

Let's Beat COVID-19

he development of COVID-19 vaccines is one of the greatest achievements in medical science. At RWJBarnabas Health, we're proud to be a key part of the effort to get the vaccine into the arms of all eligible people in New Jersey.

We also remain committed to fighting the spread of the disease. That's why we join with the Centers for Disease Control and Prevention in urging everyone, whether vaccinated or not, to continue with the simple precautions we know are effective in preventing the spread of the coronavirus:

- Wear a mask.
- Stay at least six feet apart from people who don't live with you and avoid crowds.
- Wash your hands thoroughly and often; use a hand sanitizer if soap and water aren't available.

The reason for this continued caution: In some cases, COVID-19 vaccines may protect against severe infection, but may not necessarily prevent mild or asymptomatic infection. If this is the case, an infected person could still spread the virus.

We are proud to be a part of the vaccination effort. Back in December, Robert Wood Johnson University Hospital was one of six hospitals in New Jersey to receive and administer the first doses of COVID-19 vaccine to our frontline healthcare heroes. Since then, we have administered thousands of doses at our vaccine clinic. We helped the state open the vaccine mega-site in Edison, which is now vaccinating thousands of Middlesex County residents weekly. Our commitment to this effort will extend for as long as it takes to end the pandemic.

It will take all of us working together as a community to minimize the ongoing effects of COVID-19. Together, we can protect friends, family and neighbors and end this pandemic. Yours in good health,

BARRY H. OSTROWSKY PRESIDENT AND CHIEF EXECUTIVE OFFICER RWJBARNABAS HEALTH



BILL ARNOLD INTERIM PRESIDENT AND CHIEF EXECUTIVE OFFICER ROBERT WOOD JOHNSON UNIVERSITY HOSPITAL



HEALTH NEWS

RECOGNITION FOR TOP-NOTCH **BARIATRIC SURGERY**

Robert Wood Johnson University Hospital (RWJUH) has been recognized by Healthgrades for having superior patient outcomes in bariatric surgery. It's among the top 5 percent in the nation for this procedure. The hospital is the only one in central and southern New Jersev to receive this distinction two years in a row.



A GENEROUS GIFT



In February, Spirit Halloween, the largest seasonal Halloween retailer, donated \$89.000 to support the Child Life Program at The Bristol-Myers Squibb Children's Hospital (BMSCH) at RWJUH. Over the years, the

program has donated nearly \$700,000 to BMSCH. The funding has enabled the Child Life Department to purchase muchneeded toys and supplies and hire a child-life specialist in BMSCH's pediatric surgical suite. It has also helped make the hospital's annual Halloween celebrations possible.

A BEST MATERNITY CARE HOSPITAL

RWJUH was named to Newsweek's 2021 list of Best Maternity Care Hospitals. The distinction recognizes hospitals that have provided exceptional care to mothers, newborns and their families, as verified by the 2020 Leapfrog Hospital Survey. RWJUH delivers more than 2,500 babies annually in its designated Regional Perinatal Center, which provides the highest level of maternal and neonatal care.



Robert Wood Johnson | RWJBarnabas **University Hospital**

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AS AVAILABILITY INCREASES, EXPERTS HAVE ONE STRONG MESSAGE FOR THE PUBLIC: GET THE SHOT.

t the outset, we knew we would be helping with the COVID-19 vaccination effort." says John Bonamo, MD, MS, Executive Vice President and Chief Medical and Quality Officer at RWJBarnabas Health (RWJBH). "But we weren't aware just how much the state would be relying on healthcare systems to make this happen."

Just as they did when the pandemic first hit, the experts at RWJBH rose to the challenge. "We opened our first vaccine clinic the week the vaccine came out in December," he recounts. "Then we opened clinics at each of our 11 acute care hospitals."

RWJBH is also administering the vaccine at the Middlesex County megasite in Edison, which it runs; the former Sears in the Livingston Mall; RWJBarnabas Health Arena in Toms River: Brookdale Community College in Monmouth

JOHN BONAMO, MD

County; and smaller clinics, including in Bayonne and in the Greenville section of Jersey City.

"We're also assisting municipal efforts in four counties—Ocean, Somerset, Essex

and Monmouth—by providing some or all vaccinators for their clinics," Dr. Bonamo says, "and we're partnering with the state, the National Guard and others. In addition, we've applied for more vaccination sites for physician offices."

As of mid-March, RWJBH had already vaccinated approximately 150,500 people and was vaccinating more at the rate of 2,000 a day at its hospitals and 4,000 a day at the Edison megasite. However, Dr. Bonamo says that number will increase significantly as vaccine availability does. "We're ramping up," he says. "We're in this to get it done."

By summer, Dr. Bonamo says, vaccine supplies will make it available to all who want it. The challenge will shift to making sure everyone who's eligible chooses to be vaccinated.

DISPELLING FEARS

"Many people started out with 'vaccine hesitancy'—they wanted to see how other people did with the vaccine first," says Dr. Bonamo. "As they saw others feeling good about having had the vaccine, they became more open to it." That led to the

clamor for vaccination appointments the state saw in the winter.

Vaccine hesitancy persists, however. "There's understandable mistrust, especially in the black community, born of all the social inequity and healthcare injustice that has happened over the years," he says. "We're working hard to dispel that with all kinds of outreach and town halls being done by healthcare professionals of color."

Older adults should prioritize getting the vaccine, Dr. Bonamo says. "The years they have are precious, and many seniors who got COVID-19 did not do well," he says. "Often, that's because they have at least one other comorbidity—diabetes, hypertension, heart disease, kidney disease, lung disease or obesity—that contributes to their risk."

Dr. Bonamo emphasizes that his message isn't just for certain groups, but for everybody who's eligible for the vaccine. "Get vaccinated," he says. "That's it. It's safe, it's smart, it's advanced science and it's the right thing to do to protect yourself and your family."

To learn more or to make a vaccination appointment, visit www.rwjbh.org/covid19.





Sabiha Hussain, MD, and her team at the Post-COVID Recovery Program Clinic at Robert Wood Johnson University Hospital



MOVING ON AFTER COVID-19

A NEW CLINIC IS HELPING PATIENTS WITH LONG-TERM SYMPTOMS MAKE A COMPLETE RECOVERY.

hen pulmonologist Sabiha Hussain, MD, first started seeing COVID-19 patients in March 2020, she knew there would be lasting effects. "I looked at their CT scans and saw bronchiectasis, damage to the lungs that makes it difficult to clear mucus," she says. "Pulmonary problems are important because they have a lasting impact on patients' health and can drain the healthcare system if they're not addressed."

Of the 600,000 and counting COVID-19 cases in New Jersey, about 10 percent of patients experience long-term health problems, says Dr. Hussain, Associate Professor of Medicine in the Division of Pulmonary and Critical Care at Rutgers Robert Wood Johnson Medical School and the Adult Cystic Fibrosis Program at Robert Wood Johnson University Hospital. Dr. Hussain wanted to create a multidisciplinary program that would address all of patients' healthcare needs-medical, social, nutritional and rehabilitative. In January, she launched the Post-COVID Recovery Program to care for patients who continue to experience symptoms of the illness four weeks after diagnosis.

A MULTIDISCIPLINARY APPROACH

After a patient makes an appointment, he or she completes a survey. Patients are asked to report their symptoms, such as shortness of breath, fatigue, anxiety and depression. They also are asked whether they have access to transportation and healthy foods and whether they can afford their prescriptions, says Dr. Hussain.

