center in the state, located in Livingston. In addition, we have expanded our emergency response capabilities and have acquired an advanced emergency helicopter, call sign Life Flight, equipped and staffed to provide critical care while transporting badly injured patients.

Robert Wood Johnson University Hospital (RWJUH) is one of only three Level I Trauma Centers in the state and New Jersey's first designated Pediatric Trauma Center. With more than 2,000 trauma patients treated annually in an Emergency Department that sees in excess of 95,000 patients each year, RWJUH's Level I Trauma Center regularly cares for some of the most seriously injured patients in the state. In addition to treating the seriously injured, the Trauma Center conducts research and educates other healthcare professionals about the most recent advances in trauma care. It also educates the community about safety through its Injury Prevention Program.

To help people stay healthy and safe, we reach out with education and prevention programs for people of all ages. We've also invested in creating the new secure and convenient RWJBarnabas Health Connect app, available at your app store. Health Connect lets you access your records, store your insurance information, search for doctors, and make real-time appointments that are automatically added to your phone calendar.

Health Connect, along with the RWJBarnabas Health TeleMed app, which offers online access for a physician visit, are integral parts of efforts to create a truly tech-forward healthcare organization. These efforts led to all RWJBarnabas Health hospitals earning the "Most Wired" designation from the College of Healthcare Information Management Executives this year.

Whether you face an emergency or have an everyday health question, we're committed to providing convenient access to the highest-quality care—whenever and wherever you need it.

Yours in good health,

**BARRY H. OSTROWSKY**  
PRESIDENT AND CHIEF EXECUTIVE OFFICER  
RWJBARNABAS HEALTH



**JOHN J. GANTNER**  
PRESIDENT AND CHIEF EXECUTIVE OFFICER  
ROBERT WOOD JOHNSON UNIVERSITY HOSPITAL



## HEALTH NEWS

### CELEBRATING 100 YEARS OF LEADERSHIP

The American Hospital Association (AHA) honored Robert Wood Johnson University Hospital (RWJUH) in recognition of the hospital's 100 years of participation and leadership in the AHA. Founded in 1898, AHA's first year of admitting institutional members was 1919, meaning RWJUH is one of 55 charter members of the AHA. AHA Regional Executive Michael Draine was on site to present the award to the RWJUH leadership team.

### ACCOLADES FOR SURGICAL PERFORMANCE

Healthgrades has recognized RWJUH with the America's 100 Best Hospitals for Prostate Surgery Award™ (for 2020 and 2018). RWJUH was honored for superior clinical outcomes in prostate removal surgery and transurethral resection of the prostate. The hospital also received the Bariatric Surgery Excellence Award™ (for 2020 and 2019) for superior clinical outcomes in bariatric (weight loss) surgery.

### EXCEPTIONAL STROKE CARE

The Comprehensive Stroke Center at RWJUH received the American Heart Association/American Stroke Association's Get With The Guidelines®-Stroke Gold Plus Quality Achievement Award and its Stroke Elite Plus Honor Roll Award—two of the highest honors a center can receive from the organization for exceptional stroke care. The Get With The Guidelines®-Stroke award recognizes the hospital's commitment to ensuring that stroke patients receive the most appropriate treatment according to nationally recognized, research-based guidelines based on the latest scientific evidence. RWJUH's Comprehensive Stroke Center earned the award by meeting specific quality achievement measures for the diagnosis and treatment of stroke patients.

**Robert Wood Johnson University Hospital** | **RWJBarnabas HEALTH**

1 Robert Wood Johnson Pl., New Brunswick, NJ 08901  
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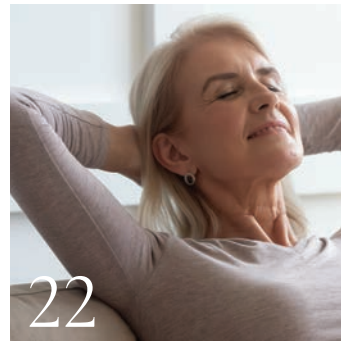
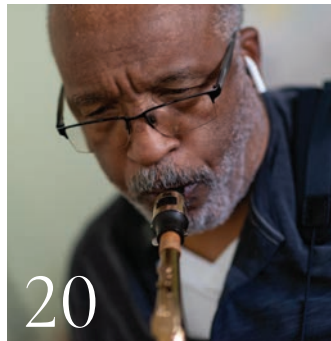
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- @RWJUH
- RWJBarnabas Health

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# THE GIFT OF LIFE



## A YOUNG WOMAN SAVES A CHILD

When Samantha Donnelly was in high school, one of her classmates needed a kidney transplant. “I wanted to donate one of my kidneys to her, but when I applied I was told I was too young,” recalls Samantha, now 22. Undeterred, she decided she would wait until she reached the legal age for kidney donation, which is 21 in the U.S.

In 2018, Samantha applied to be a kidney donor at Robert Wood Johnson University Hospital (RWJUH), where she works as an Emergency Medical Technician (EMT) with the RWJUH Mobile Health Service and is pursuing a nursing degree.

Meanwhile, 4-year-old Aden Supe was struggling with a rare genetic kidney disorder. His RWJUH physicians warned his parents, Marco and Mayra, that kidney failure was imminent. In 2018, he was placed on dialysis, which performs the functions of the kidneys. “It was hard to see our son suffering,” recalls Marco. “He had no appetite and wasn’t growing, and the dialysis left him so exhausted he couldn’t go to preschool.”

Then, last spring, the Supes received exciting news. RWJUH had identified a donor: Samantha, who had a matching blood type. For Marco and Mayra, it was a dream come true. “There were a few potential donors before

Samantha, but they always fell through,” says Marco.

The surgery was scheduled for June 25. On the day of the operation, Samantha and Aden were wheeled into their respective operating rooms. Samantha was surrounded by her mother and boyfriend, Aden by his parents.

It took two hours for Ronald Pelletier, MD, a transplant surgeon and Program Director at the Kidney and Pancreas Transplant Center at RWJUH, to remove Samantha’s kidney. It took four hours for Advait Bongu, MD, a transplant surgeon and Dr. Pelletier’s colleague, to place Samantha’s kidney in Aden.

Samantha stayed in the hospital for two days before being discharged to recuperate at home. Although she was up and walking around fairly quickly, she couldn’t drive for two weeks and had to be out of work for six, since her job as an EMT requires heavy lifting. Aden also tolerated the procedure well. “The first thing he said when he saw my team was that he wanted some waffles,” recalls Dr. Bongu. “That’s when we all knew he would be fine.” Over the summer, Aden’s appetite returned, he started growing again, and he had more energy for school and other activities. The transplanted organ will last for 10 to 15 years, then he’ll have to go through the process again. “For now, we’re enjoying the fact that our son has his health back,” says Marco.

## TWO RWJUH EMPLOYEES DONATED THEIR KIDNEYS TO GIVE TWO SERIOUSLY ILL PEOPLE THEIR LIVES BACK.



From left: Four-year-old Aden Supe has regained his health thanks to a kidney from Samantha Donnelly, an RWJUH employee. Samantha with Jami Abes, BSN, RN, CPTC, Transplant Coordinator. Above, from left: Advait Bongu, MD, Surgeon, Kidney and Pancreas Transplantation; Joann Carlson, MD, Interim Division Chief, Division of Pediatric Nephrology and Hypertension, The Bristol-Myers Squibb Children's Hospital at RWJUH; Abes and Ronald Pelletier, MD, Director of Kidney and Pancreas Transplantation at RWJUH with Samantha and Aden.

Samantha and Aden were able to meet about six weeks after the surgery, when they were at the hospital for follow-up appointments. It was an overwhelming moment for both—especially Aden, who became shy and hid behind his parents. “It was so great to see him and put a face to the person I donated to,” says Samantha, who now keeps up with him through his mom’s Facebook account. Mayra recently posted: “I want to thank God for sending this angel into my life. Samantha, we’re really thankful for everything you did for our son. God bless you forever.”

Samantha and Aden’s parents rave about the care at RWJUH. “Dr. Pelletier did an excellent job of explaining the procedure and allaying my fears,” says Samantha. Similarly, Marco says, “The hospital staff went out of their way to reassure Aden before and after the surgery.”

