MHVI’s Christian Shults, MD, cardiac surgeon at MedStar Washington Hospital Center (left), and Mun Hong, MD, interventional cardiologist at MedStar Southern Maryland Hospital Center.

Connecting MHVI Throughout the Region

See page 4
Interconnectivity Brings High Level of Expertise to Far-Reaching Population

We’re leveling the playing field in cardiovascular care. In the simplest terms, this is the linchpin philosophy behind creating an interconnected network of cardiovascular services. The growth and expansion of MedStar Heart & Vascular Institute (MHVI) has always focused on increasing our capacity to bring a consistent, high level of expertise to a far-reaching patient population.

This connectivity is achieved through multiple platforms, systems and programs. In this issue of Cardiovascular Physician, you will read about several of our newest initiatives, aimed at bridging gaps in services and maximizing the effectiveness of MHVI’s clinical excellence.

CREATING PROFESSIONAL SYNERGY

Our cover story recounts a collaboration between two MedStar Heart & Vascular Institute hospitals−miles apart but connected through the professional synergy of Drs. Mun Hong and Christian Shults. Quick consultation and fast transport resulted in a positive outcome for a critically ill patient.

Another new program featured on these pages is focused on building an interdisciplinary complex aortic program at MedStar Union Memorial Hospital by harnessing the experience of a team of MHVI experts from throughout the system.

MULTIPLE MODES OF CONNECTIVITY

These examples of systemness represent ways we are improving the movement of information, expertise and people across distances. More and more of this connectivity is achieved virtually.

An interdisciplinary team is currently designing an extensive high tech advanced cardiac imaging system that will stretch across many MHVI hospitals. A cadre of advanced cardiac imaging experts at MedStar Washington Hospital Center and MedStar Georgetown University Hospital will be routinely scheduled to virtually review images in nearly “real time” for patients and referring physicians in network facilities dispersed across our geographic footprint. These experts will make immediate recommendations for next steps—everything from initiating an emergency response to an immediate cardiac crisis to instigating needed follow-up clinical care and/or diagnostic testing.

Finally, we are creating a consistent protocol to respond to the more than 20,000 patients who annually present in our EDs with symptoms of a stroke warning or heart attack. A multidisciplinary group of cardiologists, radiologists, neurologists and emergency physicians is developing standardized guidelines for clinical evaluation that includes diagnosis, treatment and disposition of these patients. No matter which emergency department patients enter, they will be cared for with a common evidence-based pathway of clinical care.

A very important component of this program is the capacity to schedule follow-up outpatient appointments for ED patients with the appropriate specialists before they leave the hospital. We believe that our role as healthcare professionals isn’t simply to deliver care in emergent situations. To truly “level the playing field” in cardiovascular care—and improve our community’s health—requires prevention, early diagnosis and prompt treatment for all our patients. We know we can’t achieve this ultimate goal unless we ensure that patients who need services get them in the “right” setting at the “right” time.
More than 2,300 participants gathered in Washington, D.C., in February for CRT17 at its 20th anniversary celebration. During the last two decades, the four-day meeting has evolved to include the largest international contingent of cardiovascular professionals and is today regarded as the nation’s leading cardiology conference.

“When we began CRT in 1997, we had an audience of just 400,” says Ron Waksman, MD, director of Cardiovascular Research and Advanced Education. “During two decades, participation has grown exponentially—attracting a diverse mix of cardiology professionals from throughout the U.S. and abroad.”

Highlights included:

• Keynote speaker Al Gore, former vice president of the U.S., who discussed the impact of climate change on the environment and the public’s health.
• Former Attorney General Eric Holder, who led a lively discussion about the disparities that continue to exist in health care.

In addition, at a first-of-its-kind 20/20 symposium, 20 prominent opinion leaders examined innovations that have revolutionized cardiology in the last two decades. Lectures included an historical examination of interventional cardiology, a review of the European perspective on personalized medicine, and a look at an industry model for technological innovation.

A special CRT 20/20 award was presented to Bram Zuckerman, MD, director, Division of Cardiovascular Devices at the FDA, for his ongoing support of the meeting’s educational mission, and for his long-time dedication to improve cardiovascular care in the United States.