At the initial appointment, patients are assessed by a pulmonologist, nutritionist, physical therapist, mental

SABIHA HUSSAIN, MD

health provider, social worker, respiratory therapist and pharmacist. A breathing test is administered to check a person's lung function; a CT scan of the

chest is taken to view the condition of the lungs; and a musculoskeletal evaluation is performed to check for weakness and dizziness. A neurologist conducts a cognitive evaluation. "Fifteen to 20 percent of patients develop cognitive symptoms, and 30 to 40 percent have anxiety or depression," says Dr. Hussain.

The clinic not only assists patients with their medical problems but also their financial and legal needs. Legal services are available for patients who have housing challenges, and those who are experiencing financial problems can receive assistance from the clinic's pharmacist, says Dr. Hussain.

HOPE FOR PATIENTS

While rehabilitation specialists oversee many COVID-19 rehabilitation clinics, the program at RWJUH is managed by physicians. "It's rare for a COVID-19 recovery program to be run by physicians," says Dr. Hussain. "Ours is managed by internists, pulmonologists and critical care specialists." Dr. Hussain was chosen to oversee the clinic because of her expertise in cystic fibrosis, which requires a multidisciplinary approach to care, says Joshua M. Bershad, MD, Executive Vice President for Physician Services at RWIBarnabas Health. "She's experienced in treating chronic lung diseases and obtaining resources from many disciplines," he explains. The clinic will be partnering with the one at Saint Barnabas Medical Center, a sister hospital. The system is planning for a third site, says Dr. Bershad.

Dr. Hussain is thrilled about the program. "This clinic is a model for patient care for other conditions," she says. "Almost every disease must be approached in a multidisciplinary way." In the future, it's possible that multidisciplinary clinics will be developed to care for patients



ARE YOU ELIGIBLE FOR TREATMENT?

The Post-COVID Recovery Program Clinic is held every Monday from 8 a.m. to noon at the Clinical Academic Building, located at 125 Patterson Street in New Brunswick. Patients must meet the following criteria:

- Positive COVID-19 antibody test
- No longer infectious
- Symptoms must persist four weeks after diagnosis

with conditions like diabetes and hypertension, says Dr. Hussain. "Not only does the hospital care about patients' physical health; it also cares about their mental health and social well-being," says Dr. Hussain. This is good news for COVID-19 patients with long-term health problems, who often have "nowhere to turn," says Dr. Bershad. "The new clinic will provide hope," he says. "COVID-19 patients will now have a medical home. The clinic provides a compassionate and empathetic approach to care."

Clinic physicians will collect data on COVID-19 patients. It will be used to develop the most appropriate treatments for the disease. "We need to address the physiology of COVID-19," says Dr. Hussain. "We need effective medications. This program will show us how to really care for COVID-19 patients."

To learn more about the Post-COVID Recovery Program at Robert Wood Johnson University Hospital, call 732.235.6653.





A HIGH-TECH TREATMENT AND A DEDICATED TEAM HELPED A BABY RECOVER FROM A LIFE-THREATENING CONDITION.

hen Jeannette Wright was pregnant with her third child in 2019, she was devastated to learn that the baby had a congenital diaphragmatic hernia. With this condition, there's a hole in the diaphragm, the muscle that separates the chest from the abdomen. This birth defect, which can prevent the baby's lungs from developing completely, was discovered during Jeannette's routine 20-week ultrasound exam. It affects about 1 in 3,600 babies, according to the Centers for Disease Control and Prevention. "I joined a Facebook group of moms who have babies with the condition, and I saw that some didn't survive, while others were thriving," says Jeannette, who lives in Piscataway. Her older children are 7 and 5.

Doctors wouldn't know how severe the hernia was until the baby was born. Jeannette's obstetrician told her that she could terminate the pregnancy or the baby could have surgery in utero. She didn't like either option, so she decided to get a second opinion at The Bristol-Myers Squibb Children's Hospital (BMSCH) at Robert Wood Johnson University Hospital (RWJUH).

Jeannette discovered that BMSCH had just created an ECMO (extracorporeal membrane oxygenation) program. With ECMO, lung and heart function are taken over by a machine. "ECMO helps buy time for the lung vasculature to mature," says Yi-Horng Lee, MD, Chief of Pediatric Surgery at Robert Wood Johnson Medical School and Surgeon-in-Chief at BMSCH. About one-third of babies with congenital diaphragmatic hernias require ECMO, he adds. "When I met Dr. Lee, he



YI-HORNG LEE. MD

made me feel like my baby would have a chance," recalls Ieannette, who decided to see an obstetrician at RWIUH. "I trusted the team."

IT TAKES A VILLAGE

The maternal-fetal medicine team at the RWIUH maternity center monitored Jeannette throughout the remainder of her pregnancy. On September 24, 2019, Ayla was born. "I didn't know what to expect," recalls Jeannette. "I was so scared. I remember asking, 'Is she breathing?' They said, 'Don't worry. We're intubating her and taking her to the NICU."

It turned out that Avla's hernia was on the right side of her body, which usually has a worse outcome, says Dr. Lee. About 11 hours after her birth, doctors recommended that she go on ECMO. "Ayla was the first newborn to go on ECMO at BMSCH," says Dr. Lee.

Ayla was sedated so that the many tubes connecting her body to the machine wouldn't be disturbed. ECMO requires 24/7 monitoring by critical care nurses and a critical care physician. Surgeons must also be on call. Two coordinators—Dominick Carella and Tracy Low-have to keep an eye on the machine. "These two pediatric ECMO veteran nurses helped us set up the program and run frequent simulations to make sure our staff stays sharp," says Dr. Lee. "It took two years to train our staff in ECMO."

When Ayla was 10 days old, doctors performed the hernia repair surgery. A corner of the NICU was transformed into an operating room. Ayla was still on ECMO, and Jeannette began to worry whether Ayla could survive without the machine.

In the meantime, Jeannette's older children had just started school. She would drop them off at school, go straight to the hospital, then go



Ayla enjoys playing with her older siblings, Grayson, 7, and Sophia, 5.

home around dinnertime. After her children went to bed, she would return to the hospital and stay there until 2 a.m. For nine months, she spent every day at the hospital.

Around Halloween, Ayla wasn't doing well, and doctors met with Jeannette and her husband to discuss the possibility that she might not be able to come off the ECMO machine. Avla had a mind of her own, recalls Jennifer Owensby, MD, Medical Director of ECMO at BMSCH. "She didn't follow the textbook," says Dr. Owensby. "She didn't do well when we expected her to. But she always bounced back."

TURNING THE CORNER

To help Ayla breathe better, the doctors placed a tracheostomy tube in Ayla's neck and connected it to a ventilator. When she was three weeks old, doctors tried to take her off ECMO. They did it very slowly, in five- and 10-minute intervals. "We realized Ayla likes things slow, on her terms," says Jeannette. Finally, after 23 days, she was removed from the ECMO machine.

Ayla still had a long road ahead of her. She needed the ventilator to help her breathe, and she had pulmonary hypertension, in which there's high blood pressure in the lung arteries. "I celebrated the little things, like when she could drink a few milliliters of formula or open her eyes or move a finger," says Jeannette. "Only the nurses and doctors could understand." Eventually, Ayla was transferred to Children's Specialized Hospital (CSH), where she participated in physical and occupational therapies. She learned how to sit and roll over.

On June 29, 2020, Ayla finally came home. "I'm happy with the progress she's made," says Jeannette. "I'm so proud of her." Today, Ayla still has tracheostomy and feeding tubes, and she uses a ventilator at night. She sees her pulmonologist once a month and her cardiologist every six weeks, and she's participating in feeding therapy. Dr. Lee expects her to make a full recovery. "She's doing wonderfully," he says. "I'm very proud that our team came through for her."

