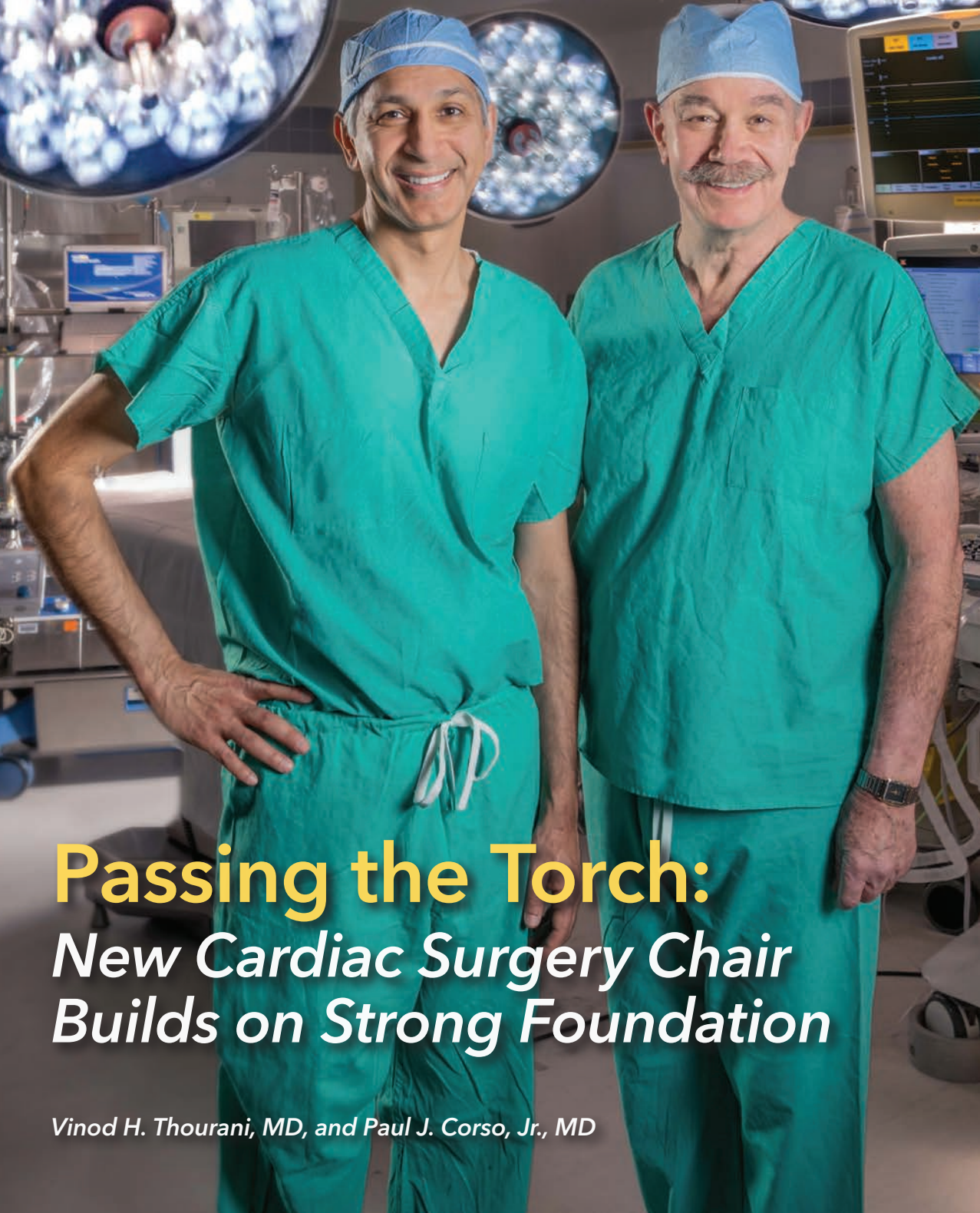


CARDIOVASCULAR  
**Physician**



**Passing the Torch:**  
*New Cardiac Surgery Chair  
Builds on Strong Foundation*

*Vinod H. Thourani, MD, and Paul J. Corso, Jr., MD*



## A Powerful Union for Improved Care



Today, blurred lines may actually be creating greater clarity in cardiovascular care. By blending technical skills and judgment, cardiologists and cardiac surgeons are narrowing the traditional divides that can impede care.

Patients are gaining real advantages, as cross training, the number of physicians with multiple subspecialty accreditation, and multi-specialty centers of care grow.

At MedStar Heart & Vascular Institute, we take pride in our long tradition of collaboration between cardiovascular physician specialists. Going back to the earliest days of coronary revascularization, our cardiologists and cardiac surgeons have had a commitment to collegial interaction. While this approach is increasing nationwide, our network has long been ahead of the curve. It's clearly demonstrated in our approach to the care of patients with structural heart disorders.