Another first brought together a group of invited interventional cardiologists from the Veterans Administration for a discussion about the challenge of bringing new technology to their special population of patients.

Three individuals received the Top Cardiovascular Innovation Award in recognition of their work in the development of cardiovascular technology:

• Michael Whitman, BA; MIA™ Minimally Invasive Annuloplasty Device
• Ronald J. Solar, PhD; Endovascular Selective Cerebral Hypothermia for Neuroprotection
• Yoseph Shalev, MD; A Novel Design of Smart Wire and Actuator To Cross Chronic, Calcific Occlusion of Superficial Femoral Artery

Preparation is underway for CRT 2018, which will be held in Washington, D.C., March 3-6, 2018.
A community hospital can frequently provide all the services patients need. However, in complex cases, patients’ lives depend on the interconnected services that systems like MedStar Heart & Vascular Institute can deliver: collaboration, speed, expertise and the latest technology.

Temple Hills, Maryland, resident William Green is a case in point.

• On Feb. 8, Mr. Green, 72, a retired postal worker, arrives by ambulance at MedStar Southern Maryland Hospital Center’s Emergency Department (ED) in respiratory distress.
• An EKG shows diffuse ST changes, including ST elevation in the lead AVR. Interventional Cardiologist Mun Hong, MD, has Mr. Green intubated before taking him to the Cath Lab.
• Once there, Mr. Green goes into cardiac arrest with electromechanical dissociation. A Code Blue is called, and after 10 minutes of CPR, a pulse is established.
• After placing a guiding catheter in the left main coronary artery, Dr. Hong sees that this artery had become completely blocked. He immediately employs life-saving balloon angioplasty to open it.
• Although Mr. Green would have benefited from emergency coronary artery bypass surgery, time is of the essence. Dr. Hong stabilizes Mr. Green with an intra-aortic balloon pump and secures coronary blood flow with a left main stent.
• Mr. Green remains hemodynamically unstable and needs the additional advanced mechanical circulatory support of an “extracorporeal membrane oxygenation” (ECMO) machine, which more completely does the work of the heart and lungs. ECMO is available at MedStar Washington Hospital Center, 20 miles away. Both hospitals are part of MedStar Heart & Vascular Institute (MHVI).
• Using this invaluable network, Dr. Hong calls his colleague, cardiac surgeon Christian Shults, MD, at the Hospital Center and sends images through the ImageShare website.
Almost simultaneously, Mr. Green is transported via helicopter to the Hospital Center via MedSTAR Transport (“the flying ICU”).

Bypassing the ED, the transporters deliver Mr. Green directly to the Cardiovascular ICU, where the rooms are large enough to accommodate the bedside insertion of ECMO. This eliminates the need to go into the operating room.

Dr. Shults places Mr. Green on peripheral ECMO at the bedside, giving his heart the opportunity to rest and recover.

Over the ensuing week, Mr. Green is gradually weaned off ECMO support and discharged to recover at home.

Because the stent had been placed emergently and its critical location in the left main coronary artery, a follow-up angiogram is performed that shows 50 percent stenosis of the stent, as well as another coronary lesion, requiring bypass.

On May 19, Dr. Shults performs a coronary artery bypass grafting (CABG).

Today, Mr. Green is doing well.

MedStar Washington Hospital Center receives several patients a day like Mr. Green who need the complex technology and expertise available at the Nancy and Harold Zirkin Heart & Vascular Hospital. They are transferred there from MedStar hospitals, as well as from other hospitals throughout the mid-Atlantic.