Jeannette is grateful for the care Ayla received at BMSCH and CSH. "I have Dr. Lee's phone number on speed dial," she says. "And I keep in touch with the nurses, who came to Ayla's birthday party. They always went the extra mile to make us feel comfortable."

For more information about the ECMO program at The Bristol-Myers Squibb Children's Hospital at Robert Wood Johnson University Hospital, visit www.rwjbh.org/bmschecmo.





LIVING WELL DIABETES

AN INNOVATIVE PROGRAM IS PROVIDING **EDUCATION AND SUPPORT FOR LOCAL RESIDENTS** WITH THIS CHRONIC DISEASE.

iabetes has, unfortunately, become a fact of life for many area residents. To help them navigate this challenging chronic disease, Robert Wood Johnson University Hospital's Community Health Promotions Program (CHPP) offers the Latino Diabetes Wellness and Prevention Program. It is providing much-needed assistance to the community.

One aspect of the program, Project Inspire, focuses on youth. Participants learn about healthy eating and the importance of exercise. They also

learn to prepare healthy meals and snacks that can be suitable for a family member with diabetes.

Education for adults is also important. Over the course of two sessions, participants learn how to monitor their blood sugar, count carbohydrates and use diabetes medications effectively. A certified diabetes educator discusses medications.

The program also offers monthly support groups, known as Grupo Vida, where participants put into practice the lessons they learned in

learn which herbs are easy to grow at home and attend presentations about diabetes.* Children who participate in Project Inspire learn how to make meals and snacks with healthy ingredients. *NOTE: This photo was taken

Clockwise, from left: Participants

before mask and social distancing recommendations were in place.

the educational component of the program. There are eye screenings, cooking demonstrations and presentations on how to prevent diabetes-related complications. Members who have completed the educational component of the program are entitled to a voucher for a free membership at the RWJ Fitness & Wellness Center.

INFORMATIVE AND **SUPPORTIVE**

New events are constantly being created for participants. The group has done yoga sessions on a nearby beach and has learned how to grill healthfully in a park. "Participants love the group," says Leslie C. Malachi, CHPP nutritionist. "We try to do little things to keep them motivated. We recently created live videos at the grocery store to explain how to read food labels."

For more information about the Latino Diabetes Wellness and Prevention Program, call 732.257.2050.





BRIEF PERIODS OF INCREASED HEART RATE ARE COMMON AND HAVE A VARIETY OF CAUSES.

veryone experiences an increased heart rate at some point. You exercise, and your heart rate increases. You become frightened or stressed, and your heart beats faster. You might experience the increased heart rate as a skipped beat, a flutter or a pounding in your chest.

"A temporary increase in heart rate has many causes," says David Dobesh, MD, Chief of Cardiac Electrophysiology at Jersey City Medical Center and a member of RWJBarnabas Health Medical Group with offices in Jersey City and West Orange. "Emotional stress, physical stress, psychological stress, even things like caffeine, nicotine, too much alcohol or fever. Your body is performing a complex balancing act with your pulse."

A lesser-known but common source



DAVID DOBESH, MD

of increased heart rate is medication, including some kinds of over-thecounter medicines and certain prescriptions. "People should be aware that some medicines do

briefly increase your heart rate," says Dr. Dobesh, "and usually those episodes are not something you should be concerned about."

POSSIBLE CAUSES

Common medications that may increase heart rate for a short period of time include:

- Decongestants, specifically those that contain pseudoephedrine, a stimulant. "If the decongestant has a capital 'D' at the end of its name, it contains this ingredient," says Dr. Dobesh.
- Some inhalers for asthma, emphysema or COPD (chronic obstructive pulmonary disease).
- Theophylline, an oral asthma medication
- Medications for ADHD (attention deficit hyperactivity disorder).
- Diuretic medications (used to help prevent fluid retention) could result in dehydration, says Dr. Dobesh.
- Some blood pressure medications may inadvertently lower blood pressure

"If your pressure is very low from either dehydration or overmedication, the body will respond by increasing the heart rate to compensate," he explains.

WHAT IS **TACHYCARDIA?**

For most people, a heart rate between 60 and 100 beats per minute (bpm) is normal. When your heart beats more than 100 bpm for reasons unrelated to physiological stress, that's known as tachycardia, from the Greek words for "swift" and "heart."

If increased heart rate is a concern, basic testing, such as an electrocardiogram or blood work, can be done to determine whether you should be referred to an electrophysiologist—a cardiologist who specializes in heart rhythms. The electrophysiologist will look for possible types of tachycardia that are caused by an abnormality of the heart itself and can affect how well the heart pumps blood.

Examples include atrial fibrillation (AFib), atrial flutter and supraventricular tachycardia (SVT). A wide range of treatments may be considered, including lifestyle changes, medications and medical and surgical procedures.

"Some medications carry warning labels about increased heart rate but in practice this side effect is unusual," Dr. Dobesh says. "These include certain antidepressants and also thyroid medications, which will not usually increase heart rate if they're taken at the recommended dose."

Similarly, herbal supplements such as ginseng, valerian root and orange bitters should not increase heart rate when taken in normal doses, he says.

While a short-term increase in heart rate from medication or emotional or physical stress is normal, increased heart rate that lasts for a long time is not. "If you're repeatedly feeling symptoms of a racing heartbeat that make you uncomfortable, tell your doctor," advises Dr. Dobesh. "Further testing may be appropriate."

Whoever your heart beats for, our hearts beat for you. To connect with one of NJ's top cardiovascular specialists, call 888.724.7123 or visit www.rwjbh.org/heart.



EXPECT OUTSTANDING CANCER CARE

THE NCI COMPREHENSIVE CANCER CENTER DESIGNATION CARRIES A WORLD OF MEANING FOR PATIENTS AND FAMILIES.

he National Cancer Institute (NCI) Comprehensive Cancer Center designation is the highest credential a U.S. cancer center can attain. But what does it mean for a patient?

"For a cancer patient, the question of where to be treated can be terribly confusing. The NCI designation tells a layperson that the institution is among the top centers in the country for delivering cancer care and performing research," says Steven K. Libutti, MD, Senior Vice President, Oncology Services, for RWJBarnabas Health (RWJBH) and Director, Rutgers Cancer Institute of New Jersey—the state's only NCI-Designated Comprehensive Cancer Center.



STEVEN K. LIBUTTI, MD

Though Rutgers Cancer Institute is located in New Brunswick, the beneficial effects of its research, clinical trials and advanced treatments are felt throughout New Jersey thanks to its

unique partnership with RWJBH.

"The beauty of our partnership is that Rutgers Cancer Institute is fully integrated with each of the healthcare system's 11 hospitals," Dr. Libutti explains. "When a patient is being treated at any RWJBarnabas facility, he or she has an entryway to an NCI-Designated Comprehensive Cancer Center and will get the same level of care and access to advanced treatments and clinical trials."

PERSONALIZED CARE

For all their mastery of technology and treatments, the healthcare providers at RWJBH and Rutgers Cancer Institute never lose sight of the human element. "Our whole goal is to provide personalized care not only for the type of cancer you have, but for you as a

patient," says Dr. Libutti.

Nurse navigators "reduce the burden of diagnosis," he explains, by working with the patient throughout treatment, coordinating appointments and ensuring that specialists involved have the information they need. "We wrap the patient in a plan of care created just for him or her," Dr. Libutti says.