For the surgeons, this transplant is especially memorable. Says Dr. Pelletier: “I’ve performed many kidney donations over the years, but this one moved me the most. Samantha performed a selfless act for a young child; she saved Aden’s life.”

For Samantha, seeing Aden made her sacrifice worthwhile. “My life is back to normal, but I got to give a little boy the chance to live a full life,” she says.

To learn more about living kidney donation, visit [www.njtransplant.org](http://www.njtransplant.org).



From left: Jennifer Loreto is grateful to Colleen Herkert for donating her kidney to Jennifer’s husband.

## A COWORKER GOES ABOVE AND BEYOND

Colleen Herkert and Jennifer Loreto have been part of the RWJUH family for more than a decade. They work together on the hospital’s bone marrow transplant unit, where Colleen, RD, CSO, CNSC, is a registered dietitian and Jennifer is a unit manager. The women are close friends, and Jennifer often asked Colleen for advice about nutrition for her husband, Manuel, who has type 2 diabetes.

Manuel’s disease was not well controlled, and it had taken a toll on his kidney function. He began dialysis in October 2017 and had to stop working. He was placed on a waiting list for a kidney transplant, but both he and Jennifer were not optimistic they would find a donor quickly.

Then, the seemingly miraculous happened. Colleen, who shares the same type O blood as Manuel, offered to donate one of her kidneys. “I’d worked with dialysis patients, and I saw firsthand the toll dialysis takes on their lives,” she says. “I never had a second thought about it.”

In January 2019, the surgery took place at Saint Barnabas Medical Center in Livingston. The procedure was a success. Today, Manuel is back to work and playing sports that he had to give up during dialysis, such as tennis. “He has his life back, and it’s all thanks to Colleen,” says Jennifer. “She gave my husband the gift of life.”

Next year, the three will travel to Manuel’s and Jennifer’s native Philippines, along with several other nurses from the bone marrow unit. The trip is especially meaningful because Manuel was unable to travel for several years due to the dialysis. “It is amazing to look at Manuel and realize that I was able to give him his life back,” marvels Colleen.





# HEALTHY HOMES, HEALTHY PEOPLE

**AN INNOVATIVE PROGRAM IS HELPING LOCAL TENANTS IMPROVE THEIR LIVING CONDITIONS.**

Sofia\*’s rental home in New Brunswick was in serious disrepair, but her landlord refused to remedy the problems. “The windows were falling apart, the bathroom was in bad condition, and pieces of the ceiling were falling off,” says Sofia. “I waited for the landlord to fix these issues, but he didn’t.” Instead, the landlord sent her a bill for a \$4,200 water fee and other phony charges. When Sofia refused to pay the bill, the landlord tried to evict her, her husband and children.

Thankfully, a new program was available to help. In 2018, Robert Wood Johnson University Hospital (RWJUH)





The New Brunswick Healthy Housing Collaborative's community health ambassadors work to reduce risks and hazards in homes to improve residents' health. Left: Ambassadors raise awareness of the program at a broad range of community events.

partnered with Saint Peter's University Hospital, Middlesex County Office of Health Services and New Brunswick Tomorrow to launch the New Brunswick Healthy Housing Collaborative, which aims to reduce risks and hazards in homes to improve residents' health. The initiative is part of RWJBarnabas Health's Social Impact and Community Investment practice. "Housing is a social determinant of health," says Mariam Merced, Director of Community Health Promotions at RWJUH. Unsafe, unsanitary living conditions can lead to a range of health problems, including asthma and allergies, lead poisoning, heat or cold exposure, injuries, carbon monoxide poisoning and fire hazards. "Your living situation directly affects your health—whether it's your mental or physical health," says Ana Bonilla Martinez, Program Coordinator.

### INVESTIGATING HEALTH RISKS IN HOMES

The Healthy Housing initiative has four Spanish-speaking "community health ambassadors" who are members of the community and are trained to recognize health risks in homes. With the tenants' permission, the ambassadors visit homes in pairs and assess the living situation. They investigate problems such as pests, water leaks, mold, lead exposure, dust, poor heating and tenant-landlord conflicts. After they've identified hazards, they make recommendations for improvements and connect residents with resources that can help them address the problems.

The program works with residents of two New Brunswick neighborhoods—Esperanza and Unity Square—which have some of the greatest health and

social disparities in the city, says Merced. Most of the residents are Spanish-speaking immigrants, often women with children. Many are renters who don't know or understand their rights as tenants. "Initially, we thought we were going to find a lot of issues around pests and mold, and we did find those," says Merced. "But the most pressing issue was tenant-landlord conflict, with tenants not being able to fix their homes because they didn't know that they could ask for things to be repaired. Some landlords take advantage of that." Others, however, have made repairs and improved the tenants' living conditions quickly.

The program, which is in its second year, has already helped to improve housing conditions in 144 homes with more than 800 residents. In Sofia's case, the community health ambassadors explained that her rights as a tenant were being violated. They advised her to compile evidence, including photos and written communications, to use in case she had to go to court. Ultimately, the case was dismissed, and Sofia and her family decided to move to another home in New Brunswick.

In another case, the landlord made amends. Carolina's\* home had chipping paint and mold in the bathroom. With the help of the community health ambassadors, she learned what steps she needed to take to resolve the situation. "The ambassadors told me to write a letter to the landlord explaining the problems," she says. "In the letter, I also mentioned that we didn't have a fire extinguisher, and he got me one."

The community health ambassadors also recommended that Carolina use cleaning products with fewer chemicals. Carolina is grateful for their guidance. "I learned that the landlord has a responsibility to fix things that are wrong with the house," she says. "I also learned how to advocate for my rights as a tenant."

### EMPOWERING TENANTS

To help tenants understand their rights, the Healthy Homes ambassadors host educational sessions at churches, daycares and other facilities. During the sessions, tenants learn to obtain a copy of their lease and receipts to document rent payments, take photos of hazards and put complaints in writing to their landlords. "We help tenants get organized in case they need to go to court," says Merced.

Bonilla Martinez knows from personal experience how important these services are to the community. "I grew up in an immigrant family, and any sort of guidance you can get is helpful when it comes to housing because you don't understand the language, your rights and the community resources that can help you have a healthy home."

Merced says she's proud of the program's accomplishments. "I think we've created momentum in the city around housing issues," she says. "Many of the residents call us now and say, 'I've moved to a different place. Can you help me read my lease?'"

\*Name has been changed to protect privacy.

If you have a question about your living conditions, call Legal Services of New Jersey at **888.576.5529** or visit [www.lsnj.org](http://www.lsnj.org).

# KEEP MOVING!

## A TRAINER'S ADVICE FOR STAYING FIT WHEN THE WEATHER IS FRIGHTFUL.

**D**uring the winter, it's tempting to put exercise on hold until warm, sunny days return. But there are a lot of good reasons to keep moving: Working out can reduce anxiety and blood pressure and improve your quality of sleep. It can also help reduce arthritis pain, lower your risk of developing eight types of cancer and slow the progression of high blood pressure and type 2 diabetes. What's more, if you exercise regularly, you'll be less likely to gain weight, become lethargic and eat poorly. "When you make one good choice, it's easier to make another good choice, such as eating healthy," says Peter DeFranzo, a trainer at Robert Wood Johnson (RWJ) Fitness & Wellness Center in Old Bridge. "It's what we call a 'positive feedback loop.'" Here, DeFranzo offers advice on how to stay active when there's a chill in the air.

### How much exercise do I need?

The government's recently updated Physical Activity Guidelines for Americans recommend that adults get at least 150 to 300 minutes of moderate-intensity

aerobic activity each week. That translates into about 20 to 40 minutes per day. The Guidelines also recommend strength training, such as lifting weights, on two days per week. Kids ages 6 through 17 need at least one hour of moderate-to-vigorous activity daily. Moderate-intensity activities include brisk walking, household chores and dancing. Examples of vigorous activities include running, swimming laps and hiking.

### If I don't belong to a gym, how can I stay fit?

Move as often as you can—and monitor your activity with a fitness tracker, if possible. Create a goal for yourself, like taking 8,000 to 14,000 steps each day (check with your physician first). The average American takes about 3,000 to 4,000 steps per day. Add an extra 1,000 steps per day every two weeks until you've reached your goal. If you're snowed in, walk up and down the stairs in your home. Keep in mind, even chores, such as doing laundry and taking out the garbage, count as exercise.

