CHRONICLE

Richmond University Medical Center

FEBRUARY 2023 • RICHMOND UNIVERSITY MEDICAL CENTER • WWW.RUMCSI.ORG

The Honorable James P. Molinaro Emergency Department Officially Opens

On Friday, January 20, Richmond University Medical Center's new Emergency Department officially began caring for its first patients. Months of planning, drills, and careful coordination resulted in a near flawless transition of staff and equipment from the exiting emergency department, built in 1978, to the new facility in just a few hours.

Medical staff at one of the many new nurses stations in the new ED.

"When you can deliver care in a private setting, a private environment that's comfortable for the patient, you feel that much more proud about what you're doing for the patient," Johnathon LeBaron, DO, Chair, Emergency Medicine, said shortly after the transition was complete. "Our staff is very excited to be in the new space."

The new 35,000 sq. ft. facility, named in honor of the former Staten Island borough president and hospital trustee, features expanded trauma and triage areas and dedicated units for pediatrics, behavioral health, cardiac/stroke emergencies, sexual assault victims, and more. The new Emergency Department also has increased ambulance bays and a larger patient drop-off area at its main entrance. Patients will receive care from experienced physicians and medical personnel assigned to Richmond University Medical Center and Mount Sinai Health System.

The new trauma bays ready to receive critical patients.

Wider hallways make it easier for staff to move patients throughout the new facility.

Staten Island Borough President Vito Fossella toured the new ED with RUMC President and CEO Daniel J. Messina, PhD, FACHE shortly before the first patients were received for care.

"This was very carefully engineered with physician input, nurse input, [and] community and patient input, so it's a unique opportunity to blend a state-of-the-art facility with great clinical resources," RUMC President and CEO Daniel J. Messina, PhD, FACHE, said. "We're fortunate to build upon the great clinical team that we have and augment the current team with Mount Sinai's world-class reputation for quality. This is going to be great for Staten Island for years to come."

February is American Heart Month

From the President & CEO, Daniel J. Messina, PhD, FACHE

February is American Heart Month. Let me start my letter to you this month by simply saying please take care of your heart. If you have not had your annual physical, regardless of the month, schedule it now and if you think you need a more thorough cardiovascular exam, contact our experienced Cardiovascular Department, led by our board certified chief, Francesco Rotatori, MD.

According to the Centers for Disease Control and Prevention (CDC), heart disease is the leading cause of death for men and women of most racial and ethnic groups in the United States, with one person dying every 34 seconds from cardiovascular disease. Coronary Artery Disease (CAD), the most common type of heart disease, claimed the lives of nearly 383,000 people in 2020. Every year, about 805,000 people in the United States have a heart attack. That means every 40 seconds, someone in our country suffers this life-threatening cardiac emergency.

Here on Staten Island, data from the New York City Department of Health and Mental Hygiene shows that approximately 27 percent of Staten Island adults have high blood pressure and/or high cholesterol. While this is a slightly lower proportion than the nation overall, despite this finding, Staten Island still has a higher rate of death due to heart disease than the rest of the nation.

Our hospital is helping to lead the charge when it comes to making our communities more heart healthy. Dr. Rotatori and the Cardiovascular Department are speaking at many community forums and meetings, promoting keys to good heart health and educating people to the risk factors and symptoms of heart disease and heart attacks. At the same time, we are collaborating with community groups, businesses, and faith-based organizations to provide free EKGs and blood pressure monitoring to the public. Over the past few months, several cardiac-related articles were published featuring members of our cardiovascular faculty like Sean Galligan, MD, assistant director of cardiology, and Marisa Semioli, one of our fantastic nurse practitioners who specializes in cardiology. Dr. Galligan discusses the importance of echocardiograms in detecting heart issues that may present no symptoms and Marisa explains how we can better determine risk factors for heart disease by a simple blood test that reveals a person's lipid panel. Both these articles are on SILive.com and on our website, RUMCSI.org.