Patients who want to know more about their treatment options through RWJBH and Rutgers Cancer Institute can call the Oncology Access Center at 844.CANCERNJ (844.226.2376), where oncology specialists stand ready to help determine the next steps. "That number is our 'Easy Button,' our way to put you on the first step to a successful outcome," says Dr. Libutti. "We're only a phone call away."



A Cancer Center Designated by the

BADGE OF HONOR

A Comprehensive Cancer Center designation from the National Cancer Institute places an organization among the top tier of cancer institutions in the country. Rutgers Cancer Institute, together with RWJBarnabas Health, is the only Comprehensive Cancer Center in the state of New Jersey.



THE DESIGNATION MADE A DIFFERENCE

These survivors are among many who have had the benefit of cutting-edge research, clinical trials and care through the RWJBarnabas Health and Rutgers Cancer Institute partnership.



A RARE T-CELL LYMPHOMA

Ling Jin needed treatment for a rare and aggressive form of T-cell lymphoma, requiring high-dose chemotherapy and radiation treatments in preparation for an allogeneic stem cell transplantation, sometimes referred to as a bone marrow transplant. As she underwent chemotherapy, a lymphoma was discovered behind her eye, which was resolved through brief and highly targeted proton beam therapy.

After an extensive database search, an appropriate donor for bone marrow cells was found, and last June, Ling had a successful stem cell transplant at Rutgers Cancer Institute.



BREAST CANCER WHILE PREGNANT

Breast cancer survivor Liz Tague found out she was pregnant—and soon after, learned that her breast cancer had recurred. After consulting with an oncologist in New York, Liz opted to have her treatment closer to home, guided by Rutgers Cancer Institute and RWJBarnabas Health.

Following a lumpectomy and chemotherapy, Liz gave birth to a healthy son. Now it was time to consider radiation therapy to prevent further recurrence. Her doctors proposed proton beam therapy, which can be precisely targeted to spare previously irradiated tissues. Three years later, Liz is back to work as a teacher and enjoying family time with her toddler.



STAGE 4 KIDNEY CANCER

Jim Gritschke was fit and active, but weight loss and sharp pains in his right leg led him to an orthopedic surgeon. The diagnosis: a large tumor on his kidney from metastatic renal cell carcinoma, which had spread to his pelvis.

Jim required major robotic surgery to remove the kidney and tumor, followed by radiation and systemic therapy. He had the benefit of the latest technology and a multispecialty team at a high-volume center, as well as the opportunity to participate in a clinical trial for immunotherapy. Jim has now returned to his favorite activities.

"THE BEAUTY OF OUR PARTNERSHIP IS THAT RUTGERS CANCER INSTITUTE IS FULLY INTEGRATED WITH EACH OF THE HEALTHCARE SYSTEM'S 11 HOSPITALS." -Steven K. Libutti. MD

THE PATH TO A PRESTIGIOUS DESIGNATION

This year marks the 50th anniversary of the National Cancer Act, which established the NCI Cancer Centers program. Out of the thousands of U.S. facilities that have cancer programs, just 51 are NCI-Designated Comprehensive Cancer Centers. The NCI designation is a grant that brings significant dollars to the Rutgers Cancer Institute and has a positive economic impact on the state of New Jersey.



Submission of a written application between 1,200 and 1,500 pages long



A site visit from a variety of national cancer experts, who examine infrastructure, basic research, clinical care, clinical trials and more

2



Scoring to determine rankings

3

After five years, institutions must reapply for the designation.

4



A PARTNERSHIP FOR PATIENTS

RWJBarnabas Health, in partnership with Rutgers Cancer Institute of New Jersey—the state's only NCI-Designated Comprehensive Cancer Center—provides close-to-home access to the latest treatment options. To learn more, call 844.CANCERNJ or visit www.rwjbh.org/beatcancer.

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BRAIN ANEURYSMS: WHAT TO KNOW

BEING AWARE OF THE SYMPTOMS CAN KEEP YOU OR A LOVED ONE SAFE.

bout one in 50 people in the U.S. has a brain aneurysm—a "balloon" of blood protruding from an artery. The majority of these will never burst or even require treatment.

For those whose aneurysms do burst, however—approximately 30,000 people each year—the consequences can be devastating, leading to brain damage, stroke or death.



ANIL NANDA, MD

"We want to raise awareness about aneurysms because some studies have shown that almost a quarter of people who have a ruptured aneurysm die because

of misdiagnosis," says neurosurgeon Anil Nanda, MD, MPH, Senior Vice President of Neurological Services for RWJBarnabas Health and Chairman, Department of Neurosurgery, for Rutgers-New Jersey Medical School and Robert Wood Johnson Medical School.

"We have seen an increase in ruptured aneurysms during the COVID-19 pandemic. This may be because people have been less active during this period, perhaps gaining weight or not controlling high blood pressure," he says.

People who may have warning signs of an aneurysm often neglect them, assuming they'll simply go away, he says. In addition, many people have avoided seeking care because of fear of going to a hospital during the pandemic.

"The classic symptom is a severe

headache—one that feels like the worst headache of your life," Dr. Nanda explains. "Not every headache is an aneurysm, of course, and most of the time it's not anything serious. But if you have this terrible headache along with neck stiffness, and bright light bothers you, you should go to the Emergency Department to have it investigated."

ADVANCED TREATMENTS

Aneurysms can be diagnosed by a CT (computed tomography) scan, which uses X-rays to determine whether blood has leaked into the brain. Doctors may also order an MRI (magnetic resonance imaging), which uses computergenerated radio waves to create detailed images of the brain.

Other diagnostic tests include

a cerebral angiography, which is performed by passing a catheter (a long, flexible tube) from the groin artery to inject a small amount of contrast dye into the neck and brain arteries, and a cerebrospinal fluid analysis, which measures chemicals that indicate bleeding in the brain.

"If we do determine there is an aneurysm, whether it's ruptured or in danger of bursting, we look at the risk factors and determine the appropriate course of action. If surgery is indicated, we'll get our team together and perform it within 12 to 24 hours," says Dr. Nanda.

"For years, a procedure called clipping was the only way to fix an aneurysm," he explains. In this procedure, a craniotomy is performed to create an opening in the skull and then a small metal clip is placed on the aneurysm to stop the blood flow.

"Clipping is still the best solution for some cases," Dr. Nanda says. "Today, however, the mainstay of treatment is coiling. We can thread the catheter through a groin artery to place a coil on the aneurysm, and there is no need to open the skull."



WHAT IS A BRAIN **ANEURYSM?**

A cerebral (brain) aneurysm is a weak spot on a brain artery that balloons or bulges out and fills with blood. If it bursts, it spills blood into the surrounding tissue, an event that's called a hemorrhage. Brain cells, deprived of oxygen, begin to die, and the patient may have a stroke.

TEAM OF EXPERTS

Decisions about treatment are made on a case-by-case basis. "We have a multidisciplinary team at RWJBarnabas Health and Rutgers," says Dr. Nanda. "We have neurologists, neurosurgeons, a neuropsychologist, a neuroradiology team and endovascular specialists, all providing input about what will be most effective for the patient. We're like a special forces team, able to come together quickly. The patient gets 10 experts for a problem immediately, which is a huge advantage." Nurse

practitioners, neurology nurses and neurophysiology technologists round out the care team.

"Another benefit of being part of a large system is that we have the advantage of research, clinical trials and education," Dr. Nanda says. "We can do what we call translational research, meaning we take basic research that's being done on stroke and translate it into the clinical realm. It's a bench-to-bedside approach where we can really improve the condition of patients."