Dr. Shults says the ability of MHVI to treat patients like Mr. Green is based on three essential elements:

1. The expertise of the staff—those at the Hospital Center as well as those in the community hospitals—to know which patients can benefit from MHVI’s resources;

2. Cardiac ImageShare, which rapidly transfers studies via our secure DICOM website using PACS connections, so specialists can review them as the patient is in transport;

3. MedSTAR Transport, which can reach doctors immediately and transport patients by helicopter or ambulance quickly.

William Green (center) is now recovering and resting comfortably at home.
MedStar’s highly effective interdisciplinary program to treat complex aortic disease, originally based at MedStar Washington Hospital Center, is expanding. Now, patients can also rely on the aortic team at MedStar Union Memorial Hospital, where vascular surgeon Raghuveer Vallabhaneni, MD, and cardiac surgeon Reza Abrishamchian, MD, are successfully collaborating to treat these challenging conditions.
The surgeons work together, caring for patients from the initial diagnostic appointment, through surgery, to recovery and rehabilitation.

“Care of these patients is complicated and so are the procedures for treatment,” says Dr. Vallabhaneni, who is director of Vascular Surgery for the Baltimore region. “Combining a cardiac and a vascular surgeons’ expertise as we evaluate each patient and develop a treatment plan means we can offer the best chance for a good outcome to our patients.”

Treatment options for patients with aortic pathology—which includes tears in the wall of the aorta (dissections); aneurysms of the aorta in the chest, abdomen or both; and other conditions—have been transformed as minimally invasive endovascular surgical procedures have evolved.

“For some patients requiring surgery, open repair procedures are the best option,” says Dr. Vallabhaneni. “But for most, endovascular options, such as stent graft repair for a thoracoabdominal aortic aneurysm, may be performed through a small incision under the collar bone and two small needle holes in the groin. We have seen patients in their 80s, who could not have tolerated the open procedure, have good outcomes and maintain their quality of life. We are now able to treat more than 90 percent of even the most complex pathologies in a minimally invasive fashion.”

The surgeons perform both open and endovascular procedures in a hybrid operating room, with sophisticated imaging that provides the level of precise detail necessary for the complex surgeries.

Dr. Abrishamchian believes that medical practice is shifting from a specialty-centric, siloed approach to one that is more inclusive and collaborative. “Many specialties can become involved in successfully treating complex aortic pathology—cardiac surgeons, vascular surgeons, critical care physicians, anesthesiologists, pulmonologists, nephrologists, and of course a range of other caregivers,” he says. “This collaborative, unified approach to health care is vital for patients with multiple conditions, and in all phases of their care.”

MedStar Union Memorial’s complex aortic program also offers the full resources of MedStar Heart & Vascular Institute, including regional transport, image sharing, dedicated cardiovascular ICU and 24/7 on-call team. “We’re able to offer services previously only available at large academic centers,” notes Dr. Vallabhaneni. “That is satisfying for us, and life-changing for our patients.”

“This kind of collaboration,” says Stuart F. Seides, MD, MHVI Physician Executive Director, “is representative of the continuing evolution of Union Memorial as a premier cardiovascular center.”

For consultation, contact:
Dr. Vallabhaneni at 410-554-2950 or Raghuveer.Vallabhaneni@medstar.net, or Dr. Abrishamchian at 410-554-6550 or Ahmad.R.Abrishamchian@medstar.net
Joel Patton was the quintessential picture of health, boasting a strong body and mind. An IT professional working on his PhD, the 33-year-old was a personal trainer during his off hours. Last May, his left foot began hurting, and he assumed it was an overworked muscle. When numbness and tingling followed, and he began walking differently, Mr. Patton sought medical advice.

Several doctor visits found little. But one alert physician recognized something was gravely wrong, and quickly referred him to Rajesh K. Malik, MD, RPVI, FACS, a vascular surgeon at MedStar Washington Hospital Center.

“By then, Mr. Patton’s left foot was ischemic—rubric, red and cold to the touch,” says Dr. Malik. It required immediate treatment.

“When Dr. Malik described the blood clot and noted that amputation was a possibility,” says Mr. Patton, “it was a horror story coming true.”

RARE AND DANGEROUS THROMBOSIS

A thrombosis this severe is rare in young adults, Dr. Malik says. He started Mr. Patton on a heparin drip and began diagnostic tests. “A CT-angiogram confirmed extensive thrombosis at the left popliteal artery,” Dr. Malik says. “Blood flow was restricted from the knee to his foot.”

