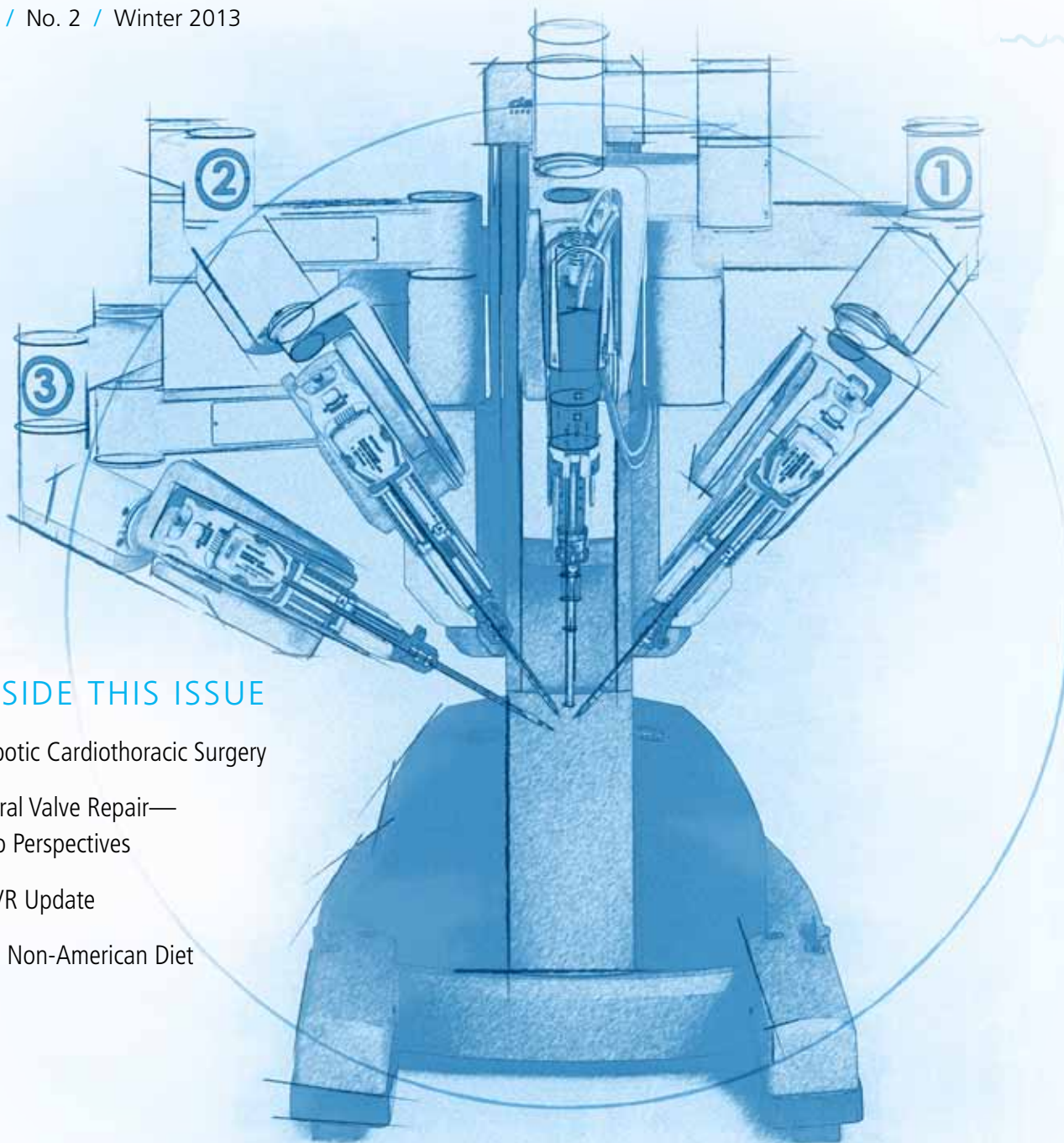


HEARTLINE

V2 / No. 2 / Winter 2013



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Montefiore
Montefiore Einstein
Center for Heart &
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A Message from Robert E. Michler, MD, and Mario J. Garcia, MD

The past year was a very productive and positive one for the Center for Heart & Vascular Care. In 2012 we provided heart and vascular care to more patients than in any other year in the history of our institution. We believe this extraordinary growth is largely attributable to our terrific physician recruits and our ever-expanding range of services and procedures.