RISK FACTORS

- Smoking.
- Family history of aneurysms.
- Older age.
- · Head injury.
- Substance abuse, particularly
- Heavy alcohol consumption.
- Conditions present at birth, including polycystic kidney disease and cerebral arteriovenous malformation, an abnormal connection between arteries and vessels in the brain.



POSSIBLE SIGNS OF A RUPTURED **ANEURYSM**

If you experience these symptoms, call 911:

- Sudden, severe headache.
- Double vision.
- Nausea and vomiting.
- Stiff neck.
- Sensitivity to light.
- Seizures.
- · Loss of consciousness, even if brief.
- · Cardiac arrest.



POSSIBLE SIGNS OF AN UNRUPTURED **ANEURYSM**

If you experience any of the following, consult your doctor right away:

- Drooping eyelid.
- Dilated pupil in one eye.
- Pain above and behind the eye.
- Changes in vision or double vision.
- Confusion.
- Weakness and/or numbness on one side of the body.

For more information about neurosurgical services available at RWJBarnabas Health, visit www.rwjbh.org/neurosurgery.





DON'T DELAY ROUTINE VACCINATIONS THAT WILL KEEP YOUR CHILD SAFE FROM PREVENTABLE DISEASES.

he rate of routine childhood vaccinations—for diseases like measles, mumps, pertussis and more—has declined significantly during the COVID-19 pandemic, and pediatricians are worried.

"This decrease in vaccinations is a huge concern to us," says Uzma Hasan, MD, Division Chief of Pediatric Infectious Diseases at Saint Barnabas Medical Center and a member of RWIBarnabas Health Medical Group.



UZMA HASAN, MD



PATRICIA WHITLEY-WILLIAMS, MD

"We don't want to experience a resurgence of vaccine-preventable illnesses that we have previously had very good control over. We don't want to see our patients develop life-threatening issues like encephalitis from measles or meningitis from Haemophilus influenzae type B, which are prevented by safe, routine childhood vaccinations."

"Parents have been hesitant to bring their children to doctors' offices or clinics for fear of exposing them to COVID-19," explains Patricia Whitley-Williams, MD, a pediatric infectious disease specialist at the Bristol-Myers Squibb Children's Hospital at Robert Wood Johnson University Hospital and Division Chief of Allergy, Immunology and Infectious Diseases at Rutgers-Robert Wood Johnson Medical School.

"However, these offices are following all the recommended guidelines from

the Centers for Disease Control and Prevention," Dr. Whitley-Williams says. "Offices are sanitized in between patient appointments, plastic barriers are up, patients and visitors are checked for fever and masks are worn." (For children, wearing a mask is recommended over the age of two years.)

"Pediatricians' offices have protocols in place to keep well children and sick children apart," adds Dr. Hasan. "Some set aside special time periods just for vaccinations. Many places require that people check in over the phone and wait outside in their cars. Patients and families then are brought straight into the office, so there's no exposure to other people in a waiting room."

Parents who have safety concerns should contact their pediatrician's office to ensure that proper safety measures are in place, the doctors advise.

FOLLOW THE SCHEDULE

Timing is important when it comes to childhood vaccinations, Dr. Hasan says. "Please don't put off having your child vaccinated because you think it's better to space the shots out," she says. "The schedule of vaccines has been carefully determined to minimize risk and get the best response for each age." The recommended schedule for routine childhood vaccinations can be found at www.cdc.gov/vaccines.

Expectant mothers should get the Tdap vaccine to protect the baby against pertussis, sometime between the 27th and 36th weeks of pregnancy, the CDC recommends. "That vaccine has been a game changer for protecting vulnerable newborns," Dr. Hasan says.

One vaccine many parents are eager to explore for their children is the one for COVID-19, Dr. Hasan says. "I can't tell you how many calls we get about that," she says. "We're eagerly awaiting the results of trials so we have safety data for the younger age groups, particularly for vulnerable populations such as those with kidney, heart or lung disease."

In the meantime, routine childhood vaccinations should proceed as advised by your pediatrician. "Parents and guardians should be assured that these vaccines have been proven to be safe and effective," says Dr. Whitley-Williams, "and they save lives."

To find a pediatrician at RWJBarnabas Health, call 888.724.7123 or visit www.rwjbh.org/doctors.











Hard work at the Inpatient Chronic Pain Management Program enabled Olivia to compete in triathlons again.

A RACE AGAINST PAIN

A COMPETITIVE ATHLETE **ACHIEVES HER DREAMS THANKS** TO AN INNOVATIVE PAIN MANAGEMENT PROGRAM.

livia Christmann, 19, had been in pain for months when she came to Children's Specialized Hospital (CSH) in New Brunswick.

A competitive athlete, Olivia had been training for the Age Group Triathlon World Championships in August 2015 when she crashed her bike while riding at 27 miles per hour. The impact of the crash left Olivia suffering from a broken nose, a torn gluteus maximus and several strains in her legs.

Though her injuries healed with time, her pain continued and got progressively worse. Finally, Olivia was diagnosed with Complex Regional Pain Syndrome (CRPS), a form of chronic pain that develops after an injury but gets worse over time. While CRPS is not well understood, it's thought that high levels of nerve impulses are sent to the affected site.

Olivia tried several outpatient therapies, but her pain persisted, leaving



An RWJBarnabas Health facility

her unable to do most social or physical activities. Even walking to the car after a therapy session was an ordeal.

After researching other avenues for treatment, Olivia learned about the four-week Inpatient Chronic Pain Management Program at CSH.

"I was searching for a way to get my life back to normal," says Olivia. "During the initial evaluation, they asked me what my goals for the program were, and the first thing that I said was that I wanted to race again." She entered the program in January 2016.

WILL TO WIN

During her time at CSH, Olivia learned techniques for moving in a way that would help her manage the pain. Her natural competitiveness came out during timed activities like learning how to step in and out of a tub, or going for a walk

outside. "I always strived to beat my time from the day before," she recalls. Swimming, aquatic therapy and group and individual psychotherapy helped her learn to desensitize herself to pain and function normally.

After four weeks, Olivia was feeling more in control of her CRPS-and ready to get back to her senior year of high school. By the end of that year, she had been accepted into a prestigious university and was back to competitive sports.

In 2019, nearly four years after her accident, Olivia competed in the Age Group Triathlon World Championships, the same competition she'd been training for when she crashed her bike.

Olivia recalls the moments before the competition began: "I remember thinking, 'I can't believe I'm actually here!' And that's when it all hit me: There's no way I would have been able to do it if it weren't for my time at Children's Specialized Hospital. The treatment I got there gave me the chance to live out my dreams."

For more information about Children's Specialized Hospital, call 888.244.5373 or visit www.rwjbh.org/childrensspecialized.

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. We treat everything from chronic illnesses and complex physical disabilities, like brain and spinal cord injuries, to a full scope of developmental, behavioral and mental health concerns. We have convenient locations throughout the state: Bayonne, Clifton, East Brunswick, Egg Harbor Township, Hamilton, Jersey City, Mountainside, New Brunswick, Newark, Somerset, Toms River and Warren.



THERE'S NOTHING MINOR ABOUT THE PARTNERSHIP BETWEEN RWJBARNABAS HEALTH AND THE SOMERSET PATRIOTS.

hen two powerhouse organizations combine forces, the result is a big win for the community. Fans and friends of the Somerset Patriots not only get to see great baseball—the team was recently selected as a Double-A affiliate for the 27-time world champion New York Yankees—they also learn new ways to stay healthy.

"Baseball players work at their craft every day to be the best that they can be. Their exercise routines and nutritional habits are rooted in the principles of living healthy. Like our community, they rely on experts to help guide them along the way. That's why our partnership with RWJBarnabas Health is so important and works so well," says Steve Kalafer, Somerset Patriots Chairman Emeritus and RWJBarnabas Health (RWJBH) trustee.