As we open our new Emergency Trauma Department to care for our first patients, emergency cardiac care was one of the service lines at the forefront of our design planning. Our new ED provides larger space for our cardiovascular team to work in, features a state-of-the-art monitoring system that enhances cardiac care and the latest telemetry technology that is more accurate and can store data for each patient who transitions from the ED to the catheterization lab for further testing and treatment.

So once again, I urge you and your families to take good care of your hearts. To learn more about how to keep your heart healthy, if you have questions about heart disease, or want to schedule an appointment for cardiovascular care, contact our Cardiovascular Department at 718-818-7425.

Remember the Power of One — You Make A Difference!

Sincerely,

Daniel J. Messina, PhD, FACHE
President and Chief Executive Officer

Patient Satisfaction: A Note of Thanks

Dear Dr. Cardoso,

Thank you for calling me to express your sympathies at a time of loss for our family. Daniel and I were glad you were his surgeon because we saw that you cared deeply about your patients. We trusted you and Daniel was motivated in rehab by your concern and support. He pushed himself to improve his posture and mobility so he could be ready for the second surgery. We are grateful that you are not only a great surgeon, but that you also are truly a kind person.

We also give thanks to your staff, in particular Sarah Lawrence, for the care and concern shown to us throughout Daniel's treatment and at this time.

— In Peace and Love, Deborah Pheasant, wife of Daniel Remine

To the Amazing Staff at RUMC,

Thank you so much for all of the kindness and love you showed our family in August when we welcomed our son, Joseph Vincent Cleary, Jr.

— Always, The Cleary Family

We want to give a big thank you to the hard working staff in OB for such a wonderful experience when we were in your care delivering our son, Jameson. Everyone was so wonderful and attentive. A special thank you to our nurse Erica who was so amazing and caring. She went above and beyond for the expectations of her job.

— Love, The Zollo Family

New Imaging Equipment for Clinical Research Trial on Non Alcoholic Steatohepatitis

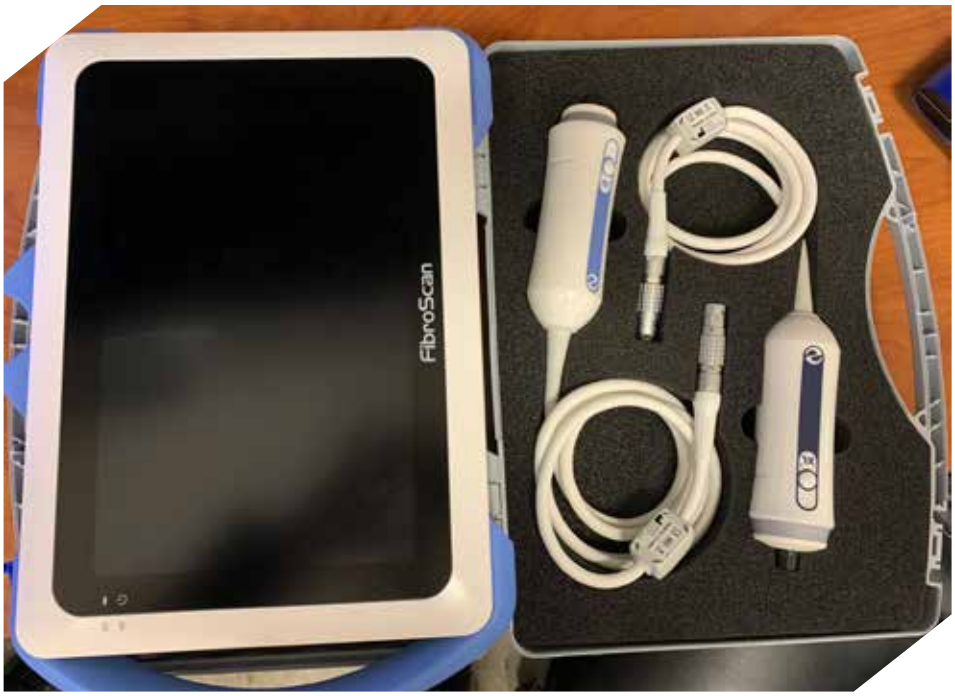
In conjunction with the sponsor of a new treatment for Non Alcoholic Steatohepatitis (NASH), new state-of-the-art imaging equipment that can scan a patient's liver for fibrosis has been provided to Richmond University Medical Center (RUMC). The equipment, which costs over $100,000, is part of a clinical trial for the new treatment and will be housed in the hospital's Radiology Department.