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HEARTLINE



To read more about the accomplishments of the Montefiore Einstein Center for Heart and Vascular Care, visit www.montefiore.org/heartline.



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Montefiore Einstein Center
for Heart & Vascular Care

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A Message from Robert E. Michler, MD, and Mario J. Garcia, MD

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The region's burgeoning cardiovascular demands make physician recruitment a top priority for our program. This year, we welcomed the following cardiologists to our ranks: Jessica Peña, MD, MPH; Hernando Orjuela, MD, FACC; Luigi DiBiase, MD, PhD, FHRS; and Anna Bortnick, MD, PhD. In addition, we welcomed the following vascular surgeons: Jennifer Stableford, MD; Charles Sticco, MD; and Jeffrey Kirk, MD. These talented physicians bring unparalleled experience and expertise to our program. They will help us expand our outreach efforts to the North and South Bronx, Yonkers, Westchester County and southern Connecticut.


Our ability to offer patients a renewed life continues to expand, especially with the availability of novel treatment options that were not obtainable only a few years ago. Our transcatheter aortic valve replacement (TAVR) program offers a less invasive technique for individuals with severe aortic stenosis who are not candidates for conventional open heart surgery. The prevalence of hypertension in the community recently led us to partner with Montefiore's Division of Nephrology to participate in the SYMPPLICITY HTN-3 clinical trial. This controlled trial seeks to determine whether renal denervation treatment is a safe and effective option to lower blood pressure for certain patients with uncontrolled hypertension. We continue to be national leaders in enrollment in the National Institutes of Health/National Heart, Lung, and Blood Institute (NIH/NHLBI) mitral valve repair trials, the atrial fibrillation trial and the stem cell/left ventricular assist device trial. As leaders in the research community, we are helping to design and participate in clinical trials for cardiac stem cell and gene therapies in heart attack and heart failure, novel options for risk reduction in TAVR, and the use of fractional flow reserve (FFR)-guided coronary artery bypass surgery.

Our success in this dynamic field can be attributed to our fierce pursuit of innovation combined with strong, visionary leadership. For a third consecutive year, the Society of Thoracic Surgeons awarded the heart surgery program the prestigious three-star rating. This is an exciting time for the Center for Heart and Vascular Care. We look forward to working with you to ensure that your patients reap every benefit of the world's most advanced heart care. Thank you again for your continued loyalty.

Sincerely,



Robert E. Michler, MD
Surgeon-in-Chief
Professor and Chairman
Department of Cardiovascular and
Thoracic Surgery and the
Department of Surgery
Samuel I. Belkin Chair
Co-Director, Montefiore Einstein
Center for Heart and Vascular Care



Mario J. Garcia, MD
Professor and Chief
Division of Cardiology
Pauline Levitt Chair in Medicine
Co-Director, Montefiore Einstein
Center for Heart and Vascular Care

“In 2012 we provided heart
and vascular care to more
patients than in any other
year in the history of
our institution.”



A Man with a Mission

Montefiore's new Division Chief of Cardiothoracic Surgery Sets His Sights on Expanding World-Class Services to the Tri-State Region



For Joseph DeRose, MD, being named Chief, Division of Cardiothoracic Surgery, and Co-Director, TAVR Program for Montefiore Einstein Center for Heart and Vascular Care, brings not just responsibility but also tremendous opportunity.

"Montefiore is unique in that we have this assemblage of world-class surgeons who choose to focus their efforts on caring for patients in the Bronx," says Dr. DeRose. "My job is to work with many of these doctors to identify and pursue new clinical avenues for Montefiore that will both further our mission to the community and solidify our position as a national leader."

More than this, however, Dr. DeRose is also responsible for heralding the word of Montefiore's advances in cardiac and thoracic surgery to local physicians.

"Dr. DeRose is going to play a very important role in reaching out to internists, primary care specialists and cardiologists in the tri-state area to help them understand the depth and breadth of our programs in adult cardiac and thoracic surgery," explains Robert E. Michler, MD, Surgeon-in-Chief, Professor and Chairman, Department of Cardiovascular and Thoracic Surgery and Department of Surgery, and Co-Director, Montefiore Einstein Center for Heart and Vascular Care. "This is a position of leadership, development and mentorship that I believe he is ideally suited to hold considering his expertise and accomplishments in these clinical areas."