Over the 22-year history of the partnership, RWJBH has hosted regular health fairs, blood drives and food drives, and has provided information on how

community members can get access to key health services and screenings. Somerset Patriots players have benefited, too: RWJBH provides sports medicine services to keep players on the field of play.

For kids, the Somerset Patriots, in partnership with the health system, created the Hit a Home Run Program. Featuring former pitcher Nate Roe, the education program for schools (delivered virtually this school year) is designed to teach young children how to eat healthier, make smarter lifestyle choices, be a good teammate and friend and understand the importance of exercise.

FRIENDS IN NEED

The Somerset Patriots team has been a stalwart supporter of RWJBH. Last summer, the organization raised more than \$16,000 for the RWJBarnabas Health Emergency Response Fund to help support healthcare professionals as they served communities during the COVID-19 pandemic. The money was



At left, the Somerset Patriots and RWJBarnabas Health have recently enhanced their longtime partnership. Above, former pitcher Nate Roe delivers health information for area students (photo taken pre-pandemic).

raised in a variety of ways, including online auctions, merchandise sales of T-shirts and face masks, a pop-up shopping event and drive-in movies at TD Bank Ballpark.

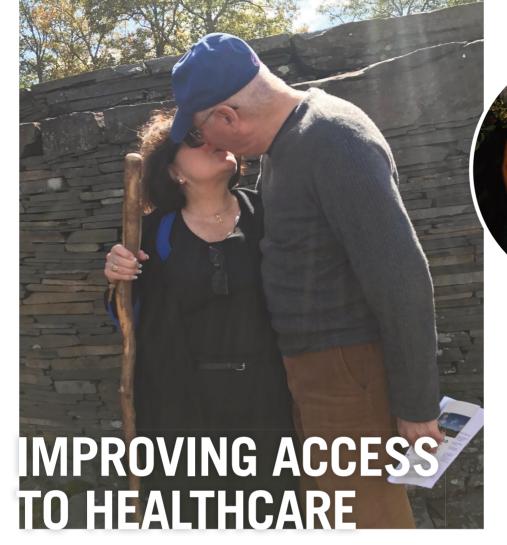
"We are so grateful to the Somerset Patriots for their continued support of our hospital and our community throughout the COVID-19 pandemic, from donations of food for our staff to hosting blood drives and holding events to benefit our Emergency Response Fund," says Tony Cava, President and CEO of Robert Wood Johnson University Hospital Somerset, a pillar of healthcare throughout Central New Jersey. "Their ongoing support helps ensure that our community has access to the comprehensive healthcare services they need."

A SOURCE OF PRIDE

RWJBH employees, many of whom live locally, take great pride in the partnership, attending games and participating in group events. Players feel that spirit as well.

"We pride ourselves on being active in our community to help make a difference," says Somerset Patriots President and General Manager Patrick McVerry. "Our fans are always there for us at the ballpark and for all of our efforts. We know that through our partnership with RWJBarnabas Health, we are able to make sure our fans and community are always in good hands where their health is concerned."

To learn more about the Somerset Patriots and the RWJBH partnership, visit www.milb.com/somerset and www.rwjbh.org/partnerships. To donate to the RWJBH Emergency Response Fund, visit www.rwjbh.org/giving.



WHY ONE COUPLE IS SUPPORTING THE HOSPITAL'S COMMUNITY **HEALTH PROGRAMS.**

ver the past decade, Judith Martin Waterman and Harvey Waterman of Highland Park have become familiar with the expert and compassionate care at Robert Wood Johnson University Hospital (RWJUH). To express their gratitude, they have established a gift annuity and funded several programs. "We want to make sure that people who are less fortunate than we can receive excellent healthcare," says Judith.

Judith and Harvey discovered that the hospital's Community Health Promotions Department had launched a Healthy Housing Ambassadors program, which helps protect local residents from the dangers of lead paint and other hazards. They contributed to the program in 2019 and supported the hospital's emergency response fund, which purchased personal protective equipment

during the COVID-19 pandemic. "It's wonderful that the hospital is concerned about the community," says Judith. "So many people are working hard to help others, and it feels good to be part of it."

GOING ABOVE AND BEYOND

The Watermans have always been impressed by the care they've received at RWJUH. In 2014, Harvey had triple bypass surgery at RWJUH. When he was in recovery in the coronary Intensive Care Unit, Judith recalls that he had to be moved from one room to another "I was worried he wouldn't be able to walk, so I asked the nurses about it," she says. "They said, 'We'll

Judith and Harvey Waterman have been so satisfied with their medical care that they have made generous donations to Robert Wood Johnson University Hospital.

bring a wheelchair for him in case he needs to sit.' He was fine, but she did that to take care of me. I realized that the hospital cares not only for patients but also for the people who love them."

Then, in 2017, Judith was diagnosed with recurrent breast cancer and had a double mastectomy. She was scared, but her surgeon, Susannah S. Wise, MD, always made her laugh. "She showed me pictures of her young son, who had a snail on his cheek," recalls Iudith. "Dr. Wise told me it was a 'rescue snail.' I started to laugh, and I felt my blood pressure drop."

When Judith was first diagnosed with breast cancer, she was using crutches because she had injured one of her knees. At a radiation treatment appointment, one of the crutches fell to the ground. "Before I could grab it, there were three people at the door to help me," she recalls. "It made me feel cared for." During her treatments, Iudith was concerned that the radiation would affect her lungs. Her radiation oncologist agreed to position her in a way to minimize her exposure. "He has an international reputation, yet he was very respectful of my wishes," says Judith. "It's the culture of the hospital."

To support the RWJ University Hospital Foundation, visit www.rwjuhgiving.org.



"I FEEL LIKE A BETTER MAN"



HOW A KIDNEY DONATION TRANSFORMED THE LIVES OF TWO PEOPLE.

rtie Regan was scrolling on Facebook last March when a post about a man in need of a kidney caught his eye. "I'm not an overly religious guy," says the 58-year-old business owner. "But in that moment, I felt a tap on my shoulder and heard a voice say, 'This is you.' I said to myself, 'I'm going to donate a kidney.' From that moment forward. I was like a man on a mission."

James Neebling, the subject of the post, was a total stranger to Artie, though the two men had a friend in common. The owner of a freight brokerage business, James, also 58, had had diabetes for 25 years. He had gone on dialysis at the end of 2018 after collapsing while on a business trip. "The ER doctor looked at my labs and said, 'Listen, if you don't start dialysis immediately, you'll be dead," recalls James.

For the next six months, James left his home at 4:30 a.m. three days a week in order to receive dialysis and then put in a full day at work. "Fifty percent of the time, I felt out of it, drained," he says. "I looked around at the people in the dialysis center who had been going for years and thought, I can't believe this is my life."

James applied for an organ transplant at Robert Wood Johnson

YOU'VE REALLY GOT TO BE SPECIAL TO NOT ONLY WANT TO DONATE A KIDNEY BUT TO DO IT FOR SOMEONE YOU DON'T EVEN KNOW.

Iames Neebling

University Hospital (RWJUH), and after a battery of tests, he was placed on the waiting list. He was warned it would likely be five years before a kidney became available. That's when his fiancée, Mary Gibney-Doherty, posted his story on Facebook, hoping to find a living donor among the couple's friends and connections.

"There aren't nearly enough deceased donor kidneys to help patients who need them," says Ronald P. Pelletier, MD, a transplant surgeon and Program Director at the Kidney and Pancreas Transplant Center at RWJUH. "That's why it's important to try to find a living donor."