### What types of outdoor exercise do you recommend during the winter?

Walking (especially up hills), snowshoeing, cross country skiing, shoveling snow—and even throwing snowballs with your kids or grandkids—are great calorie burners. Since the snow and ice can lead to falls, be sure to wear slip-resistant sneakers or boots.

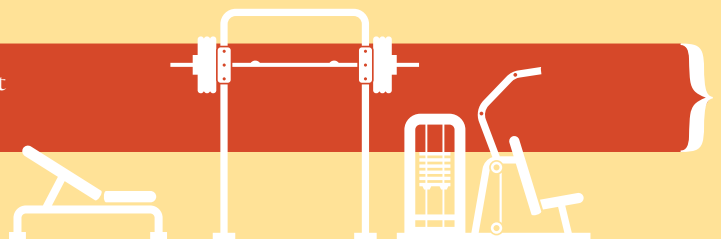
### How does "exercise planning" benefit people who work out at RWJ Fitness & Wellness?

Members have access to a trainer during orientation. We can identify any movement patterns that could lead to knee, low back, neck or shoulder strain. We also ask about a person's fitness goals and preferences. Based on that information, we create a custom weekly exercise routine. So, for instance, on Mondays you might swim, and on Tuesdays you might take a group exercise class. We focus on achievable milestones, which helps people stay motivated. We also advise working out with a friend, which can make exercise fun and hold you accountable for sticking with your plan.



**PETER DEFranzo**

To learn more about the RWJ Fitness & Wellness Center, visit [www.rwjfitnesswellness.com/old-bridge](http://www.rwjfitnesswellness.com/old-bridge).





# HOW TO SAVE A LIFE

## IS IT A HEART ATTACK OR CARDIAC ARREST—AND WHAT SHOULD A BYSTANDER DO?

“Heart attack” and “cardiac arrest” may sound like similar conditions, but they’re not the same—and one is potentially much more life-threatening. “With a heart attack, an artery is clogged, and the majority of patients have 100 percent closure of an artery,” explains Jay H. Stone, MD, Director of the Cardiac Catheterization and Interventional Lab at Community Medical Center in Toms River and a member of the RWJBarnabas Health medical group. “In a cardiac arrest, the heart stops completely and no blood at all is circulating.” Death can be instantaneous.

The two things that determine survival, Dr. Stone explains, are the underlying pathology and the flow of blood to the brain. “If someone passes out in front of you, take action immediately,” he urges. “The patient can’t afford to lose the time that it may take for professional medical help to arrive.” Quick action can double or even triple a cardiac arrest victim’s chance for survival.



JAY H. STONE, MD

### GET IT CHECKED

Your heart doesn’t beat just for you. Get it checked. To make an appointment with one of New Jersey’s top cardiac specialists, call **888.724.7123** or visit [www.rwjbh.org/heart](http://www.rwjbh.org/heart).

### HEART ATTACK

#### WHAT IT IS

A circulation problem. Blood flow stops because of a blockage in an artery. The part of the heart muscle that is deprived of oxygen-rich blood begins to die.

#### SYMPTOMS

These may begin hours, days or weeks in advance.

- Chest pain or feeling of pressure in the chest, possibly spreading to arms, neck, jaw, back or stomach.
- Feeling sick, sweaty or short of breath.
- The person having a heart attack will usually remain conscious.

#### WHAT TO DO

If you are having these symptoms, don’t hesitate to contact your doctor or call 911. If someone you are with appears to be having a heart attack, call 911 immediately. Sit the person down and keep them calm while you wait for help.

### CARDIAC ARREST (CA)

#### WHAT IT IS

Usually, an electrical problem that causes the heart to stop pumping. CA can be triggered by a heart attack but can have other causes, such as an undiagnosed heart abnormality or cocaine or amphetamine use.

#### SYMPTOMS

- Possibly racing heart or dizziness, but CA may occur without warning.
- A person suffering CA will become unconscious and will not breathe normally, or breathe at all.

#### WHAT TO DO

- Immediately call 911, or have someone else make the call while you perform the steps below.
- If an AED (automated external defibrillator) is available, begin use, following the prompts.
- Do CPR (cardiopulmonary resuscitation). If you don’t know conventional CPR, do hands-only CPR (see below).

### HANDS-ONLY CPR

Hands-only CPR can be done successfully even by someone who’s not a professional. The idea is to push hard and fast in the center of the victim’s chest to the beat of a familiar song that has 100 to 120 beats per minute. Think of the song “Stayin’ Alive” by the Bee Gees to help keep compressions in a regular rhythm. If disco doesn’t do it for you, push along to one of these:

- “Crazy in Love” by Beyoncé
- “Hips Don’t Lie” by Shakira
- “I Walk the Line” by Johnny Cash





# TRAUMA WITHOUT DRAMA

TOP RWJBARNABAS HEALTH TRAUMA AND BURN CENTERS STAND AT THE READY TO DO WHAT'S NEEDED FOR THE MOST SEVERELY INJURED PATIENTS.

Paramedics are running through the Emergency Department (ED) entrance. Blood is all over. Doctors are shouting, “Get me a clamp—stat!”

And ... cut! End scene. That chaotic scenario, a staple of medical shows, happens on TV show sets but not in real life, trauma experts say.

“In a true trauma situation, we have quiet, controlled conditions,” says critical

care surgeon Rajan Gupta, MD, Director of the Level I Trauma Center and Pediatric Trauma Center at Robert Wood Johnson University Hospital (RWJUH) in New Brunswick. “The more we mitigate chaos, the safer the environment, and the better the patient will do.”

Another common misconception, says Dr. Gupta, is that trauma treatment ends after the critical first 30 to 60 minutes of care. “In fact, our system spans the entire gamut of care—emergency services, acute care centers, rehab facilities, radiology, blood banks, clinical labs, data registry and more,” explains Dr. Gupta. “A trauma

center’s job is to bring all these aspects together to help prioritize decisions and get the best possible long-term outcome for the patient.”

Together, experts at the Trauma Center at RWJUH, the Level II Trauma Center at Jersey City Medical Center (JCMC) and The Burn Center at Saint Barnabas Medical Center (SBMC) in Livingston—each an RWJBarnabas Health facility—provide a critical safety net for thousands of New Jersey residents.

## TRAUMA OR ED?

Hospital EDs take care of emergencies, of course, like heart attacks and breathing problems. EDs also deal with a broad range of noncritical conditions, such as the flu or broken bones.

A trauma center, however, has a larger scope than an ED. First responders or ED



RAJAN GUPTA, MD



MICHAEL MARANO, MD



BRUNO MOLINO, MD



From left, flight paramedic Michael Brown, FP-C; flight nurse Robert Maiullo, CFRN; and lead pilot Joe Gilbert with the RWJBarnabas Health Airbus 135 helicopter.



physicians make the decision as to whether a patient needs the services of a trauma center.

“A trauma center is designed to immediately treat critically injured patients who have life- or limb-threatening injuries,” explains acute care surgeon Bruno Molino, MD, Trauma Director at JCMC and a member of RWJBarnabas Health medical group. “When seconds count to make the difference between life and death, a whole team is waiting around a stretcher even before the patient arrives.

“To be certified as a trauma center, a facility must have extensive resources available to care for severely injured patients at all times,” says Dr. Molino. “Neurosurgery, maxillofacial surgery, orthopedic surgery, cardiac surgery—all these specialties and more have to be there at our disposal.”

The most common types of injuries seen in trauma centers come from three

situations: falls by elderly people, blunt-force assault or penetrating wounds (such as gunshots), and motor-vehicle crashes, says Dr. Gupta. “Our cars are getting much safer, so traumatic injuries from crashes are decreasing,” he explains. “Meanwhile, for the elderly, even a minor fall can result in devastating injuries. As the population ages, this has become an ever-growing issue for health systems.”

Trauma centers also routinely drill to be prepared for mass casualties in a disaster situation. This training includes close coordination with other trauma centers in case backup is needed. There are 10 state-certified trauma centers in New Jersey.

### HELP FOR SEVERE BURNS

Trauma centers across the state coordinate closely with The Burn Center at SBMC, New Jersey’s only state-certified burn-treatment facility. In addition to burns from home accidents, industrial incidents and motor-vehicle crashes, one of the most common injuries the center sees—up to 30 percent of cases—is scalding in children under age 2 who have been splashed accidentally by a hot liquid.