The thrombosis was so extensive, and had gone untreated for so long, that finding options for bypass was difficult. “Endovascular/minimally invasive surgery wasn’t possible, and open surgery was risky,” says Dr. Malik. “In an open procedure, we might have been able to take a piece of vein from above the popliteal artery, remove the clot and create a bypass. But the risk of failure was great.”

TACKLING TOUGH CHOICES

“Other surgeons might have opted to bypass,” Dr. Malik says. “But I thought we should sit tight and watch.”

Within a few days, some feeling returned to Mr. Patton’s foot.

“There was some improvement—the blood thinner was doing its job,” says Dr. Malik, but the clot’s cause remained unclear. A complete work up, including an MRI, pointed to a rare condition called popliteal artery entrapment syndrome.

Mr. Patton’s muscles and tendons near the knee were compressing the popliteal artery, restricting blood flow to his lower leg. “The muscle band was not in the correct position,” Dr. Malik says. “Because it was a birth anomaly, we knew it would also be present in his right leg.”

The condition is most often seen in young athletic patients with no other vascular problems. Their workouts enlarge the calf muscle, resulting in compression of the artery.

CORRECTING A BIRTH ANOMALY

Dr. Malik believed corrective surgery to release the entrapped muscle would provide a cure for Joel.

“I entered through the back of the knee, and resected the muscle band,” he says. “We then performed an angiogram to visualize blood flow, and immediately saw tremendous improvement, from just 20 percent to 80 percent. A month later, I performed the same procedure on the right leg.”

The surgeries were successful, and Mr. Patton is currently in physical therapy to regain his strength.

For a consultation, contact Dr. Malik at 202-877-0275 or Rajesh.Malik@medstar.net
A CT-angiogram confirmed extensive thrombosis at the left popliteal artery. Blood flow was restricted from the knee to his foot.

—Rajesh Malik, MD

Popliteal artery entrapment occurs when the muscles and tendons near the knee compress the popliteal artery, restricting blood flow to the lower leg.

“I’m working smarter now. At this point, my knees talk to me! I’m not running and not doing squats, but I’m ready to start intensive physical therapy. I’m grateful I put my confidence in Dr. Malik. He saved my leg.”

—Joel Patton
FDA Approves PFO Occluder for Stroke Prevention

Long-Term Data Shows Superiority to Medical Management

After years of patient follow-up data, a lingering doubt among cardiologists and neurologists has finally been put to rest: The AMPLATZER™ PFO Occluder is better than anticoagulation alone for patients with stroke who have a patent foramen ovale (PFO).

In October 2016, the FDA approved the device after reviewing data from 1,000 patients participating in the longitudinal, nationwide RESPECT trial. MedStar Washington Hospital Center, under the direction of principal investigator Lowell Satler, MD, was a lead site for RESPECT, enrolling the first patient into the seminal study.

“This green-light marks a major shift in how we manage stroke patients with a proven PFO, particularly those younger than 60,” says Dr. Satler, an interventional cardiologist and medical director of the hospital’s Catheterization Lab. “Results demonstrate a 50 percent reduction in the incidence of repeat ischemic stroke among this population when treated with the occluder versus medical management.”

“Previous studies didn’t show any advantage over medical management, historically the standard treatment,” Dr. Satler says. “It wasn’t until researchers followed patients long enough that the occluder’s importance and benefits finally shone through.”

Robert Laureno, MD, chief of Neurology at MedStar Washington Hospital Center, participated by evaluating potential study participants before and after PFO implants. He calls the occluder a “valuable and viable new approach.”

“Previously, we only had two options for preventing subsequent strokes due to PFO,” he says. “Lifetime anti-coagulation or anti-platelet therapy, or major open surgery to close the hole. Now specialists have another alternative.”

Deciding who is an appropriate candidate for the PFO occluder is a complex task, best achieved by a cardiologist and neurologist working together. Patients with cryptogenic stroke must first undergo a series of tests to rule out other potential causes, including atrial fibrillation (see related story, page 11) and carotid atherosclerosis. Once PFO has been pinpointed as the likely culprit, a patient is further evaluated to assure the opening is anatomically suitable for closure.