A PANDEMIC DELAY

Artie saw the Facebook post just as the COVID-19 pandemic began to emerge in the U.S. Although he passed the psychological assessment required for donors, he was forced to wait for blood work and other tests because the hospital was overwhelmed by COVID-19 patients.

Artie was finally cleared and found to be a good match for James in July 2020. The surgery was scheduled for August 4. But James had been kept in



RONALD P. PELLETIER, MD



ADVAITH BONGU, MD

the dark, pending the results of Artie's tests When the hospital called to say there might be a donor for him, he began to get his hopes up.

James learned the good news just days before the surgery at a surprise party organized by the men's mutual friend. There, Artie popped open a bottle of champagne and revealed that he would be James' organ

James was overwhelmed with gratitude. "You've really got to be special to not only want to donate a kidney but to do it for someone you don't even know," he says.

The surgery went off without a hitch. "I can't tell you how great I feel," says Artie. "Every day, I wake up feeling like a better man."

PAYING IT FORWARD

By early September, Artie was ready to lead the annual walkathon he hosts honoring those who died on 9/11. This time, he dedicated the walk to the transplant program at RWJUH. Advaith Bongu, MD, the kidney/ pancreas transplant surgeon who performed James' procedure—along with others from the transplant team participated. Mary pushed James, who

Artie Regan and James Neebling at the annual walkathon

Artie hosts for those who lost their lives on 9/11. In 2020, the event was dedicated to the transplant program at Robert Wood Johnson University Hospital. James' transplant surgeon, Advaith Bongu, MD, participated in the walkathon.

was still weak from the surgery, in a wheelchair. "Organ donors are a special breed," says Dr. Bongu. "It takes a real commitment. But the experience has been as life-changing for Artie as it has been for James."

Today, James is in excellent health, and the two men have developed a deep bond. Last fall, they started an organization called The Kidney Exchange—of Hope to help bring together people in need of kidneys and prospective donors. Artie wants more people to experience the impact that donating a kidney has had on him. "I had no idea how good you could feel about yourself," he says.

The experience helped him turn "a year of lemons into lemonade," Artie adds. "I was able to not only do something good but possibly something that can inspire other people to step forward."

For more information about the Kidney and Pancreas Transplant Center, visit www.njtransplant.org.





n May 2013, Patricia Buscemi, 71, a former hairdresser in Aberdeen, had a sinus infection and was worried she might have pneumonia, so she saw her doctor. Imaging tests showed she had a 6-centimeter ascending aortic aneurysm—a bulge in the main artery of the heart—that needed to be removed

MARK J. RUSSO, MD, MS

immediately. The procedure was performed by Leonard Y. Lee, MD, Chair and Professor of Surgery at Rutgers Robert Wood Johnson Medical School and Chief

of Cardiovascular Services at Robert Wood Johnson University Hospital (RWJUH). It went smoothly, and Patricia returned to Dr. Lee's office every six months to have an echocardiogram, an ultrasound test that enables doctors to check the heart's function.

Patricia felt fine until the summer of 2020. She was weak and experienced shortness of breath whenever she walked. Her symptoms persisted into the fall. One night in October, she passed out while trying to get a glass of water. "I was especially tired," she recalls.

Patricia went to the Emergency Department at RWJUH. Tests showed that she had aortic insufficiency, in which the main heart valve is unable to close

completely. The purpose of the aortic valve is to ensure that blood ejected from the heart only moves downstream to other vital organs. The valve was not closing properly, so blood was flowing backward into the main chamber of the heart. This requires the heart to work harder to pump sufficient blood to the body. Over time, the additional stress on the heart causes it to fail. "Doctors told me that my heart valve needed to be replaced," she says.

A BREAKTHROUGH DEVICE

Luckily, Patricia was eligible for a new, minimally invasive procedure. She was enrolled in a clinical trial of a nextgeneration transcatheter aortic valve replacement (TAVR) device called the



JenaValve. The JenaValve is being studied to treat aortic insufficiency, says Mark J. Russo, MD, MS, Chief of Cardiac Surgery and Director of Structural Heart Disease at RWJUH and Rutgers Robert Wood Johnson Medical School and a member of RWJBarnabas Health Medical Group.

to breathe better and had more energy after receiving

a new heart valve.

RWJUH is one of only 15 hospitals in the country—and the only one in New Jersey—that's participating in a study of the device, which received a Breakthrough Device Designation from the Food and Drug Administration in January 2020. This designation is reserved for investigative therapies designed to treat a serious or life-threatening disease or condition. Another criterion: Preliminary clinical evidence indicates that the therapy may

demonstrate substantial improvement over

During the procedure, which lasts less than 90 minutes, doctors access the femoral artery and vein—large blood vessels in the groin, just above the thigh—using needles, wires and catheters. No incisions are required. X-ray and ultrasound guidance including echocardiography performed by Chunguang Chen, MD, Director, Advanced Noninvasive Cardiac Imaging at RWJUH—is used to ensure that the new valve is positioned properly. The JenaValve is placed inside the existing valve, thus replacing the diseased native valve. A special "locator technology" enables the JenaValve to be secured in the correct area of the heart.

Currently, patients who have this procedure are given general anesthesia, but in the near future, Dr. Russo expects to perform the procedure when patients are conscious.

Patricia was scheduled for the surgery on December 15, 2020. She was one of approximately 100 patients enrolled in the study, says Dr. Russo. "Given Patricia's previous heart surgery and the heart failure she developed as a result of a leaking valve, open-heart surgery would be risky for

her," says Dr. Russo. "However, without a replacement valve, she would die from her heart condition. Surgical aortic valve replacement remains the standard for treating aortic valve disease. However, the JenaValve device allowed us to replace her valve and enable her to avoid the more prolonged recovery associated with openheart surgery," says Dr. Russo.

A QUICK RECOVERY

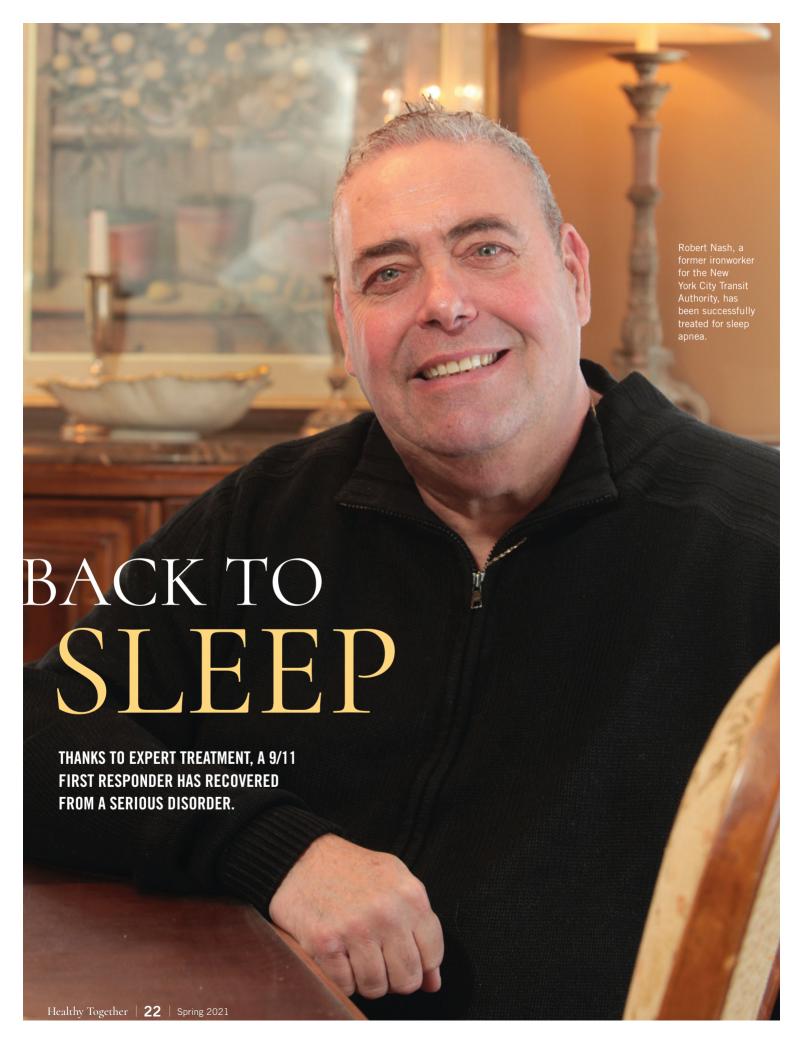
The surgery went remarkably well, reports Dr. Russo. For Patricia, "the worst part was when the IVs were placed," she says. Patricia was impressed with the nursing care. "The nurses were very attentive," she recalls. "They were always asking if they could prop up my pillows and walk me to the bathroom." After a single night in the hospital, Patricia was discharged to her home. "If Patricia had required open-heart surgery to fix her valve, she likely would have been in the hospital for many days and required weeks of recovery," says Dr. Russo. "With this approach, there's none of the trauma involved in open-heart surgery. Therefore, Patricia was able to return home the day after her valve was replaced. In fact, patients often say they feel better right away."