Specialists including burn technicians, nurses and respiratory therapists, as well as the most advanced technology, are available at the center at all times. “If someone comes in with a surface burn, for example, we’re able to immediately treat them with hydrotherapy—water piped through special spigots that removes dead skin and bacteria to minimize the chance of infection,” explains Michael Marano, MD, Medical Director of The Burn Center.

The center has 12 intensive care beds for the most critically injured patients and an 18-bed recovery unit. It also runs The Outpatient Center for Wound and Burn Healing, which works with more than 4,500 patients each year.

### AN OUNCE OF PREVENTION

In the hope of minimizing the need for their services, the trauma and burn centers put considerable resources into community education, covering the age spectrum from infants and car seats to geriatric fall prevention, as well as pedestrian safety,



## THE NEED FOR SPEED

“In trauma care, timing is everything,” says Jim Smith, Vice President, Mobile Health Services and Patient Transport at RWJBarnabas Health (RWJBH). “The gold standard is to have no more than 60 minutes from the time a patient has a traumatic emergency to the time he or she is in the OR.”

Depending on location and time of day, a trip that takes 45 minutes by road could be done by helicopter in 20 minutes. That’s why RWJBH has partnered with Med-Trans aviation to provide a state-of-the-art Airbus 135 helicopter and two dispatch centers for live satellite tracking. Known as LifeFlight, the service includes on-scene and in-air emergency treatment and transportation to the closest appropriate state-certified trauma center. The crew includes RWJBH Emergency Medical Services flight nurses and paramedics who have had extensive training in emergency, air medical and trauma protocols.

In addition to providing time-critical transportation from emergency events, the LifeFlight system transports patients as needed among RWJBH’s 11 hospitals (and other health systems as appropriate). “The service assists with continuity of care within the same network,” Smith says. “And although it can seem dramatic and scary for patients to hear they are being transported by helicopter, sometimes the issue is not so much medical acuity as it is timing and traffic.”

In either case, he says, “It’s important for New Jersey residents to know that, barring any weather issues, air medical services in the state are robust and coordinate closely with ground providers. Very few states have the availability of resources and capabilities that we do.”

bicycle safety, sports safety, yard-work safety and distracted driving education. “I tell my Injury Prevention Coordinator that it’s her job to put me out of business,” says Dr. Gupta.

Inevitably, accidents will happen. When they do, New Jersey residents are in the fortunate position of having a nearby trauma center ready and able to serve.

To learn more about safety education and training at RWJBarnabas Health hospitals, visit [www.rwjbh.org/cpr](http://www.rwjbh.org/cpr).



# MAKING MATERNITY SAFER

## A FOCUS ON WOMEN'S HEALTH BEFORE, DURING AND AFTER PREGNANCY AIMS TO SAVE LIVES.

"I don't feel well," said Tara Hansen, 29, of Wanamassa, shortly after giving birth to her son in 2011. But her healthcare providers considered her a healthy postpartum patient, and sent her home. Six days later, she died from an infection that occurred during the birth.

Pregnancy-related deaths are relatively rare—about 700 occur each year in the U.S.—but are on the rise. So is the rate of delivery-related "severe maternal morbidity," which is defined as significant short- or long-term effects to a woman's health.

"In New Jersey, healthcare systems, community-based organizations and government agencies are tackling this issue head-on," says Suzanne Sernal, Vice President of Women's Services

for RWJBarnabas Health (RWJBH). "We're collectively looking at the entire continuum of healthcare to see what women want and need to be healthy before, during and after pregnancy."

### EMPOWERING WOMEN

Providing education is a priority. "The majority of maternal adverse events don't happen on the day a woman gives birth," Sernal says. "They occur in the days and weeks that follow the birth, when mom is back at home and the warning signs of a serious complication may not be immediately recognized."

To increase awareness, Tara's husband, Ryan, partnered with Rutgers Robert Wood Johnson Medical School and Robert Wood Johnson University Hospital, an RWJBH facility, to create the Tara Hansen Foundation's "Stop. Look. Listen!" program. This initiative empowers women to voice any concerns they have and reminds providers to pay close attention, rather than assuming a symptom is a typical complaint of pregnancy or the postpartum period. The program has been embraced by facilities throughout RWJBH.

### ALERT IN THE ED

RWJBH Emergency Departments (EDs) have created a system to ensure that any woman coming to an ED who has given birth within the previous 42 days is identified, and a note made in her electronic health record. "Care management for certain conditions can be quite different for a woman who has recently given birth compared to a woman in the general population," Sernal says. "This alert system quickly identifies postpartum women and when minutes matter it can save lives."

Other aspects of RWJBH's comprehensive approach to maternal health include:

**Promoting equality in healthcare** to improve pregnancy outcomes. "Our hospitals are exploring the specific needs and challenges of women in their unique communities," Sernal says.

**Providing reproductive planning** so women, particularly those with medical conditions, can plan safer pregnancies.

**Co-designing initiatives with community groups** that address issues such as housing, domestic violence, obesity, diabetes and substance abuse, all of which can negatively affect pregnancy outcomes.

**Focusing on maternal mental health.** Monmouth Medical Center, an RWJBH facility, has the state's only perinatal mood and anxiety disorder program.

**Participating in Maternal Health Awareness Day**, this year on January 23.

"This is new attention to maternity care that is so long overdue," Sernal says. "Healthcare providers, policy advocates, women's advocates—together, we're really going to change the landscape over the next few years."



To find world-class maternity care near you, call 888.724.7123 or visit [www.rwjbh.org/maternity](http://www.rwjbh.org/maternity).





# LEARNING TO CRAWL AGAIN

**A BABY REBOUNDS FROM A TRAUMATIC BRAIN INJURY WITH THE HELP OF CHILDREN'S SPECIALIZED HOSPITAL.**

**O**n the afternoon of January 8, 2019, Olivia Lopes got a frightening phone call: Her mother, nephew and 7-month-old son had been in an accident. While the three were walking home from her nephew's school, a vehicle had jumped the curb and struck them from behind.

Olivia's mother and nephew suffered multiple fractures. Infant LJ, who had been in his car seat in a wagon being pulled by his grandmother, suffered the most extensive injuries as the car seat became dislodged and soared 70 feet away. "When we finally got in to see LJ, he was on life support," Olivia recalls. "He had multiple skull fractures, orbital fractures, severe brain trauma and a broken leg, and was having difficulty moving his right arm."

LJ spent 21 days in a Pediatric Intensive Care Unit before being transferred to the Brain Injury Program at Children's Specialized Hospital



**Children's Specialized Hospital®**  
An RWJBarnabas Health facility

(CSH) in New Brunswick. There, a team of specialists developed a customized rehabilitation program to address his medical, physical, cognitive and psychosocial needs.

Within a week, however, his family and team realized something wasn't right with LJ. He was transferred to the Emergency Department at Robert Wood Johnson University Hospital in New Brunswick, where a CAT scan led to a diagnosis of hydrocephalus. With this condition, excess cerebrospinal fluid builds up in the ventricles (cavities) of the brain and increases pressure within the head, causing head enlargement, headaches, impaired vision, cognitive difficulties and loss of coordination. A shunt was surgically inserted into a ventricle to drain the excess fluid.

From left to right, LJ Lopes in the playroom at Children's Specialized Hospital; snuggling with his cousin Auggie; getting a boost from visiting Rutgers University football players.