It's been just a few months since Dr. DeRose's appointment, and already he is driving an impressive list of initiatives in both cardiac and thoracic surgery.

"We have several new programs that we're implementing in the area of aortic surgery," he says. "One of these focuses on reducing the mortality rates of individuals with acute aortic dissection. These patients need to be transferred quickly to a center, such as Montefiore, that specializes in the treatment of this condition. To help streamline this process we'll be publishing a dedicated phone number that referring hospitals can use in these cases."

Another program focuses on the treatment of individuals with thoracic aortic aneurysms using a stent graft instead of traditional medical therapy.

"We were recently selected as one of just 23 centers in the nation to participate in a prospective randomized trial studying the safety and effectiveness of a new endovascular graft for the treatment of this condition," explains Dr. DeRose. "This is an exciting trial that has the potential to offer these patients a greatly enhanced quality of life."

Dovetailing on its successful pediatric extracorporeal membrane oxygenation (ECMO) program, Montefiore has instituted an adult ECMO service that is available to referring centers in the region.

"We are using ECMO anytime a patient is in extremis, requires left ventricular assist device (LVAD) surgery or isn't getting enough oxygen – as in the case of chronic obstructive pulmonary disease or lung infection," says Dr. DeRose. "This is a very busy service, and we are getting referrals from all over the area. In grave situations we will even go out with the ambulance to implement ECMO on-site."





“Montefiore is unique in that we have this assemblage of world-class surgeons who choose to focus their efforts on caring for patients in the Bronx.”

Joseph DeRose, MD

Chief, Division of Cardiothoracic Surgery
and Co-Director TAVR Program
Montefiore Medical Center
Associate Professor
Albert Einstein College of Medicine

Robotic heart surgery continues to play a dominant role at Montefiore, and Dr. DeRose is a driving factor in its success. Over the past five years he has performed more than 160 robotic coronary artery bypass grafts (CABG) and pioneered the use of this technology in a procedure called hybrid CABG. The primary benefit of this approach is that it brings both cardiac and vascular surgeons into the same operating room simultaneously to treat patients who have blockages in several vessels.

“During this procedure—which is offered at fewer than 30 centers nationally—a CABG is performed, and then the vascular surgeon steps in to deliver drug eluting-stents to other vessels that present significant risk,” Dr. DeRose explains. “We are currently participating in a national, NIH-funded, prospective randomized trial to compare hybrid CABG to other methods of revascularizing the heart. So far, the results we’ve achieved have been great, particularly for people who are too sick for traditional open procedures.”

Now, Dr. DeRose is drawing upon his expertise and expanding his practice to include robotic thoracic surgery.

“We started offering robotic lung resections in August for individuals with early-stage or resectable cancers,” he says. “Typically, lung resections are open procedures that can be quite stressful for people who are very ill or smoke. The robotic approach reduces the physical strain and improves their recovery.”

Under Dr. DeRose’s watch, Montefiore is also building its minimally invasive esophageal program to include both thoroscopic and robotic options for patients with esophageal cancer and benign conditions such as reflux. He anticipates that this program will be up and running by early fall.

“I think it’s safe to say that Montefiore is on the threshold of something really great,” says Dr. DeRose. “We already have a successful heart transplant and LVAD program, and our notoriety in the treatment of complex valve disease continues to grow with the recent launch of our transcatheter aortic valve replacement program, which I co-direct. As these new programs take hold, Montefiore will truly be able to deliver on our pledge to bring world-class care to the community.” ❤️

Rare Procedure Saves Life of Unlikely Heart Patient

Kathleen O'Donnell is living proof that appearances can be deceiving.

At age 44 and in great physical condition, this hedge fund manager and part-time personal trainer seemed the picture of perfect health. Yet, on May 8, her heart revealed a very different story.

"I was working out in my home with a client when I began to feel light-headed," says O'Donnell. "My client went to get me a drink from the kitchen, and when she returned I was slumped over and had stopped breathing."