**If you have a patient you think may benefit from this device, contact the MedStar Structural Heart and Valve Disease Center, at 202-877-5975.**

“Results demonstrate a 50 percent reduction in the incidence of repeat ischemic stroke among this population when treated with the occluder versus medical management.”

—Lowell Satler, MD
In late February, MedStar Heart & Vascular Institute at MedStar Washington Hospital Center became the first facility in the northeastern United States to implant a new left atrial appendage (LAA) occluder under an investigational device exemption. Designed to pick up where WATCHMAN™ leaves off, the AMPLATZER Amulet device could potentially expand the pool of people eligible for the former’s ground-breaking approach to LAA closures and stroke prevention.

Currently, MHVI is the only institution in Washington, D.C., Maryland and Northern Virginia to offer the alternative device. Like WATCHMAN, Amulet is only appropriate for certain patients with non-valvular atrial fibrillation who are at high risk for not only stroke but also bleeding from long-term anti-coagulant usage. Where Amulet differs, however, is in its reduced device length, which allows it to accommodate more diverse anatomies than the longer WATCHMAN, and in its elimination of the 45-day post-procedure blood thinner requirement. The latter is particularly relevant, says cardiac electrophysiologist Manish Shah, MD, principal investigator of the Amulet trial at MHVI, and the designated physician proctor for WATCHMAN within our metropolitan area.

“Between 20 and 30 percent of all stroke patients have AFib, so anything we can do to reduce their risk is a huge step forward,” he says. “By removing anti-coagulation from the equation, Amulet offers us another alternative to help manage stroke risk among vulnerable patients while protecting them from dangerous gastrointestinal or intracranial bleeds.”

Eligible study participants are randomly assigned to receive either Amulet or WATCHMAN, currently the only FDA-approved LAA closure device in the U.S.

- Patients in the WATCHMAN control group adhere to the standard protocol: warfarin for 45-days post-procedure followed by clopidogrel (Plavix®) and then baby aspirin therapy.
- For the Amulet patients, warfarin is replaced by a 60-day regimen of aspirin and clopidogrel after implantation before tapering off to baby aspirin alone.

The Amulet trial is currently taking place at around 50 sites throughout the U.S., Australia and Europe, with the goal of studying 1,600 patients over seven years.

If you have a patient you believe may benefit from, or be eligible for, the Amulet trial, please contact Manish H. Shah, MD, principal investigator, at 202-877-7685 or Manish.H.Shah@medstar.net.
Recently MedStar Franklin Square Medical Center expanded its services to include cardiac computed tomographic angiography (CCTA). This procedure allows physicians to see highly detailed imaging of a patient’s arteries, to determine whether they have been narrowed by plaque buildup.

Cardiology Chief Sriram Padmanabhan, MD, conducted Franklin’s first cardiac CT angiogram in the hospital’s Emergency Department. “The images were good,” he says, “the transmission was flawless, and the report was available within a very short time. All involved did their part superbly.”

The new service is a system-wide cooperative venture. Once test images from Franklin Square are in the MedStar PACS system, physicians based at MedStar Washington Hospital Center, which does a high volume of cardiac studies, read the results and generate a report within a few hours. The ED physician is then able to make a decision on next steps for the patient’s care.

CCTA can be an excellent option for patients who have chest pain but low-to-intermediate risk factors for heart disease. Dr. Padmanabhan says, “The test is quick and simple, with relatively low radiation exposure, and is comparatively low-cost. This imaging modality gives us a lot of information relatively easily. For appropriate patients with the appropriate indications, this test helps us determine whether their pain is coming from the coronary arteries.”

MedStar’s push to provide imaging services is resulting in better options for patients, he continues. “Cardiac CT is often only available at very large medical facilities, so having the ability as well as the trained physicians and staff to perform this test at Franklin Square is extremely useful,” he says. “This is a wonderful new service to be able to provide.”

In April, the Vascular Access Clinic opened in a newly renovated space in the MedStar Washington Hospital Center’s Physicians Office Building, South Tower. The service has also made an administrative move and is now under the clinical oversight of the Department of Vascular Surgery within MHVI.