"There has been no liver scanning equipment for this particular condition on Staten Island and patients have had to go off Island for this expensive procedure, which is vital to the evaluation of NASH," Kavan Patel, MD, principal investigator for the trial, said. "The procedure will be free for patients participating in this clinical trial at RUMC."

NASH is an advanced form of Non-Alcoholic Fatty Liver Disease (NAFLD). NAFLD is caused by buildup of fat in the liver. When this buildup causes inflammation and damage, it is known as NASH, which can lead to scarring of the liver. Scarring of the liver is a potentially life-threatening condition called cirrhosis. While there are often no outward symptoms associated with NASH, the most common symptoms that are reported include fatigue and pain in the upper right abdomen. NASH is most common in patients who are overweight or obese. Additional risk factors include diabetes, high cholesterol, high triglycerides, poor diet, metabolic syndrome, polycystic ovary syndrome, sleep apnea, and an underactive thyroid, or hypothyroidism.

"Prior to the development of this new study drug, there has really been no effective treatments for NASH," Dr. Patel said. "Our GI specialists have indicated they have many patients suffering with this disease who can be entered into our study, if they meet the criteria."

According to Dr. Patel, the enrollment period for the on-going trial is one year, with treatments and follow-ups to continue for an additional six years. Anyone interested in learning more about the trial and possible enrollment can contact the Clinical Research Department at 718-818-2707.



New imaging equipment that is part of an on-going clinical trial to help treat patients with Non Alcoholic Steatohepatitis.

FDNY Tours New Emergency Trauma Department

On January 11, firefighters from Engine Company 156 and Ladder Company 79 joined leadership from FDNY/EMS Division 5 and FDNY Operations to tour the new Emergency Trauma Department. President and Chief Executive Officer Daniel J. Messina, PhD, FACHE, provided the tour along with William Amaniera, Vice President, Emergency Services; Johnathon LeBaron, DO, Chair, Emergency Medicine; and Jean Gordon, RN, MSN, Assistant Vice President, Emergency Medicine.

RUMC's Use of an Advanced Lipid Panel Is Helping to Diagnose and Treat Cardiovascular Disease Earlier

Marisa Semioli, nurse practitioner specializing in cardiology

Without a doubt, the pandemic upended the way people live, work, and interact and as recent behavior and outcomes show, it also impacted how people approach health care — and not always in a positive way.

"Instead of being a catalyst for living a healthier lifestyle, the pandemic has had a reverse effect for many in our community, as we've seen a trend toward people 'falling off the wagon' and eating and drinking out of comfort and fear," shared Marisa Semioli, a nurse practitioner who specializes in cardiology. "They've also adopted a more sedentary lifestyle that's led to physical deconditioning."

As a result, "we've been seeing an influx in patients, especially younger ones, complaining of shortness of breath, fatigue, and even palpitations — all symptoms that we believe are the fallout of physical deconditioning and the presence of underlying insulin resistance and inflammatory processes at play," she said.

In an effort to help determine why so many cardiovascular, endocrine, and autoimmune diseases are on the rise, especially among younger people, RUMC has been providing the powerful Advanced Lipid Panel along with standard inflammation and insulin resistance testing. "This panel allows us to go beyond the standard screening and delve in deeper and earlier to better assess our patients' risk of atherosclerotic cardiovascular disease (ASCVD) and hopefully prevent it or else slow its progression," Semioli said.

According to Semioli, the Advanced Lipid Panel (ALP) goes beyond the standard lipid panel or A1C tests that people may routinely receive as part of a physical exam to more thoroughly investigate the composition of inflammatory, cholesterol, and glucose markers.