## SKILLS REGAINED

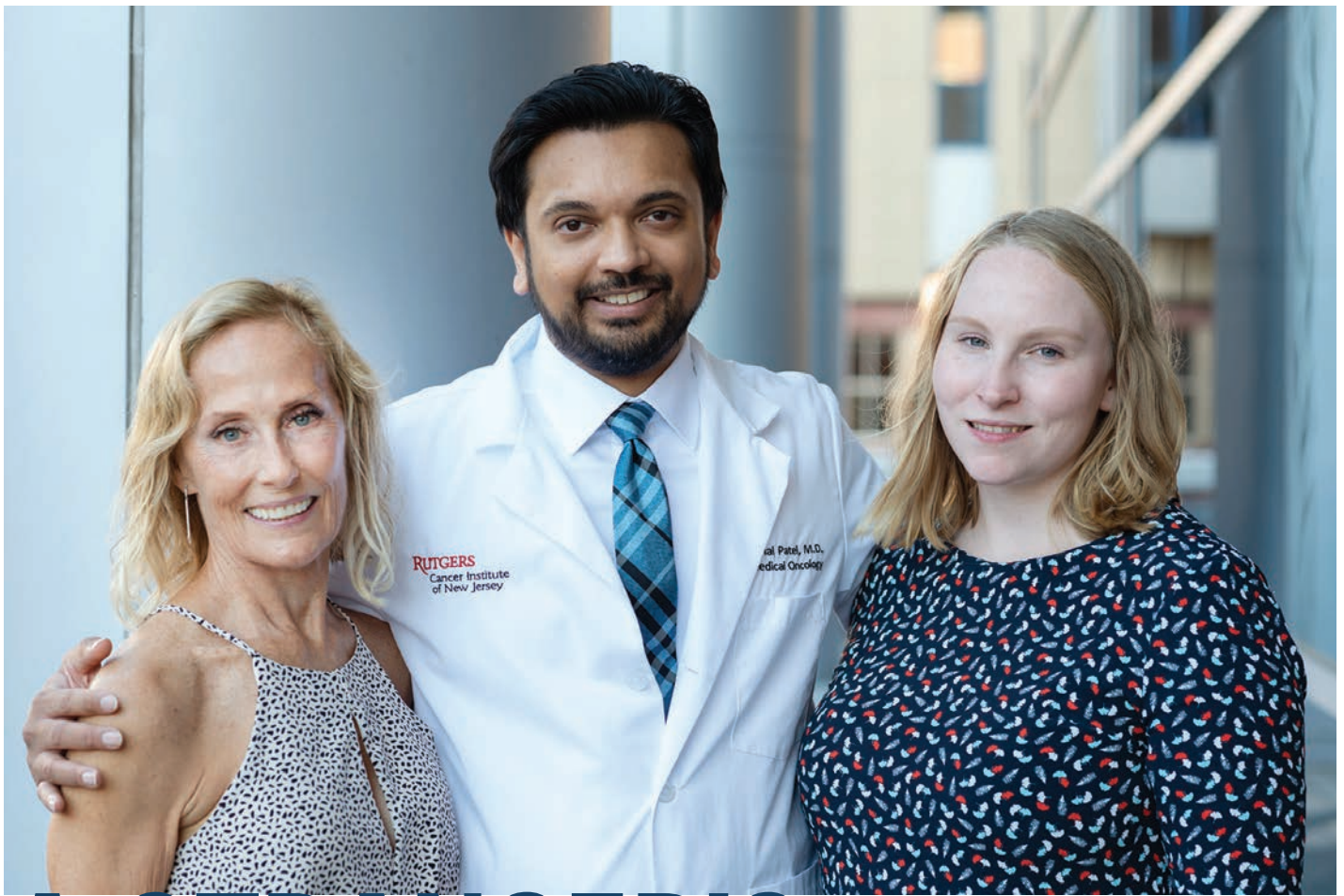
LJ returned to CSH on February 11 to continue his rehabilitation journey. He quickly bonded with his inpatient team, particularly enjoying aquatic therapy. "Once they got LJ into the pool, there was no stopping him," says Olivia. "He loved it, and the resistance of the water forced him to start using his right arm more."

LJ spent another two months at Children's Specialized working with physical, occupational, speech-language and recreational therapists. "The progress he made at Children's Specialized was amazing," says Olivia. "After the accident, he lost all of his muscle memory. The team worked with him day in and day out, helping him to learn how to roll, crawl, stand and walk." LJ went home on April 8. He is now attending outpatient therapy sessions three days a week at the CSH location in Hamilton, working hard to build strength in his right arm and learn how to suck and swallow properly.

"We still keep in touch with the remarkable therapists and care team at Children's Specialized, updating them on LJ's progress," Olivia says. "We're forever grateful for the care that Children's Specialized provided to our son."

To learn more about Children's Specialized Hospital, call **888.244.5373** or visit **www.childrens-specialized.org**.

At Children's Specialized Hospital, we provide world-class care for children and young adults who face special health challenges across the state of New Jersey and beyond. Our locations in Bayonne, Clifton, East Brunswick, Egg Harbor Township, Hamilton, Jersey City, Mountainside, New Brunswick, Newark, Toms River and Warren treat everything from chronic illnesses and complex physical disabilities like brain and spinal cord injuries, to developmental and behavioral issues like autism and mental health.



# A STRANGER'S GIFT

**A BLOOD STEM CELL DONATION—  
AND A POWERFUL MEDICAL  
PARTNERSHIP—SAVE THE LIFE OF  
A TOMS RIVER WOMAN.**

It's a gorgeous day on the boardwalk in Bradley Beach and to look at the two smiling women, you would never guess that they had met in person for the very first time just three days before. They exhibit a strong physical and emotional connection—a bond worth life itself.

"I feel as if I'm with my daughter or my niece," Lael McGrath, 68, admits. She owes her life to Wiebke Rudolph, a 21-year-old recent college graduate from Kassel, Germany. Wiebke donated her stem cells anonymously to Lael after the retired second-grade teacher from Toms River was diagnosed with life-threatening acute myeloid leukemia in 2016. Both had looked forward to this meeting for more than two years.

"To have a donor and patient together like this is truly remarkable," says Vimal Patel, MD, a hematologist/oncologist in the Blood and Marrow Transplant Program at Rutgers Cancer Institute of New Jersey and Robert Wood Johnson University Hospital (RWJUH) New Brunswick. "This is the reason I went into my field: to see moments like this."

## **AN UNEXPECTED DIAGNOSIS**

In August 2016, Lael was not well. She had been a runner for more than 40 years, but that summer she couldn't run more than a block without having to stop to walk. She had fevers, night sweats and a rash on her back. "A friend was diagnosed with Lyme disease and her symptoms sounded like mine, so I

made an appointment with an infectious disease specialist, and his phlebotomist took blood samples," she recalls.

Within 24 hours, the doctor called back to explain that he had sent the blood test results to a hematologist who wanted her in his office that day. "I think you have leukemia," the hematologist told her. "And I think you need to go to Rutgers Cancer Institute of New Jersey in New Brunswick. Today."

Lael's immune system was so suppressed that she was in a life-threatening situation. Within three days she would be admitted to RWJUH, where she would spend the next seven weeks undergoing chemotherapy. Dr. Patel has been by her side since then, along with a vast team of specialists from both





Opposite page, top, Lael and Wiebke with Vimal Patel, MD; this page, with members of the Blood and Marrow Transplant Program at Rutgers Cancer Institute and Robert Wood Johnson University Hospital.



**NOT ALL DONORS AND PATIENTS MEET. BUT THERE WAS NEVER ANY DOUBT FOR EITHER OF THESE TWO WOMEN. IN FACT, THE PAIR STARTED EMAILING, TEXTING AND THEN TALKING TO EACH OTHER ON FACETIME RIGHT AFTER BEING GIVEN EACH OTHER'S CONTACT INFORMATION.**

RWJUH and Rutgers Cancer Institute.

In the hospital, Lael's treatment involved the use of combination chemotherapy designed to get her into remission. "However, the specific mutations that we identified in her leukemia were high-risk in nature, so we knew that chemotherapy alone would not keep her in remission," says Dr. Patel. "We needed immune therapy in the form of an allogeneic stem cell transplant."

### SEARCHING FOR A DONOR

In a bone marrow transplant, cells can be used from your own body, known as an *autologous* transplant. When cells are taken from a donor, the transplant is called *allogeneic*. "In this procedure, the patient's diseased marrow is replaced with a donor's blood stem cells," says Dr. Patel. "It allows for normal blood formation and provides a new immune system to help eliminate the leukemia. It also has the potential for a cure."

At RWJUH, bone marrow transplant coordinator Mary Kate McGrath, MSN, RN, APN, BMTCN, OCN (no relation to Lael), ran the results of Lael's DNA testing through the National Marrow Donor Program (NMDP) registry. "Within two months of Lael's diagnosis, we identified three potential matches on the registry—but Wiebke turned out to be the perfect match," she explains.

Four thousand miles away in Germany, Wiebke was notified that she matched a patient in dire need. "Not that many people in Germany do this and certainly no one in my family or among my friends," she says. "But when I first heard about this, I said yes, I'm going to do it. I was determined."