The clinic is devoted entirely to patients requiring the expert initiation and maintenance of dialysis access, a busy service for the hospital with more than 2,000 dialysis access procedures performed annually.

The clinic’s medical staff has expanded to keep pace with demand for services. A multidisciplinary team is led by three highly experienced surgeons: Alejandro Aquino, MD, Jesse Garcia, MD, and Faris Hakki, MD. The team is available 24/7 to respond to all patient needs.

“The shift of the clinic into the Department of Vascular Surgery makes sense for both patients and referring physicians,” explains Edward Woo, MD, director, MedStar Vascular Program. “We’ve eliminated overlapping services and consolidated care through this clinical realignment.”

“The new clinic space has been designed with patients’ comfort in mind and also to accommodate the high volume of procedures we perform,” adds Brooke Patton, PhD, assistant vice president for vascular surgery. “We’ve also improved coordination of services and continue to work hand-in-hand with nephrologists and all referring physicians to deliver optimal care.”
MHVI’s Section of Cardiac Electrophysiology (EP) opened a new clinic in Manassas, Va., where EP physicians provide outpatient office care for patients who live close by. This brings the total to 15 EP sites, distributed across our geographic footprint, where patients can be evaluated (see below).

“It embodies our ethos of ‘Above all, patients first,'” says Zayd Eldadah, MD, PhD, director, Section of Cardiac Electrophysiology at MedStar Heart & Vascular Institute. “The doctors go where the patients live, rather than have patients from distant suburbs drive into Washington, D.C.”

He says that satellite offices are a win-win for patients, the local hospitals, and MHVI. “Patients often prefer not to travel to D.C. for simple interventions or follow-up visits. Local hospitals support many procedures and welcome the expertise of MHVI electrophysiologists, allowing the specialized MHVI EP procedural suites, for example at MedStar Washington Hospital Center, to focus on complex therapies, such as atrial fibrillation and ventricular tachycardia ablation.”

With the continued increase in referred procedural volume, Dr. Eldadah says the EP lab at the Hospital Center has already initiated the process of designing and building additional procedure capacity.
**Federico Asch, MD, FACC, FASE,** has assumed the directorship of the Cardiovascular Core Laboratories at MedStar Health, which has provided services for more than 150 multi-center trials, including multiple studies on the effects of medications on valvular and ventricular function, prosthetic valve assessments and intracoronary therapies. Dr. Asch succeeds Neil Weissman, MD, who is president of the MedStar Health Research Institute.

Dr. Asch’s own research is focused on myocardial viability, 3-D echocardiography, contrast echocardiography, and structural heart disease. He has been widely published in a number of nationally respected professional journals, and serves as principal investigator for the Genetically Triggered Thoracic Aortic Aneurysms and Cardiovascular Conditions (GenTAC) study sponsored by NHLBI. He also is co-investigator for the Surgical Treatment for Ischemic Heart Failure (STICH) trial sponsored by NIH, and the WASE normal valves study sponsored by the American Society of Echocardiography and MedStar.

Dr. Asch says of his new position, “In this very successful and highly respected lab developed by Dr. Weissman, I hope to further expand our operations to areas of new need in the growing world of cardiac imaging and structural heart disease, specifically to expand our presence in the percutaneous treatment of mitral and tricuspid valve disease and our cardiac CT/MRI core lab services. In addition, I hope to expand our scientific productivity with MedStar investigator-initiated projects.”

Dr. Asch is a graduate of the Universidad de Buenos Aires Medical School and completed a cardiology fellowship at Instituto Cardiovascular de Buenos Aires in Argentina. He completed an echocardiography fellowship, and his residency and fellowship in cardiovascular disease at the MedStar Georgetown University Hospital/MedStar Washington Hospital Center/DC VA Medical Center program.

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**Jonathan Patrick, MD,** Cardiology, received the 2017 Nurses’ Choice Physician Collaboration Award at MedStar Washington Hospital Center during Nurses Week in May. Awards are given to clinicians whom nurses feel represent the best in teamwork and excellence in patient care.