O'Donnell had gone into cardiac arrest.

It took first responders several attempts to resuscitate her and five days more before she regained full consciousness in the intensive care unit at Montefiore's Moses Campus.

"Those first few days were really touch and go," O'Donnell says. "My parish priest even came to read me my last rites."

O'Donnell learned she had severe mitral valve regurgitation, a critically serious heart disorder that causes blood to leak back across the valve and into her lungs rather than flowing forward into her arteries. It results in congestion of the lungs as they fill with fluid and is associated with fatigue, shortness of breath and eventually heart failure. This was a contributing factor in O'Donnell's cardiac arrest.

To treat her damaged mitral valve, Robert Michler, MD, Surgeon-in-Chief, Professor and Chairman, Department of Cardiovascular and Thoracic Surgery, Professor and Chairman, Department of Surgery, and Co-Director, Montefiore Einstein Center for Heart & Vascular Care, used an exquisite technical approach called the "butterfly procedure" to fix O'Donnell's damaged mitral valve. The butterfly procedure involves careful analysis of the diseased valve, visualizing in the mind's eye of the surgeon where to precisely cut a butterfly-shaped segment of abnormal tissue, and then creatively and meticulously suturing the delicate wings together again. Dr. Michler is one of only a few surgeons in the nation performing this remarkable procedure.



To view a video of Kathy O'Donnell's story, visit www.montefiore.org/heartline

"It is a privilege to hold a person's heart in one's hands. Restoring heart function and an excellent quality of life to our patients is our greatest reward. To see a beautiful young woman like Kathy O'Donnell returned to good health gives us great pride and appreciation for the skills of our team," says Dr. Michler. He adds, "Serious heart valve disease affects about one in every 40 Americans and is found equally among men and women. The challenge is properly diagnosing it, because the signs of mitral valve disease, fatigue or shortness of breath, can be easily misunderstood."

"Dr. Michler was lovely," says O'Donnell. "He explained everything to me so clearly and even showed me a video of the procedure beforehand. I know this would have made many people squeamish, but I thought it was really cool."

A week after her mitral valve repair, O'Donnell was fitted with a defibrillator by Soo Kim, MD, Attending Cardiologist, Montefiore Medical Center, to guard against future cardiac arrest.

Her symptoms are gone, and she returned to her full-time job. She even recently traveled to Ireland for a relative's wedding.

"I credit my life to the expertise of the doctors and nurses at Montefiore who cared for me," says O'Donnell. "They were consummate professionals and extremely helpful to both me and my family." ❤️



TAVR—Extending and Improving the “Golden Years”

Montefiore performed its first transcatheter aortic valve replacement (TAVR) cases in August, giving elderly patients with severe aortic stenosis who were too ill for surgery a chance at a better quality of life.

“We’ve been recruiting patients since March and have evaluated more than 30 people to date,” says David Slovut, MD, PhD, Director, Advanced Interventional Therapy, Montefiore.

“Typically these patients are over the age of 80, have significant co-morbidities and are symptomatic—meaning that they are experiencing pain in the chest, shortness of breath or syncope.”

During TAVR, a bioprosthetic valve is threaded through the femoral artery via a catheter and into the heart. Once in position, balloon dilation is performed to deploy the replacement valve and its frame within the diseased native aortic valve. The procedure is performed in a hybrid catheterization lab by a collaborative team that includes both interventional cardiologists and cardiac surgeons.

Among the first patients treated last summer was 94-year-old James Charlton, a father, grandfather and former professional baseball player in the Negro American League. This one-time athlete explains that his valve disease was severely affecting his quality of life.

“I was constantly short of breath and had a hard time walking,” says Charlton, who resides in the Bronx with his wife of 57 years. “Dr. Robert Forman, my cardiologist, referred me to Montefiore as a candidate for the TAVR procedure.”

After meeting with Drs. DeRose and Slovut and learning about the risks of TAVR, Charlton admits that he had some reservations.

“When I heard that there was a risk of stroke or death I didn’t think I could go through with it,” he explains. “But the doctors told me to take my time and not rush my decision.”