Wiebke underwent peripheral blood stem cell donation, a procedure called *apheresis*, in which blood is removed through a needle in one arm and passed through a machine that collects only blood-forming cells. (The remaining blood is returned to the donor through a needle in the other arm.) The procedure took six hours. All the logistics of harvesting Wiebke's stem cells and then transporting them to the U.S. were handled by NMDP. Meanwhile, Lael's repeat blood transfusions were made possible by the RWJUH Blood Services team.

Lael spent weeks in the hospital during the fall and winter of 2016, waiting for the transplant and being closely monitored by her healthcare team.

Finally, in December 2016, she was notified that her transplant was imminent. "On December 16th, it happened," she recalls. "A team walked in carrying a small cooler and within an hour, the transfusion was over. All I actually knew was that the donor

was female and 19 years old."

Lael did so well post-transplant that she was able to go home on New Year's Day 2017. Over in Germany, Wiebke was told that the transplant had gone well.

Protocol and confidentiality policies don't permit donors and patients to have direct contact with each other until at least one year has passed. In this case, the wait lasted more than two years, until test results showed that Lael's blood cells were 100 percent "donor."

Not all donors and patients meet. But there was never any doubt for either of these two women. In fact, the pair started emailing, texting and then talking to each other on FaceTime right after being given each other's contact information.

Recently, at a celebration hosted by RWJUH, both women held bouquets of flowers and stood happily alongside one another. "If it weren't for Wiebke, I don't know what would have happened," Lael says.

With the breeze blowing off the Atlantic Ocean, these two women look knowingly at one another, smile and agree, "It was a miracle."

✱

**RWJBarnabas Health and Robert Wood Johnson University Hospital, in partnership with Rutgers Cancer Institute of New Jersey—the state's only NCI-Designated Comprehensive Cancer Center—provide close-to-home access to the most advanced treatment options. Call 844.CANCERNJ or visit [www.rwjbh.org/beatcancer](http://www.rwjbh.org/beatcancer).**



sunlight tends to boost serotonin. A lack of light causes the brain to release less serotonin, which can lead to depression.

“We’re not sure what makes some people vulnerable to SAD while others aren’t greatly affected by less exposure to sunlight,” says Dr. Kaplan. “The theory is that people with SAD may have some form of imbalance in the regulation of these two hormones. Genetic factors may play a role in this.”

### WHAT TO DO

“If you think you may have SAD, consult with a professional to determine whether your condition relates to that or to something else,” advises Dr. Kaplan. “Depression can be due to many different things, so it’s better not to self-

diagnose and possibly waste time on the wrong treatments.”

Having a healthy diet and regular exercise have been shown to improve symptoms of depression. Other possible treatments for SAD include:

**Light therapy.** The patient sits or works near a device called a light therapy box, which gives off a bright light that mimics natural outdoor light. “For some people, this treatment is very effective, but it’s best to consult your physician about the type of device to use,” says Dr. Kaplan.

**Cognitive behavioral therapy.** This kind of psychotherapy, or “talk therapy,” focuses on changing inaccurate or negative thinking in order to create new behaviors.

**Antidepressant medication.** “Generally speaking, antidepressants don’t start working for four to six weeks,” says Dr. Kaplan. “If your depression is seasonal, you may choose to take them for several months and then go off them when winter is over, or continue to take them for the rest of the year to prevent the reappearance of depression. It’s the combined job of the doctor and patient to decide the best course.”

# YOU CAN BEAT THE WINTER BLUES

**SEASONAL DEPRESSION IS A STRUGGLE, BUT HELP IS AVAILABLE.**

In winter, the short hours of daylight can lead to dark moods. It’s a common syndrome—thought to affect up to 10 million people in the U.S.—known as Seasonal Affective Disorder, or SAD.

“SAD is a kind of depression that happens at a specific time of year, usually in the winter,” explains

psychiatrist Gabriel Kaplan, MD, Chief Medical Officer of the RWJBarnabas Health Behavioral Health Network.

Symptoms of SAD are similar to those of clinical depression, such

as feelings of hopelessness, anxiety and problems with appetite. “A couple of symptoms seem to be more common with SAD, however,” says Dr. Kaplan. “People with SAD often crave sweets more, and are more tired and sleep more.”

As with regular depression, there is help for those who suffer from SAD.

### WHY WINTER?

While the exact cause of SAD is unknown, two hormones are implicated: melatonin, the hormone that regulates sleep, and serotonin, a key hormone for mood stabilization. “Melatonin tends to be produced when there’s no sunlight,” explains Dr. Kaplan. “More melatonin means people feel sleepier.” Conversely,



GABRIEL KAPLAN, MD

To learn about options for getting help for depression, call the RWJBarnabas Health Behavioral Health Network Access line at **800.300.0628**.







# VOLUNTEER EXTRAORDINAIRE

**IN MEMORY OF ONE WOMAN'S KINDNESS, GENEROSITY  
AND INDOMITABLE SPIRIT.**

For 19 years, Barbara Wadsworth was a fixture at the Robert Wood Johnson University Hospital (RWJUH) gift shop. Every Wednesday, she came to the shop to serve as a cashier, price items and help with the shop's inventory. She left a favorable impression on every person she met. "She loved interacting with people," recalls Tammy Pfeifle, Director of Volunteer Services at RWJUH. "People came to the gift shop on Wednesdays just to see her. They wanted to talk with her." Sadly, Barbara passed away on October 7—just a few weeks after the hospital threw her an unforgettable surprise 100th birthday party.

## "KEEP MOVING"

Few people realized Barbara's age because she was so independent. She cut her own grass, cooked, cleaned, opened and closed her pool, and shoveled snow. A former physical education professor and instructor at Syracuse University and Rutgers University's Douglass College, Barbara was passionate about sports. She had season tickets to the Rutgers women's basketball

games and attended all of them. She also went to the U.S. Open with friends every year. "Her motto was, 'Keep moving,'" says Theresa Allen, manager of the gift shop. "When you think you can't do something, keep going."

Not only was Barbara active, but she was also a dedicated volunteer. "She never missed a week at the gift shop, and if I had a lot of inventory to sort through, she would volunteer to come in and help out an extra day," recalls Allen. "I would say, 'You can go home now,' but she would stay." She was no-nonsense and direct, and she had a great sense of humor, says Allen. "When she saw me, she would joke, 'Here comes the helicopter,'" says Allen. "I miss her terribly. My Wednesdays are not the same."

On September 20, a birthday celebration was held in Barbara's honor in the hospital's atrium. It was a surprise party, and about 60 people—including

RWJUH volunteer Barbara Wadsworth at her 100th birthday celebration in September. Clockwise, from left: Barbara with members of the Rutgers women's basketball team, who gave her a special jersey in honor of her 100th birthday; with the RWJUH leadership team; and with Theresa Allen, manager of the gift shop, where Barbara volunteered.

hospital staff members, gift shop volunteers, friends and her nephew—attended. "She was thrilled," says Pfeifle. People at the hospital spoke about how important she was, and she was presented with gifts, including coins from her birth year (1919) and 2019 (she was an avid coin collector). Perhaps the most poignant moment was when the Rutgers women's basketball team arrived and presented her with a jersey signed by the team with "100" on it. "She put it on and never took it off," recalls Allen. The team also announced that they wanted her to be an honorary coach at every game.

Barbara was a role model, says Allen. "I always told her, 'When I finish growing up, I want to be just like you.'" Indeed, hospital staff members couldn't help but adore her, says Pfeifle. "We're grateful that we had the benefit of her service, wisdom and personality for almost two decades," she says.

To learn about volunteering at Robert Wood Johnson University Hospital, visit [www.rwjbh.org/volunteer-opportunities-at-rwjuh](http://www.rwjbh.org/volunteer-opportunities-at-rwjuh).