For many years, interventional cardiologists focused on imaging and repairing coronary artery disorders. Structural heart disease posed a more perplexing problem. But in the late 1980s we dipped our toes into treating valve diseases with early devices and percutaneous repair. Since then the management of structural disease has evolved—with TAVR to replace aortic valves, newer mitral valve repair and replacement technology, PFO closure, and the emergence of tricuspid valve intervention.

Concurrently, cardiac surgeons have been mastering new skills outside the operating room, adding catheter-based intervention to their professional portfolios. This hasn't resulted in competition between two specialties, but instead sustained an environment that puts a premium on teamwork.

### BLENDING EDUCATION AND KNOWLEDGE

This trend is evident in the background and expertise of MHVI's new Chair of Cardiac Surgery, Vinod H. Thourani, MD. We introduce you to Dr. Thourani in this issue of *Cardiovascular Physician*—and to the MHVI team of highly experienced cardiac surgeons on pages 4 and 5.

Dr. Thourani is a nationally recognized leader in cardiothoracic surgery—and in the development of innovative percutaneous and minimally invasive valve procedures. At Emory Midtown Hospital, where he served as professor and chief of cardiothoracic surgery before joining the MedStar team, Dr. Thourani helped develop and co-directed its Structural Heart and Valve Center. Like our multidisciplinary valve clinic, the Emory center was built with the vision to blend techniques and philosophical approaches across specialties.

You can read more about the MedStar Structural Heart and Valve Clinic on the adjacent page. Staffed by interventional cardiologists, imaging experts, and cardiac surgeons, it represents this new and improved care philosophy in which blinders are off, knowledge is blended, and what's best for patients takes center stage.

We are building strength upon strength. Our widely renowned cardiac surgical program has achieved exceptional national recognition by the Society of Thoracic Surgeons, which has given its highest three-star rating to all three tracked surgical procedures at MedStar Washington Hospital Center: coronary artery bypass grafting (CABG), aortic valve replacement (AVR) and combined AVR and CABG—a distinction achieved by fewer than 5 percent of cardiac surgery programs nationwide.

### CHANGING PRACTICE

We're absorbing the latest data, clinical research results, and our own experiences to evolve new practice paradigms. And this isn't true just in the treatment of structural heart disorders. We are pushing the envelope in our diagnosis and treatment of coronary artery disease as well.

Excellence thrives at MedStar Union Memorial Hospital, where a new Radial Lounge has been specially designed for a more comfortable recovery of patients who have had radial coronary intervention. Radial access is performed in well over 80 percent of cases at the hospital and provides real benefits to eligible patients. This new program is highlighted on pages 14 and 15.

To quote the Law of the Instrument, "If the only tool you have is a hammer, you are likely to treat everything as if it were a nail." At MedStar Heart and Vascular Institute, we have assembled the full toolbox in order to provide the best treatment decision for each individual patient.



(L to R) Interventional Cardiologists Ron Waksman, MD, Itsik Ben-Dor, MD, and Lowell Satler, MD, with Yi Zhang, NP, and Cardiac Surgeons Paul Corso, MD, Christian Shults, MD, and Vinod Thourani, MD, staff the new Valve Clinic at MedStar Washington Hospital Center.

## COORDINATED CARE FOR COMPLICATED CONDITIONS

Last September, the MedStar Heart & Vascular Institute launched the area's first comprehensive, multidisciplinary program devoted to diagnosing and treating disorders of the aortic, mitral, and tricuspid valves.

Long in the making, the new Valve Clinic is the brainchild of Drs. Paul Corso and Lowell Satler, who envisioned consolidating traditional surgical, minimally invasive, and transcatheter-based valvular care under one umbrella.

"We've had all the pieces in place, just not the formal structure," says Dr. Satler, an interventional cardiologist and medical director of the Valve Clinic. "Now we have our own space, complete with six exam rooms, dedicated clinical protocols, and an accomplished nurse practitioner/clinic coordinator to help us collaborate even more closely."

Using a team approach, the Valve Clinic features highly skilled cardiologists, interventional cardiologists, cardiac surgeons, radiologists, advanced practice clinicians, specialty nurses, and others, working together with referring physicians and patients. Their combined expertise and experience guide treatment decisions, and help patients make more informed choices for optimal outcomes and satisfaction.

"In the best hospitals, the days of doctors making complex cardiovascular decisions in a silo are over," says Vinod Thourani, MD, new chair of Cardiac Surgery, who's a vocal proponent of multidisciplinary collaboration. "I believe this is especially true in structural heart and valve disease where there are now standard, minimally invasive, and transcatheter approaches to all the valves in the heart."

"When different specialists come together, contribute their unique perspectives, and work out the best overall treatment strategy, patients benefit. It really amounts to personalized care that is tailored to what's best for each individual, not to what technique an individual physician knows best."