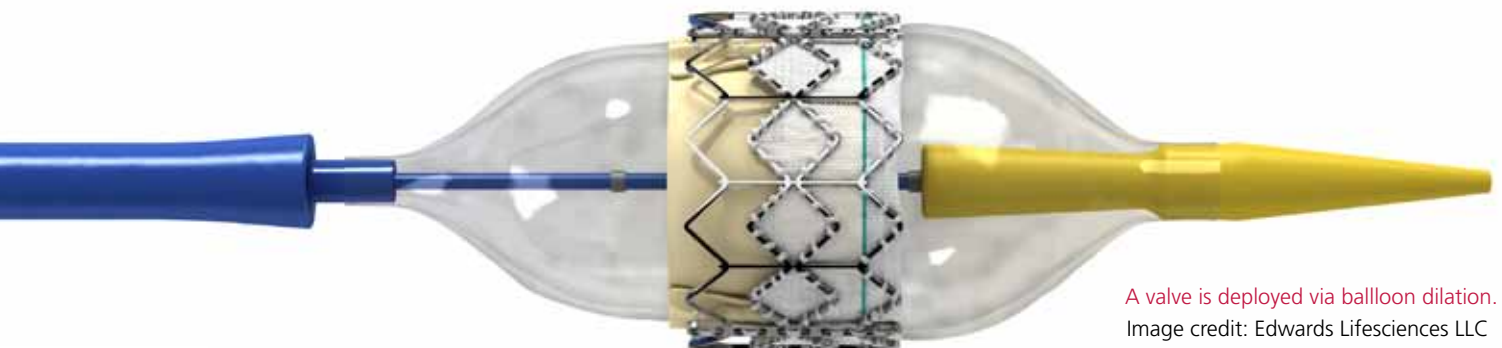
The following Sunday, Charlton and his wife went to church and prayed with his pastor and another parishioner about the decision. “I couldn’t even walk up to the altar because I was so short of breath—so they came to me,” he says. “I felt better after this and scheduled my surgery for August.”

Charlton, who was Montefiore’s first TAVR patient, says that he didn’t experience any pain and that the recovery has been great. In fact, he can now move about freely—with the aid of a walker—without feeling winded.

“In my 94 years, I’ve never been treated as well as I was at Montefiore,” he says. “This was the most important moment of my life, and I give the credit to God and Drs. Slovut and DeRose.”

“Knowing that there’s a chance they can potentially extend their lifespan and live without the limitations of this disease makes a real difference for these individuals,” says Joseph DeRose, MD, Chief, Division of Cardiothoracic Surgery and Co-Director, TAVR Program, at Montefiore.

Patients who would like to be considered for TAVR should be referred to Barbara Levine, Clinic Coordinator, at 718-920-6700. ❤️



A valve is deployed via balloon dilation.
Image credit: Edwards Lifesciences LLC



Making the Case for the Non-American Diet

Montefiore program gaining popularity and results with plant-based diet

Patients diagnosed with cardiovascular disease or at high risk for it are successfully losing weight, lowering their LDL cholesterol levels and even breaking the bonds of diabetes, joint pain and other chronic conditions. How? Through the Cardiac Wellness Program at the Montefiore Einstein Center for Heart & Vascular Care.

Launched earlier this year, the Cardiac Wellness Program strives to reverse and prevent heart disease through lifestyle changes. What differentiates the program from those offered by other hospitals and organizations is that it promotes the adoption of a whole food/plant-based diet, one that mirrors how people in rural China and the Tarahumara Indians in Mexico, eat—these populations have very little heart disease, according to Robert Ostfeld, MD, MSC, FACC, Director, Cardiac Wellness Program.

“People who fully embrace this type of diet feel better and achieve great results,” he says. “To be fully compliant, people have to give up certain types of foods, like meat and dairy, but once they discover how delicious and physically rewarding a more plant-based diet can be, they often don’t go back.”

For those who comply with this diet, the results speak for themselves. “I’ve seen people drop their LDL cholesterol between 60 and 80 points based upon diet alone,” says Dr. Ostfeld. “Others have reversed their diabetes or resolved their problems with angina, and multiple people have dropped between 15 and 20 pounds.”

Adopting Healthier Habits

“Populations with little or no heart disease thrive on a diet rich in fruits, vegetables and whole grains,” Dr. Ostfeld says. “When people move from these cultures move to the United States and adopt our eating behaviors, within a generation or two they are experiencing the same health issues as most others in this country.”