"The Advanced Lipid Panel breaks down the particles in such an in-depth manner that it can point out genetic and molecular components that put people at higher risk for cardiovascular, endocrine, and autoimmune diseases than others," she said. "It helps screen our patients better than ever before, focuses on preventing these conditions, especially among those with a strong familial component, and delivers results that can add an important new level of clarity and accuracy to a patient's diagnosis and resultant treatment plan."

"For example, the Advanced Lipid Panel's monitoring of 'hs-CRP' measures the amount of c-reactive protein (CRP) in the blood — a high level of which reflects the presence of inflammation in the body and can correlate to a higher risk of cardiovascular disease than someone with normal levels," said Semioli, who added that the panel's measure of 'Lp-PLA2' can also be used to identify active inflammation within the vessels that contributes to plaque formation. Among other measures tracked by the ALP, elevated levels of 'Lipoprotein A' can reflect an increased risk of cardiovascular and cerebrovascular disease, while higher levels of 'ApoA1,' which reflects the level of 'good' cholesterol (HDL) in the blood, can indicate a decreased risk of cardiovascular disease.

At the same time, "ApoB closely measures the level of 'bad' cholesterol (LDL) in the body and elevated levels of ApoB can suggest an increased risk of cardiovascular disease — even if the patient's overall LDL cholesterol level is in the normal range," Semioli said, adding that the size and shape of LDL particles measured by the Advanced Lipid Panel is also revealing. Specifically, "the presence of large numbers of small, dense LDL particles (as opposed to large, buoyant ones) may reflect underlying insulin resistance and a higher risk of developing diabetes."

"Insulin resistance — which is associated with cardiovascular disease, nonalcoholic fatty liver disease, chronic kidney disease, and polycystic ovary syndrome and is even linked to dementia, cancer, and obesity — can be gradual and difficult to recognize," Semioli said. "In fact, while 'hemoglobin A1C' is the main test most providers order when screening for diabetes, insulin resistance can go undetected for up to 10 to 15 years before it's reflected in hemoglobin A1C levels. However, there are a number of in-depth insulin resistance panels offered by leading diagnostic labs that will hopefully soon become the gold standard tests for identifying insulin resistance and potentially preventing or slowing the progression of diabetes."

For doctors and patients alike, "having access to more in-depth bloodwork enables us to develop a more accurate and personalized treatment plan as opposed to a more standard or 'one-size-fits-all' approach to treating cardiovascular disease, high cholesterol, inflammation, or insulin resistance," Semioli said. "There's more to the story than the standard guidelines we follow and these advanced-level blood tests provide new clarity and insight into each patient's unique body chemistry, enabling us to provide more individualized treatment and help prevent these diseases. We're at battle," she said, "but we now have more tools to screen earlier and battle back instead of succumbing to these diseases."

Semioli encourages community members to have their primary doctor or the Richmond University Medical Center team order the Advanced Lipid Panel and to see a cardiologist or endocrinologist as necessary based on the results of the ALP. "This test will help us prevent disease or accurately manage people's therapy if they already have this disease," Semioli said, "and it can potentially help prevent or reverse this disease process among others in their family as well."

The Quality and Patient Safety "Q Corner"

From Joan Gleason Scott, PhD, RN, NEA-BC, CPHQ, CPPS
Vice President Quality, Infection Prevention, Patient Experience, Language Services

Joan Gleason Scott

A3 methodology has been recognized by the Agency for Healthcare Research and Quality (AHRQ) as a reliable tool to aid in problem solving, collaboration, and process improvement. There are ten steps that outline the A3 process that have been proven to be effective and are listed below:

1. Identify the problem
2. Capture the situation
3. Analyze/ quantify the problem/ concern
4. Conduct root cause analysis to determine missed opportunities
5. Develop countermeasures for addressing the findings
6. Define and communicate the target
7. Implementation planning to show how the countermeasures will be achieved
8. Develop a plan that shows follow-up and predicted outcomes
9. Include all stakeholders
10. Implement the plan and evaluate the results

In utilizing the A3 methodology, Richmond University Medical Center has been able to achieve a reduction in *clostridium difficile* (C.Diff) infections by implementing the following practices:

- The proper and careful use of antibiotics
- Identifying patients who are at risk for this type of infection
- Managing signs and symptoms
- Using proper Infection control measures and isolation precautions
- Safe hand hygiene practices
- Daily terminal cleaning of patient rooms

In addition to the abovementioned practices, the A3 model has allowed our staff to develop additional countermeasures, including:

- The implementation of nurse-driven protocols to facilitate rapid evaluation by healthcare personnel and infection prevention
- Continuing contact precautions for at least 48 hours after diarrhea has resolved or longer, up to duration of hospital stay
- The use of dedicated patient care equipment
- Confirming laxative use in the medical record to avoid the overprescribing of testing.

Congratulations to our Employees of the Month!

Moshe Stein, Paramedic and Jacqueline Markus, Paramedic

Ilir Tehiri, Storeroom

RUMC Cardiologist Explains How Echocardiograms Are Saving Lives

Sean Galligan, MD, Assistant Director of Cardiology

With nearly 700,000 people in the U.S. dying every year from heart disease — one every 34 seconds — heart disease is the leading cause of death for men and women of all backgrounds and ethnic groups in America.

The good news is that at least some of the factors that contribute to heart disease are within one's control, and tools like echocardiograms — which provide minimally invasive ultrasound imagery of the heart — enable cardiologists to diagnose heart disease in patients and recommend appropriate treatment.

In the following interview, Sean Galligan, MD, assistant director of cardiology, explains what an echocardiogram is, how it's performed, and why it represents one of the most important and beneficial tools in a cardiologist's arsenal for detecting heart disease or dysfunction.

What's the state of heart disease in America since the pandemic?

Dr. Galligan: Unfortunately, heart disease is more prominent than ever nationwide (and on Staten Island), especially with many people being more sedentary and indulging in unhealthy eating over the past two years. Some people took time during the quarantine period to work on their health, but many others were left with little to do, which exacerbated their already-sedentary habits. Others found themselves dealing with anxiety and/or depression and looked to food, smoking, and other vices for comfort.

What is an echocardiogram and what does it show?

Dr. Galligan: Echocardiograms provide an ultrasound evaluation of the heart and are a quick, easy, and non-invasive way to assess cardiac structure and function. Ultrasound technology has been around for a long time — it's the same technology that's used to monitor pregnancies — and it enables us to not only physically see and evaluate the structures of the heart, but also to measure hemodynamic aspects of the heart (i.e, the dynamics of blood flow) using highly precise Doppler technology. While electrocardiograms, or EKGs, assess the electrical signals coming from the heart, echocardiograms are a more physical and anatomical visualization of the heart and its functionality, and they can also detect a prior heart attack.

Who is a candidate for an echocardiogram?

Dr. Galligan: We do echocardiograms for many reasons, such as for patients with an abnormal EKG or those with heart murmurs, suspected valvular abnormalities, signs and symptoms of heart failure (outward signs of which can include shortness of breath, pain, dizziness, leg swelling, etc.), or risk factors for heart failure. Candidates can be of all ages — for example, we use echocardiograms to screen babies for murmurs or malformation of the heart as well as to screen teens who play sports that increase the risk for sudden cardiac death. Risk factors for heart disease include smoking, medical conditions like diabetes and hypertension, the presence of a heart murmur, symptoms like syncope (passing out/losing consciousness), and a family history of heart disease or sudden cardiac death.

What will patients experience during an echocardiogram?

Dr. Galligan: This quick and simple procedure takes anywhere from 15 to 20 minutes and simply involves our use of an ultrasound probe to take pictures of the heart on the chest wall. It's all done superficially and there's nothing invasive — no IVs, for example — and we use gel to enhance the quality of the images. Echocardiograms are typically performed by our technicians in an exam room setting but can also be conducted by physicians at a patient's bedside in the hospital in the event of an immediate need. Because technology has improved, devices have gotten smaller, and connectivity has become more standard, ultrasound-based procedures like echocardiograms have become more mainstream for point-of-care or acute evaluation.

How do cardiologists use the images generated by an echocardiogram?