Indeed, Patricia noticed she was able to breathe better and had more energy. In January, she had blood work, an EKG and an ultrasound of the heart, and everything looked great, she says.

Though Dr. Russo expects this new valve to last for many years, the procedure can be redone if it fails. "At RWJUH, we are fortunate to have access to many cutting-edge technologies," he says. "However, the JenaValve is clearly among the most exciting new heart valve therapies currently being investigated anywhere in the world. This device may provide lifesaving therapy to a large population of patients who would otherwise have no effective treatment option. The JenaValve has the potential to save a tremendous number of lives."

Patricia is grateful. "I'm so glad I had the procedure," she says. "I would only go to Robert Wood Johnson University Hospital."

Whoever your heart beats for, our hearts beat for you. To connect with one of NJ's top cardiovascular specialists, call 888.724.7123 or visit www.rwjbh.org/heart.



his year will mark the 20th anniversary of 9/11. For Robert Nash, 58, a former ironworker for the New York City Transit Authority, the day is still fresh in his mind. When the first plane hit the Twin Towers, he and his team were told it was a plane crash, and they raced to the area to set up their equipment. When the buildings collapsed, they were forced to leave the area. Later that day, they returned, along with firefighters and police officers, to work on "the pile," where they dug through steel and rubble looking for survivors. "Teams of doctors and nurses showed up and said, 'Where are your masks?'" he recalls. "We said, 'No one told us to put our respirators on."

For more than a month, Robert, who lives in Lincroft, worked on the pile every day, from 12 p.m. to 12 a.m. After the search and rescue mission was complete, he returned to the World Trade Center (WTC) site sporadically to remove giant pieces of steel from the debris. In total, he spent about a year working on the pile.

A SLEW OF HEALTH PROBLEMS

Back in 2001, Robert was 38 and in good health. He and his coworkers routinely carried heavy tools, torches and tanks into subway stations. About four years later, he noticed he was having trouble breathing while he was on the job. He was also having frequent nosebleeds. About six of his coworkers had developed breathing problems, too. He saw a doctor in New York City and was diagnosed with asthma, chronic obstructive pulmonary disease (COPD), nodules on his thyroid gland, gastroesophageal reflux disease (GERD), emphysema and asbestos in his lungs. "I walk around like a time bomb,"



JAG SUNDERRAM, MD, ATSF

he says. Robert had always enjoyed baseball and bowling, but his breathing problems prevented him from being active. He had to take around 12 medications daily

to cope with his health problems. When he was healthy, he weighed 235 pounds, but his weight had ballooned to 400 pounds. Making matters worse, he was struggling with a lack of sleep and panic attacks. "I would wake up in the middle of the night gasping for air," he recalls.

It turned out that Robert had obstructive sleep apnea, in which the throat muscles relax and block the airway, causing a person to stop breathing multiple times throughout the night. Robert was tired of traveling to New York City for his medical appointments, so he decided to find a doctor closer to home.

THE LINK BETWEEN SLEEP APNEA AND 9/11

Friends recommended Robert Wood Johnson University Hospital (RWJUH). His first doctor retired, so he recently began seeing Jag Sunderram, MD, ATSF, Medical Director of the Medical Intensive Care Unit at RWJUH and Professor of Medicine and Division Chief, Division of Pulmonary and Critical Care Medicine, at Rutgers Robert Wood Johnson Medical School. Dr. Sunderram and his colleagues are studying around 4,000 9/11 first responders in New Jersey.

"In 2010, we were getting a lot of referrals for sleep studies," he says. "The patients were young—in their 30s and 40s—and were not obese [a typical risk factor for sleep apneal." Most patients were detectives, police officers and construction workers who were being monitored and treated by the World Trade Center Health Program at Rutgers in Piscataway. "Their noses and mouths had been covered by cement and dust particles in 2001," says Dr. Sunderram. "They had symptoms such as runny noses, snoring, sore throat, reflux and irritation of the nasal passages." Seventy-five percent of the first responder patients had sleep apnea, whereas only 25 to 40 percent of the general population has it, says Dr. Sunderram. "We are trying to identify a mechanism that would explain why obstructive sleep apnea is so prevalent in the WTC first responders," he explains. "There is a strong association with chronic



COMPREHENSIVE TESTING

The Comprehensive Sleep Disorders Center at Robert Wood Johnson University Hospital offers the following services:

- a sleep lab, where patients are tested for narcolepsy, epilepsy and seizures and movement and behavioral disorders
- wakefulness testing, which is used for professionals such as airline pilots
- pediatric sleep disorders
- insomnia
- delayed sleep phase syndrome

nasal inflammation, which the first responders suffer from."

Dr. Sunderram recommended that Robert be evaluated at the RWJUH Comprehensive Sleep Disorders Center. He had pulmonary function tests, a sleep study and a 6-minute walk test to evaluate his shortness of breath. "Robert had severe sleep apnea," says Dr. Sunderram. "During the test, he stopped breathing about 86 times per hour, which is equivalent to once every 45 seconds." By comparison, people with moderate sleep apnea stop breathing 15 to 30 times per hour. "The drop in oxygen levels during the night leads to changes in mood and memory and high blood pressure, which increases the risk of a stroke and heart attack," says Dr. Sunderram.

Dr. Sunderram recommended that Robert use a CPAP (continuous positive airway pressure) machine, which keeps the airways open. "I love it," he says. "I use it every night." Dr. Sunderram says he's doing very well. "His sleep apnea is completely controlled, and we've had great success in treating his asthma and COPD," says Dr. Sunderram. Robert agrees. He walks twice a day and swims at the local YMCA. So far, he has lost 75 pounds. "I have bad days sometimes," he says. "But overall, I'm very happy."

If you snore, choke or gasp while you sleep, suffer from daytime sleepiness, have a body mass index of 30 or higher or have high blood pressure, you might benefit from a sleep evaluation. To learn more, call 908.927.8795.

1 Robert Wood Johnson Pl., New Brunswick, NJ 08901

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