There is no charge to participate in the Cardiac Wellness Program, although people are asked to take part in all three of its components. These include:

- An initial consult visit with Dr. Ostfeld, during which patients can share their health concerns and goals.
- A four-hour educational session that arms patients with all the information they need to adopt the diet and other lifestyle changes.
- A follow-up visit and “check-in” phone calls as needed.

“During the educational session we cover everything from ‘soup to nuts,’” Dr. Ostfeld explains. “I teach participants about the scientific rationale behind this diet and how it helps them physically, and our nutritionist discusses how participants can incorporate this type of diet into their everyday lives. At the end of the session we serve a plant-based meal to show how delicious this diet can be and send people home with detailed handouts that they can reference.” Eight weeks after the session, participants meet with Dr. Ostfeld to discuss how they are doing and share any challenges they may be experiencing.

The program’s reputation in the region has grown to the point where Dr. Ostfeld has decided to add more sessions to accommodate the demand. To register for the Cardiac Wellness Program, call 718-920-5197. ❤️



Cardiologists Bring Experience and Expertise to Montefiore

Anna E. Bortnick, MD, PhD



“What attracted me to Montefiore was its established team of surgeons, interventionalists and imagers,” says Dr. Bortnick, Associate Director, Structural and Valvular Heart Disease, Montefiore Medical Center, and

Assistant Professor of Medicine, Albert Einstein College of Medicine. “The opportunity to bring new technology and options to a community in need appealed to me.”

Dr. Bortnick joins the Division of Cardiology from the Hospital of the University of Pennsylvania, where she recently completed fellowships in both interventional and general cardiology. She earned her medical degree and doctorate from Drexel University in Philadelphia, and she completed her internship and residency in internal medicine at Brigham and Women’s Hospital in Boston.

At Montefiore, Dr. Bortnick, who is board certified in internal medicine and cardiology, draws upon her expertise in minimally invasive surgery to provide patients with alternatives to open-heart surgery. She possesses significant experience in transcatheter aortic valve replacement (TAVR) through her participation in the groundbreaking placement of aortic transcatheter valves (PARTNER) trial and will help Montefiore expand its own TAVR program.

Dr. Bortnick will see patients at Montefiore Hospital and Weiler Hospital.

Hernando Orjuela, MD, FACC



“I’m looking forward to contributing to Montefiore’s outreach programs and to serving the Spanish-speaking population,” says Dr. Orjuela, Outreach Cardiologist, Montefiore Medical Center, and Associate Professor of

Medicine, Albert Einstein College of Medicine.

Dr. Orjuela joins Montefiore after 12 years in private practice. He earned his medical degree at Montemorelos University School of Medicine in Mexico, and he completed his internal medicine residency at Cabrini Medical Center in New York and a cardiology fellowship at Cabrini and The Mount Sinai Hospital, also in New York.

Dr. Orjuela – who specializes in clinical cardiology, echocardiography, nuclear cardiology and non-interventional invasive procedures – provides clinical consultation, general cardiology and nuclear cardiology services as well as diagnostic cardiac catheterization, esophageal and minimally invasive echocardiography, and other procedures at Montefiore.

He is board certified in echocardiography, nuclear cardiology and internal medicine, with a subspecialty in adult cardiovascular diseases, and he has conducted research in echocardiography and nuclear cardiology.

Dr. Orjuela will see patients three days a week at the Medalliance Health Services and Urban Health clinic locations.

The Bronx is one of the poorest urban counties in the United States and presents physicians with many challenges, from the medical and behavioral to socioeconomic and cultural barriers. Those who choose to practice at Montefiore are highly dedicated individuals who embrace the idea that their skills do indeed make a difference in the lives of their patients, many of them living with complex cardiovascular disease and co-morbidities such as diabetes or obesity.

“When we recruit physicians, we look for people who are exceedingly talented and who understand the importance of blending compassion and creativity into their work,” says Mario J. Garcia, MD, Professor and Chief, Division of Cardiology, Pauline Levitt Chair in Medicine, and Co-Director, Montefiore Einstein Center for Heart and Vascular Care. “I believe we have found that balance in our most recent additions.”