“For our physician colleagues,” says Susan Eckert, RN, MSN, senior vice president and chief nursing executive, during the awards ceremony, “this means that you have gone the extra mile to sustain a high reliability team that encourages and supports those who put patients first.”

Comments by the nurses included, “The best doctor ever. Always gentle, and if something is needed he provides it immediately. Always engaging the new nurses and taking them into consideration. An amazing cardiologist. Every doctor should be like him.”
Malik Al-Omari, MD, is joining MedStar Heart & Vascular Institute (MHVI) as a cardiologist at MedStar Southern Maryland Hospital Center in Clinton, Md. Dr. Al-Omari comes to MHVI from the Mayo Clinic Health System where he was an assistant professor of medicine and an interventional cardiologist. Dr. Al-Omari is board certified in interventional cardiology, cardiovascular disease, echocardiography, nuclear cardiology and internal medicine. His research has been published in numerous prestigious journals, and has primarily focused on an improved understanding of hypertension in African-Americans.

He received his medical degree from Jordan University of Science and Technology and completed his interventional cardiology fellowship at the University of Tennessee Health Center, Memphis. He completed a fellowship in cardiology at the Mayo Clinic (Jacksonville) Program and an advanced heart failure and transplantation fellowship at the Mayo Clinic in Rochester. Dr. Al-Omari served his residency in internal medicine residency at Seton Hall University School of Health and Medical Sciences Program, South Orange, NJ.

Dr. Al-Omari’s clinical and research interests include:

- General cardiology
- Interventional cardiology
- Peripheral vascular disease (PVD)
- Heart failure
- Echocardiography
- Heart disease in minority populations

Maria E. Litzendorf, MD, has joined the vascular surgery team of MedStar Heart & Vascular Institute. Dr. Litzendorf will be focused on growing a specialized vein program at MedStar Health at Lafayette Centre located in downtown Washington, D.C., along with her practice of general vascular surgery.

Dr. Litzendorf completed a fellowship in vascular surgery at The Ohio State University Medical Center and her internship and residency in general surgery at Boston University Medical Center. She received her medical degree from Eastern Virginia Medical School. Board-certified in general surgery and vascular surgery, Dr. Litzendorf is also certified in wound healing and hyperbaric medicine. She has been an active researcher and educator during her career, is published in a number of professional journals and has authored book chapters.

Her special clinical and research interests include:

- Peripheral vascular disease (PVD)
- Diabetic foot care and limb salvage
- Management of venous insufficiency and varicose veins

Reza Abrishamchian, MD, has joined the staff of MedStar Heart & Vascular Institute (MHVI) as a cardiac surgeon at MedStar Union Memorial Hospital in Baltimore, Md. Prior to joining MHVI, Dr. Abrishamchian served as chief of cardiac surgery at the Washington Health System in Washington, Pa. He is board certified by the American Board of Surgery and the American Board of Thoracic Surgery.

A graduate of the St. George’s University School of Medicine, Grenada, West Indies, Dr. Abrishamchian received a master in public health in epidemiology from Emory University’s Rollins School of Public Health, in Atlanta, Ga.

He completed his post-graduate training at the University of Maryland Medical Center where he served as chief resident of cardiothoracic surgery. He also served as chief resident in general surgery at the Albany Medical Center, Albany, NY.

Dr. Abrishamchian also completed fellowships in minimally invasive cardiac surgery research and a post-doctoral research fellowship in cardiothoracic surgery research focusing on heart failure and cardiac assist devices at The Ohio State University.

Dr. Abrishamchian’s clinical interests include:

- Coronary artery bypass grafting (CABG)
- Heart valve surgery, repair and replacement including TAVR
- Aortic reconstruction including endografts
- Ventricular assist devices and heart failure surgery
Cardiovascular Physician is a publication of MedStar Heart & Vascular Institute. It is a forum to share clinical, research and teaching information in cardiology, cardiac surgery and vascular care.

Please submit editorial comments to Norma Babington, at norma.babington@medstar.net, or 202-877-0201.

Visit our website, at MedStarHeartInstitute.org.

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