Dr. Galligan: We look at how well the ventricles of the heart are moving/contracting, whether the four valves of the heart are opening and closing appropriately, and the general anatomy of the heart to ensure that there's no thickening/calcification, masses present, or abnormalities related to blood flow. Based on what we see on the echocardiogram — whether it's a stiff valve, a leaky valve, or another malfunction — we're able to guide medical treatment for patients and determine the need for further evaluation, a different procedure, or surgery. As cardiologists, we're trained in performing echocardiograms, but our main role is interpretation of the images and information. At Richmond University Medical Center, our ultrasound technicians are experts in obtaining these images and collecting all of the necessary information and calculations so that we can accurately interpret them. Ultimately, echocardiograms give us such a breadth of information, both anatomically and hemodynamically, and are one of the mainstays of cardiology in that they guide both diagnosis as well as treatment.

February Observances

Please join us in acknowledging the following health-related observances for the month of February:

Month-Long

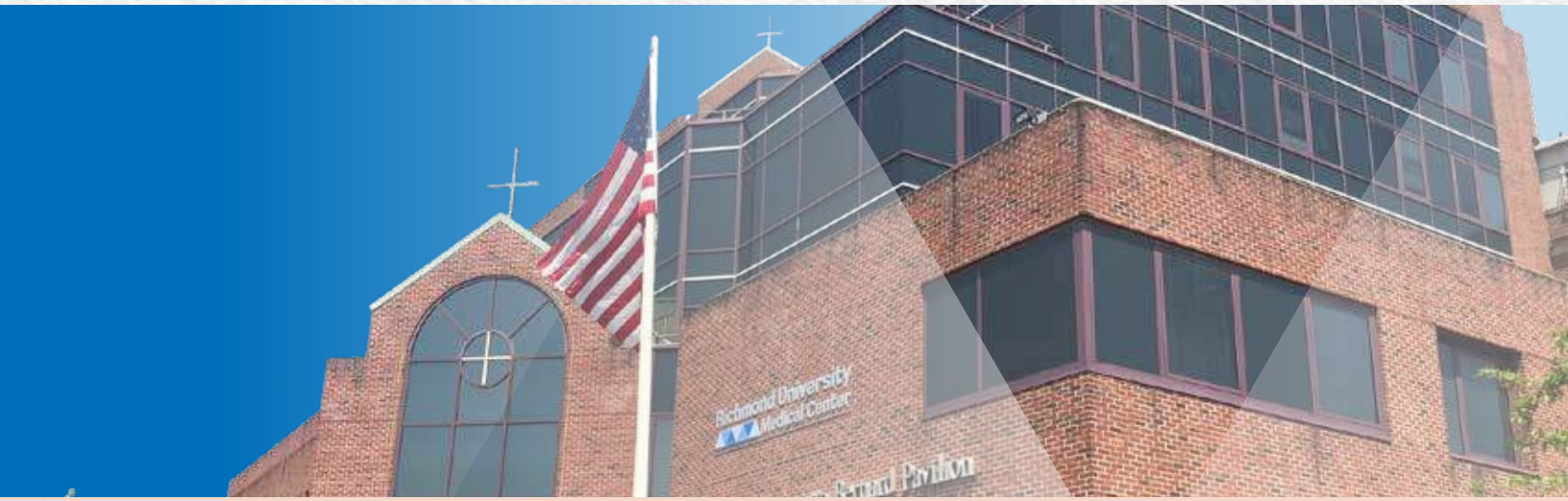
Age-Related Macular Degeneration Awareness Month
American Heart Month
International Prenatal Infection Prevention Month
National Cancer Prevention Month
National Children's Dental Health Month

Week-Long Observances

Patient Recognition Week: Feb. 1 to 7
Peri-Anesthesia Nurse Week: Feb. 6 to 12
Congenital Heart Defect Awareness Week: Feb. 7 to 14
Heart Failure Awareness Week: Feb. 12 to 20
Phlebotomist Recognition Week: Feb. 13 to 17
Duchenne Muscular Dystrophy Awareness Week: Feb. 13 to 19
Cardiovascular Professionals Week: Feb. 14 to 20
Sepsis Survivor Week: Feb. 14 to 20
National Eating Disorders Awareness Week: Feb. 23 to Mar. 1