Jessica M. Peña, MD, MPH



“I was drawn to Montefiore because of the diversity of the patient population, and the leadership of Dr. Mario Garcia,” says Dr. Peña, Outreach Cardiologist, Montefiore Medical Center, and Assistant Professor of

Medicine, Albert Einstein College of Medicine. “I hope to conduct research in the community, make clinical trials available to Montefiore patients, and help develop a robust, culturally sensitive outpatient cardiology practice.”

At Montefiore, Dr. Peña, who is fluent in Spanish and provides a full range of noninvasive cardiology services, will focus her research on preventive cardiology—including the cardiovascular effects of statins and psychosocial stress. She will also conduct clinical trials to test the inflammatory hypothesis of atherosclerosis.

Dr. Peña served as principal investigator on the JUPITER trial, which explored statin therapy and the risks of atrial fibrillation, and she participated in the Dallas Heart Study, which examined left ventricular mass and wall thickness.

Dr. Peña joins Montefiore from her research fellowship at Brigham and Women’s Hospital in Boston. She earned her medical degree from Weill Cornell Medical College in New York and completed her residency in internal medicine at NewYork-Presbyterian Hospital. She is board certified in internal medicine, cardiovascular medicine, nuclear cardiology and adult echocardiography.

Dr. Peña will see patients primarily in outreach clinics.

Luigi DiBiase, MD, PhD, FHRS



“I look forward to helping build Montefiore’s cardiology practice through dedicated clinical practice in conjunction with cutting-edge clinical research,” says Dr. DiBiase, Attending Electrophysiologist, Montefiore

Medical Center, and Associate Professor, Albert Einstein College of Medicine. “By combining my expertise in atrial fibrillation with new technologies, I hope to help Montefiore become a center of care for this condition.”

Dr. DiBiase joins Montefiore from the Texas Cardiac Arrhythmia Institute in Austin, where he served as senior researcher. There, he conducted clinical trials in ablation approaches to atrial fibrillation and ventricular tachycardia.

At Montefiore, Dr. DiBiase will provide cardiology and electrophysiology treatments, including catheter ablation of atrial fibrillation and ventricular arrhythmias and treatment of heart failure with cardiac resynchronization therapy devices.

Dr. DiBiase earned his medical degree and completed a cardiology residency at the University of Bari, Italy. He holds a doctorate in cardiovascular and respiratory physiopathology, and he has completed research fellowships at the Cleveland Clinic Heart Center and the University of Texas Medical School Branch, and electrophysiology and pacing fellowships in both Italy and Austria.

Dr. DiBiase will see patients at Weiler Hospital.





**Montefiore Einstein Center for
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Video Highlights This Issue

Kathleen O'Donnell **PATIENT STORY**

With no signs or symptoms that anything was physically wrong, Kathleen O'Donnell, a 44-year-old hedge fund manager and part-time personal trainer, one day went into cardiac arrest while working out with a client. O'Donnell, a healthy living enthusiast, later discovered that she was suffering from severe mitral valve regurgitation, a critical heart disorder that causes blood to leak back across the valve and into the lungs. Mitral heart valve disease is a common problem that may be overlooked during a routine physical exam because of the faint, hard-to-identify heart murmur associated with it.

To read more about Ms. O'Donnell's treatment and successful recovery, visit www.montefiore.org/montefioreheartcenter/.



To view a video of her story, visit
www.montefiore.org/heartline

Mitral Valve Repair Surgery

Complex mitral valve surgery for Barlow's disease is a reliable and durable operation. This photo shows the heart of a 40-year-old with severe Barlow's disease and anterior leaflet prolapse, as well as a posterior leaflet prolapse with a severely extended posterior leaflet.



An important step in the operation is measuring the angioplasty ring to the anterior leaflet size and dimension in patients with Barlow's disease to ensure that systolic anterior motion (SAM) is prevented. Once the angioplasty ring is placed and inspected, saline is then injected into the left ventricle to alleviate any residual leakage. Having found none, the incision is closed.

The results of this operation confirmed normal leaflet height, no further prolapsing, a normal height to the posterior leaflet, and most important, the absence of mitral regurgitation.



To view Dr. Robert E. Michler's narrated video of this butterfly repair, visit www.montefiore.org/heartline