# INTENSIVE CARE ON WHEELS

**TWO CUSTOM AMBULANCES PROVIDE  
SPECIALIZED TREATMENT AND COMFORT  
FOR CRITICALLY ILL CHILDREN.**



It's around midnight on a weeknight as an ambulance decorated with pictures of smiling dogs and children pulls up to a New Jersey hospital. Within minutes, a wailing toddler is transported out of the hospital on a stretcher and placed in the ambulance, her worried mother trailing behind her. An Emergency Medical Technician (EMT) gently touches her shoulder. "Mom, I think it would be better if you sat up front—we've found that children this age tend to get more upset if their parents are with them in the back," he explains. When the mother hesitates, he leads her toward the back of the ambulance, where the sounds of Elmo singing can be heard. "See, she's not even crying—we have the TV on and she's focused on Elmo," he reassures her. The mother smiles and nods, and the rest of the team—composed of a Registered Nurse, respiratory therapist and physician—climb into the ambulance. The team embarks on their journey to Bristol-Myers Squibb Children's Hospital (BMSCH) at Robert Wood Johnson University Hospital (RWJUH), where the toddler will be treated by the pediatric specialty team.

### EASING THE FEARS OF ILL CHILDREN

While being transported in an ambulance to the hospital is scary for anyone, it's especially frightening for children. But over the last 10 years, BMSCH at RWJUH has made pediatric patients less anxious with customized pediatric transport ambulances. Every year, more than 1,000 critically ill children, from newborn to age 21, are transferred from hospitals around the state to BMSCH. Patients range from medically fragile newborns who require immediate, lifesaving surgery and tots nursing a broken bone after a bad tumble to high school students with medical emergencies.

There are two fully equipped pediatric/neonatal transport ambulances, one of which was replaced by a brand-new model in 2019. "The team is in house 24/7, ready at all times of the day or night, to transport critically ill pediatric patients," says Sherry L. Calvert, BSN, CCRN, Pediatric Transport Program Manager at BMSCH. The team of physicians, nurses, respiratory therapists and EMTs that



staff the vehicles work throughout BMSCH. "Some of the team members have worked at BMSCH for well over a decade," says Calvert. "They are compassionate and highly trained in the care of critically ill pediatric patients. They listen to what parents have to say, realizing that parents know their child best. It's all about making the experience less stressful for the entire family."

The newest ambulance was funded by proceeds from the RWJUH Annual Golf Outing, which was held at Metedeconk National Golf Club in June 2018. The vehicles feature child-friendly designs, such as butterflies, pets and people, as well as a DVD player so kids can watch their favorite videos. Each vehicle offers pediatric patients access to the capabilities and technologies you'd find in a Pediatric ICU setting—advanced oxygen and air delivery systems, cardiac monitors and defibrillators, ventilators, intravenous catheters, child-sized blood pressure cuffs, syringe pumps that deliver pediatric dosages, specialized equipment for premature infants and a neonatal transport isolette that has been mounted to a stretcher. Each vehicle's stretcher is equipped with a portable 5-point harness restraint system that serves small patients for safe transport. There's also a large cab so a parent can ride to the hospital with his or her child.

### LIFESAVING CARE

The ambulance travels around the state daily picking up kids from local hospitals that don't have pediatric specialty services to treat them. "Many hospitals don't have

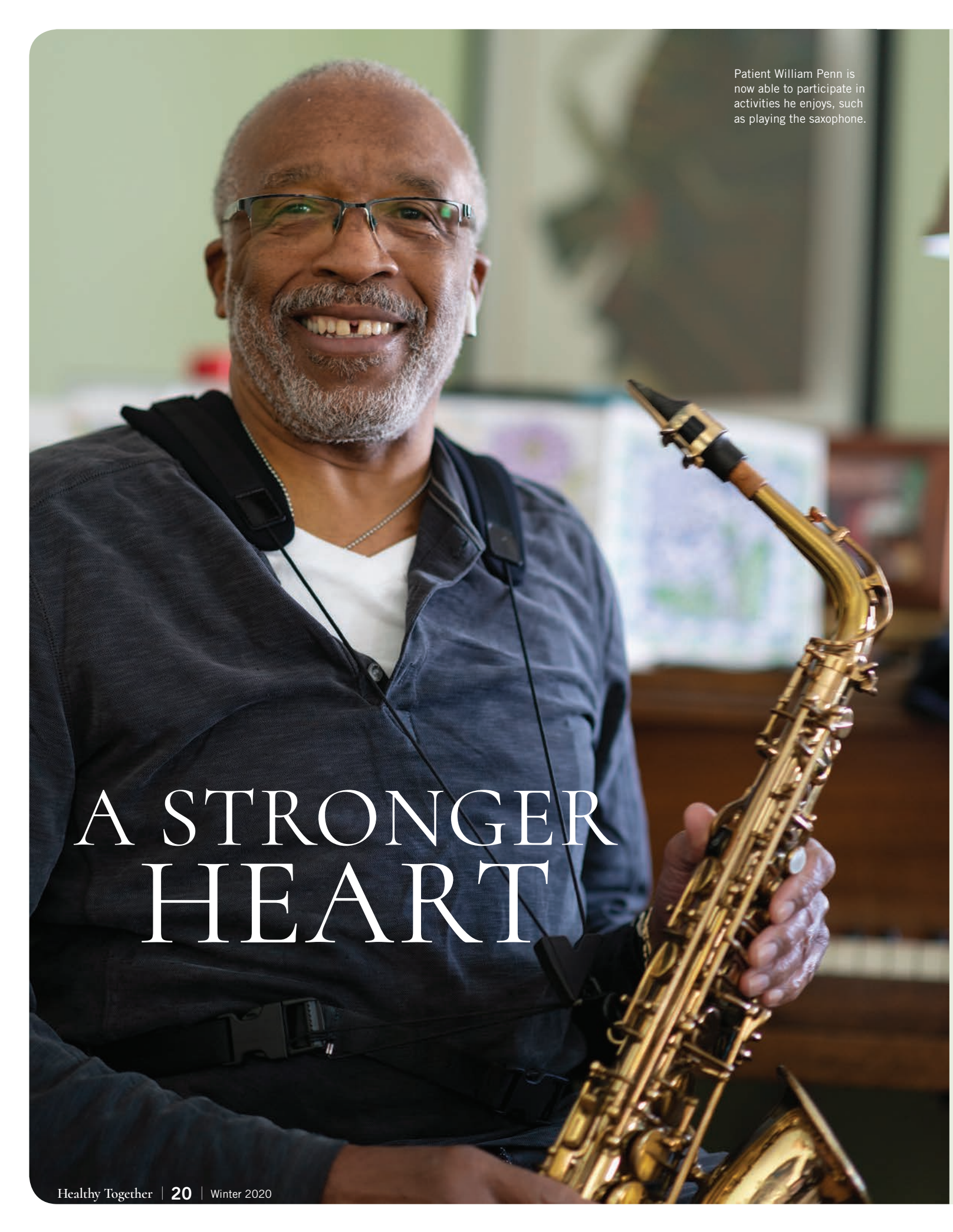
The ambulances feature child-friendly designs as well as equipment for treating pediatric patients, such as child-sized blood pressure cuffs and syringe pumps that deliver pediatric dosages.

pediatric orthopedists, for example, so if a child has a broken bone, the physician is not able to set it," says Calvert. One ambulance is usually on the road, while the other waits at the hospital for backup.

Calvert has ridden in the ambulance many times herself and has witnessed firsthand the benefits of the vehicle's specialized care. Two years ago, she was transporting a 16-year old boy who had an acute change in mental status and was diagnosed with an arteriovenous malformation (abnormal blood vessels) after he stumbled out of his high school locker room confused and disoriented. He required emergency surgery that was not available at the hospital he was taken to, so he was transferred to BMSCH. Many weeks later, Calvert assisted in his transfer to Children's Specialized Hospital for rehabilitation. "I recently saw him walking into the hospital with his father for a follow-up appointment, and it brought tears to my eyes to see how far he had come," she recalls. "It's incredible to know that the care we provided may have meant the difference between life and death for him."



The 2020 Annual Golf Outing will be held on June 16 at Montclair Golf Club in West Orange. For more information or to support programs at Robert Wood Johnson University Hospital and The Bristol-Myers Squibb Children's Hospital, visit [www.rwjhgiving.org](http://www.rwjhgiving.org) or call **732.937.8750**.



Patient William Penn is now able to participate in activities he enjoys, such as playing the saxophone.