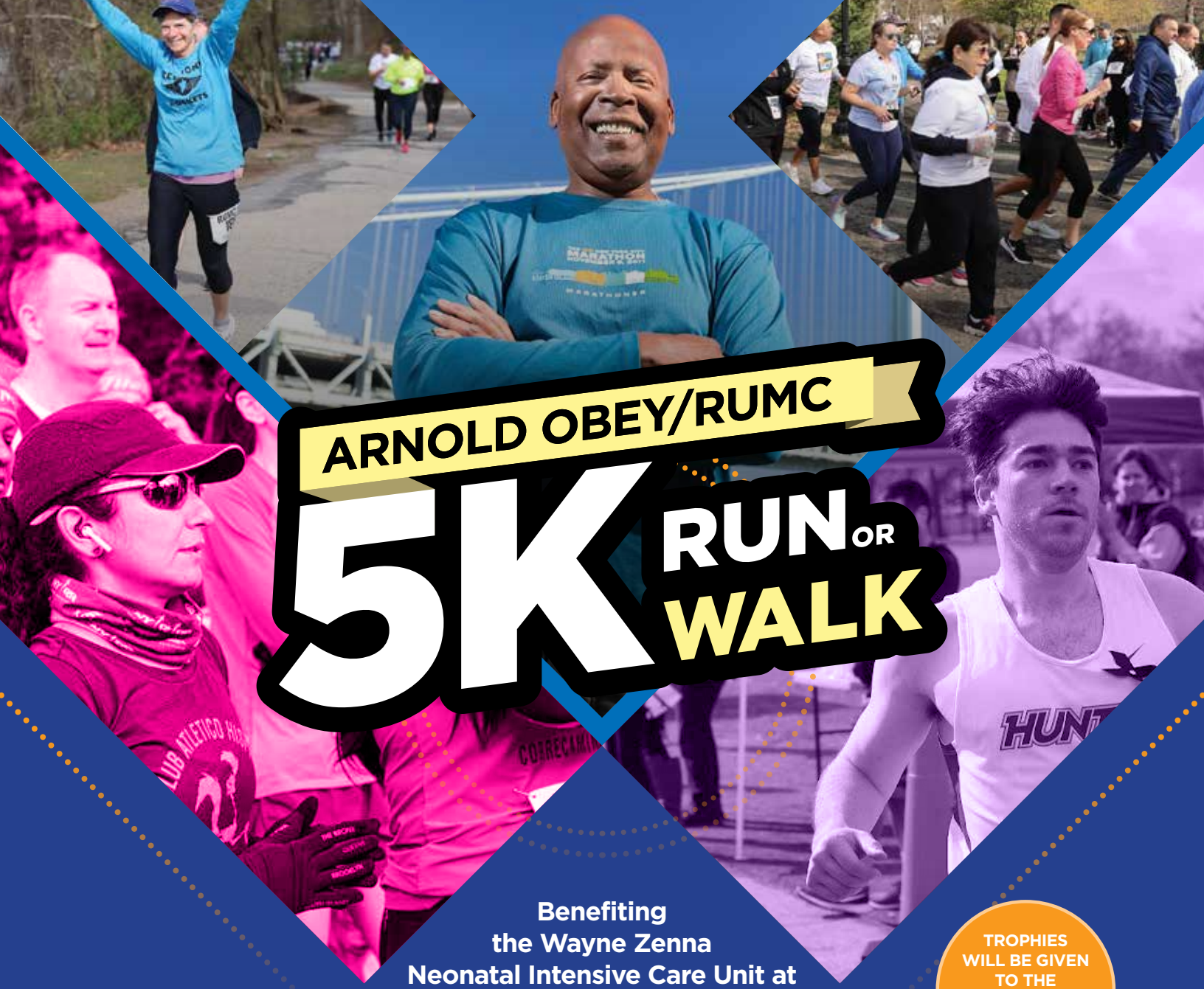
Recognition Days

Wear Red for Women's Heart Health Day: Feb. 3
National Women Physician Day: Feb. 3
World Cancer Day: Feb. 4
National Black HIV/AIDS Awareness Day: Feb. 7
International Epilepsy Day: Feb. 13
Congenital Heart Defect Awareness Day: Feb. 14
National Caregivers Day: Feb. 17
National Heart Valve Disease Awareness Day: Feb. 22
Rare Disease Day 2023: Feb. 28



New Hires — Welcome to RUMC!

Nabil Alhadi — *Paramedic*
Jenna Alija — *RN Extern*
Janet Ayoola — *RN Extern*
Daniel Bartow — *Registered Nurse*
Anida Bolevic — *RN Extern*
Jordan Briggs — *Unit Clerk*
Denis Caban — *EMT*
Stephanie Calderone — *Paramedic*
Kayle Callender — *Unit Clerk*
Matinmarie Caputo — *RN Extern*
Kerriann Carro — *RN Extern*
Jose Cespedes — *Security Guard*
Summer Chan — *RN Extern*
Izamie Charles — *Unit Clerk*
Chevonna Cook — *Food Service Worker*
Jacklyn Cuomo — *RN Intern*
Peter Christopher Defeo — *Radiology Manager*
Sadeta Dirakovic — *RN Extern*
Jamyang Dolma — *RN Extern*
Bryan Duraku — *RN Extern*
Julia Durkin — *RN Extern*
Tommi Ann Gangi — *Registered Nurse*
Krystle Garcia- Bustamante — *Registered Nurse*
Dionises Georgiou — *RN Extern*
Keashon Gillam — *Food Service Worker*
Ama Gunaratna — *Nursing Assistant*
Robert Harris — *RN Intern*
Olivia Hillery — *EMT*
Christina Jiang — *RN Extern*
Thomas Kasenchak — *Unit Clerk*
Yvetale Lauture-Jerome — *RN*
Raniyah Lockley — *Unit Clerk*
Misael Lopez — *Building Service Worker*
Lisset Moran — *Medical Assistant*
Sara Nesimi — *RN Extern*
Aishat Okeowo — *RN Extern*
Taylor Peccerillo — *RN Extern*
Crystal Perillo — *Medical Assistant*
Rangana Piyasena — *Clinical Lab Technologist*
David Poggioli — *RN Extern*
Elizabeth Rosa-Romano — *Registered Nurse*
Justin Rue Socaial — *Worker*
Latrell Sanders — *Unit Clerk*
Iryna Savynska — *RN Extern*
Jennifer Surita — *Registrar*
Maria Torres — *Registered Nurse*
Arrious Troupe — *Nursing Assistant*
Joel Validum — *Medical Assistant*
Purnima Ved — *Clinical Lab Technologist*
Logavathani Vigneswaran — *Medical Assistant*
Barry Walker Jr — *Paramedic*
Natalya Zeldina — *Clinical Lab Technologist*



ARNOLD OBEY/RUMC 5K RUN OR WALK

Benefiting
the Wayne Zenna
Neonatal Intensive Care Unit at
Richmond University Medical Center

TROPHIES WILL BE GIVEN TO THE TOP 3 MALE AND TOP 3 FEMALE WINNERS.

SATURDAY, APRIL 1, 2023

REGISTRATION AT **8AM**

KIDS DASH STARTS AT **9AM** • 5K RUN STARTS AT **9:30AM** • 5K WALK STARTS AT **9:45AM**

CLOVE LAKES PARK, 1150 CLOVE RD., STATEN ISLAND, NY 10301

RUMC's Wayne Zenna Neonatal Intensive Care Unit has a survival rate of over 99%, one of the highest rates in the nation. Your support is needed for new, state-of-the-art equipment so we can continue to save lives and keep families together. **To register, visit rumcsi.org/5K.**

355 BARD AVENUE
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Richmond University Medical Center
We Care For You Like Family, Because You Are.

SCAN QR CODE TO LEARN MORE