# A STRONGER HEART



## THANKS TO A SPECIAL DEVICE, A PATIENT WITH HEART FAILURE IS NEARLY WELL ENOUGH FOR A TRANSPLANT.

Nearly a decade ago, William Penn, a Somerville teacher's aide, began to tire easily. Eventually, he was unable to climb a single flight of steps without becoming winded. A trip to a cardiologist revealed that William had dilated cardiomyopathy (a weak heart). He was given oral medications and received an implantable cardioverter defibrillator (ICD), a small device that monitors heart rhythm and delivers lifesaving shocks if needed.

By 2018, the oral medications weren't working and William wasn't feeling well. "I didn't have the energy to do anything," he says. "One day, I went outside to clean the snow off my car and was too tired to go to work afterward."

### A LIFESAVING TREATMENT

William's exhaustion continued to worsen. One day in November 2018, he woke up and felt like "a limp dishrag." He decided to check himself into Robert Wood Johnson University Hospital Somerset. His blood pressure was dangerously low, and his kidney and liver function had deteriorated due to a lack of blood supply. He was in cardiogenic shock. William was transferred to Robert Wood Johnson University Hospital, where he was evaluated by the Advanced Heart Failure, VAD and Transplant team. A temporary Ventricular Assist Device (VAD) was implanted through an artery in William's upper chest. This would pump blood from William's failing heart to the aorta, the main artery that carries blood to the rest of the body. The hope was that by improving the blood supply to William's organs, they would recover.

A little more than a week later, William's kidney and liver function improved enough for the surgeon to implant the HeartMate3 Durable Left



Patient William Penn with Deepa Iyer, MD, Medical Director of the Advanced Heart Failure, VAD and Heart Transplant program, left, and the healthcare team.

Ventricular Assist Device (LVAD), a mechanical pump that helps the heart pump blood from the left ventricle, the large, muscular chamber of the heart, to the aorta—the body's main artery—and the rest of the body.

After the procedure, William's strength gradually returned, and he was able to go home with the device. He had physical therapy at home, then at a rehabilitation center, to improve his strength. Today, he follows up regularly with Deepa Iyer, MD, Medical Director of the Advanced Heart Failure, VAD and Heart Transplant program, along with her team. "This was a big change in my lifestyle," he says. "But it's a small price to pay to be alive."

"It truly takes a village to care for these very sick patients," says Dr. Iyer. "We have a team of passionate, experienced and dedicated physicians, surgeons, nurse practitioners, nurse coordinators, medical assistants and pharmacists, as well as a financial advisor, social worker and dietitian, who work very closely with the patient and

his or her caregivers to provide medical, financial and social support. There is nothing more rewarding than to see a patient go from being very sick and short of breath to being able to enjoy his or her life."

### CARE WITH HEART

William has done so well and the device has improved his health so dramatically that he is now awaiting a heart transplant. William is thrilled with this news—and with his care. "I've been in a lot of hospitals, and the staff at RWJUH is amazing," he says. "They really care, and it shows." William was especially touched by the parting gift he received from the nurses. "They give you a little heart pillow after the surgery," he says. "If you cough, you're supposed to press it against your chest to dull the pain. When I was leaving, the nurses gave me a replica of the pillow with all of their signatures on it. I say that God saved me because there's something else I have to do. I don't know what that something is yet, but I'm excited about it."

Your heart doesn't beat just for you. Get it checked. To reach a Robert Wood Johnson University Hospital cardiac specialist, call **888.724.7123** or visit [www.rwjbh.org/heart](http://www.rwjbh.org/heart).





# BREATHE EASY

**AT RWJUH, SPECIALISTS USE MINIMALLY INVASIVE  
TECHNIQUES TO DIAGNOSE AND TREAT LUNG CONDITIONS.**



Lung conditions can be debilitating—and even deadly. Fortunately, a growing number of diagnostic techniques and treatments are helping to improve patients' quality of life and chances of survival. Robert Wood Johnson University Hospital (RWJUH) recently launched an Interventional Pulmonology Service. Interventional pulmonology is a relatively new area of medicine, in which physicians use minimally invasive procedures to care for patients with benign and malignant lung diseases. In many cases, patients can be diagnosed or treated on an outpatient basis, and they often recover faster and experience fewer side effects.

At RWJUH, interventional pulmonologists (IPs) commonly treat patients with lung cancer, interstitial lung disease (disorders that cause lung scarring and interfere with breathing), chronic cough and advanced Chronic Obstructive Pulmonary Disease (COPD). COPD encompasses progressive lung diseases, such as emphysema, chronic bronchitis and non-reversible asthma.

Three IPs collaborate with thoracic surgeons, medical, surgical and radiation oncologists, and traditional radiologists to provide the most advanced patient care. "We meet once a week to review cases and create individualized treatment plans," says Ilya Berim, MD, Director of the Interventional Pulmonology Service. Here, Dr. Berim describes some of the cutting-edge procedures his team is using to care for patients.

### NEW DIAGNOSTIC TESTS

• Patients with lung infections and interstitial lung disease often need lung biopsies, in which physicians remove small samples of tissue and analyze them. Traditionally, biopsies are performed surgically (incisions are made in the chest) and patients stay in the hospital for several days afterward. At RWJUH, Dr. Berim and his team are using a less invasive approach called bronchoscopic



ILYA BERIM, MD

cryobiopsy. They place a probe through a bronchoscope, a thin tube that's inserted in your nose or mouth and eased into your throat and lungs. The probe is cooled until it reaches a freezing temperature, and lung tissue sticks to the probe. "This allows us to obtain a large enough sample to make an accurate diagnosis without damaging the surrounding tissue," says Dr. Berim. Since the tissue is frozen, it's better preserved and it's easier for physicians to make a diagnosis. "There's no incision, and patients can go home the same day," says Dr. Berim. "Also, the risk of complications is lower because the chest doesn't need to be opened."

• There are many possible causes of chronic cough, such as acid reflux, asthma, COPD and a condition called excessive dynamic airway collapse, in which the airways collapse and touch. To determine with greater accuracy what's behind a cough, Dr. Berim's team uses a bronchoscope to examine a patient's airway while he or she is sedated. The team applies mild air pressure, known as continuous positive airway pressure, through a mask to check for possible airway collapse. If the airway is under too much pressure, a stent may be placed to keep it open and improve symptoms.

### CUTTING-EDGE TREATMENTS

• In patients with advanced COPD, the small airways in the lungs may collapse, which causes difficulty with exhalation. Traditionally, surgeons have performed lung volume reduction, in which they remove a portion of the lung that's not functioning properly. Performing such an invasive procedure in this patient population can lead to serious complications.

Dr. Berim and his team are using a novel, less invasive solution. They identify the airways that aren't functioning properly, then insert a special one-way valve. "This allows air to leave the lungs but not return," says Dr. Berim. "As a result, a portion of the lung

collapses." The benefit to patients? This minimally invasive procedure achieves the same result as the more invasive procedure but with fewer complications. "Patients can breathe better and walk faster," says Dr. Berim. The downside? The procedure is successful with a subset of patients. They must be evaluated with breathing tests, also known as pulmonary function tests, which can be performed at RWJUH's Pulmonary Function Test lab to ensure they are a good candidate.

• If an IP needs to visually examine your lungs, he or she will likely use a flexible bronchoscope, a thin tube with a camera that's placed in your airways. However, sometimes a metal version, called a rigid bronchoscope, is necessary to remove a foreign body, shrink a tumor and place or remove certain types of stents.

• In patients with pleural effusions—fluid that accumulates between the tissues that line the lungs and chest—physicians need to determine the cause of the condition and remove the excess fluid. (Pleural effusions can be caused by cancer, an infection or heart and/or kidney failure.) Dr. Berim and his team perform a procedure called medical thoracoscopy to diagnose and treat a patient with this condition. They are able to drain the fluid through a single incision, or port, rather than use the traditional approach of making multiple incisions. In addition, "We can obtain pleural tissue samples, remove the fluid and check the chest cavity for evidence of cancer that may have spread," he says. Another benefit: With this approach, patients can be given conscious sedation rather than general anesthesia and can be discharged from the hospital the same day.

Patients with a range of lung diseases will benefit from these minimally invasive procedures. "Our goals are to improve patients' access to high-quality healthcare and provide the most cutting-edge, evidence-based diagnostic and treatment options," says Dr. Berim.

For more information about the Interventional Pulmonology Service, please call 732.425.1555.



# Proton therapy. The next generation of cancer treatment.

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