### Heart Valve Disease: Earlier Identification, Better Results

The American Heart Association®/American College of Cardiology's latest guidelines suggest that aortic, mitral, and tricuspid valve disease is undertreated, to the detriment of many patients.

The Valve Clinic is designed to improve the early identification of such patients so treatment can be initiated before damage progresses. Conditions amenable to earlier intervention include:

- Aortic stenosis
- Aortic regurgitation
- Mitral valve stenosis
- Mitral valve regurgitation
- Tricuspid disease
- PFO/ASD closure deficit
- Left atrial appendage closure for patients with non-valvular atrial fibrillation

Through commercial applications and a wide range of research studies, the Valve Clinic offers patients the full spectrum of open and percutaneous interventions, such as transcatheter aortic valve replacement (TAVR) even for certain low-risk patients, and transcatheter mitral valve repair.

**For more information or to arrange a consult, please call 202-877-5975.**





## MEET VINOD THOURANI, MD



Vinod Thourani, MD, (fourth from right), is leading the MHVI team of cardiac surgeons who are advancing the field of cardiothoracic surgery. (L to R) Dipin Gupta, MD; Michael Fiocco, MD; Reza Abrishamchian, MD; Ezequiel Molina, MD; Steven Boyce, MD; Jennifer Ellis, MD; Ammar Bafi, MD; Vinod Thourani, MD; Christian Shults, MD; Paul Corso, MD; and Peter Hill, MD, medical director, Cardiac Surgery.

## NEW CARDIAC SURGERY CHAIR BRINGS WELL-ESTABLISHED BACKGROUND IN ACADEMIC SURGERY, EDUCATION AND RESEARCH

For Vinod H. Thourani, MD, new chair of Cardiac Surgery for the MedStar Heart & Vascular Institute (MHVI), the stars must have been aligned.

He was professor of Surgery and Medicine, co-director of the Structural Heart and Valve Center, and chief of Cardiothoracic Surgery at Emory Midtown when MHVI's long-time surgical leader, Paul Corso, MD, decided to transition out of his chairmanship. Ready for a new role, Dr. Thourani says he saw a rare opportunity to join "one of the very few hospital systems in the nation with a formal, functioning program dedicated to valve therapies."

Stuart F. Seides, MD, MHVI physician executive director, saw the potential for a match made in heaven.

"Dr. Thourani is the rising star in his generation of cardiovascular surgeons," says Dr. Seides. "He brings a strong and well-established background in academic surgery, education, and research to MHVI, which, under Dr. Corso, has become one of *U.S. News & World Report's* 50 best cardiovascular centers in the nation. I am confident that Dr. Thourani will build upon our achievements and further secure our position as one of the nation's premier heart and vascular institutes."

That's a tall order.

MHVI is already one of the highest volume programs in the nation for mitral valve surgery, and among the busiest programs on the East Coast for transcatheter aortic valve replacement (TAVR). Between MedStar Washington Hospital Center and MedStar Union Memorial Hospital, MHVI performs more than 375 TAVR procedures annually and nearly 12,000 catheterizations.

The prestigious Society of Thoracic Surgeons—home of the world's premier clinical outcomes registry for adult cardiac surgery—has just added another accolade to the Institute's list of accomplishments. It awarded MedStar Washington Hospital Center three stars, the society's highest ranking, in all three of its categories: CABG alone, Aortic Valve Replacement (AVR) alone, and combined AVR/CABG.

"These honors are tangible tributes to the high-quality program that Dr. Corso built over the past twenty years, and to MHVI's remarkable history and culture of innovation and achievement in patient care," Dr. Thourani says.

*"It's an exciting time  
to work in heart care  
and I'm thrilled  
to be at the  
epicenter here  
at MHVI."*

—Vinod H. Thourani, MD

### ON THE FRONTLINE OF A NEW FRONTIER

To start his tenure, Dr. Thourani is focusing first on an area where he is an acknowledged authority and where MHVI is already ahead of the curve: structural heart disease.

"The Structural Heart Disease Program is one of the things that really attracted me to MHVI," says Dr. Thourani, tracing the Institute's decade-long involvement in the new sub-specialty back to its participation in the initial clinical trials for TAVR. "Now, in collaboration with MHVI's renowned team of interventional cardiologists and surgeons at MedStar Washington Hospital Center and MedStar Union Memorial Hospital, my goal is to further advance our leadership position in the field."

Toward that end, he is already expanding the Institute's existing research portfolio. Shortly after his arrival, Dr. Thourani—national co-principal investigator for the Edwards Cardioband System ACTIVE clinical trial—brought the pivotal study to MedStar Washington Hospital Center.

"Cardioband is a transcatheter-based mitral valve repair system that approaches its target through the femoral vein," explains Dr. Thourani. "With the ACTIVE trial now in place, MHVI is one of the first five sites in the nation and the only one in the mid-Atlantic able to offer this innovative technique to qualified patients with advanced heart failure."

As the national principal investigator for the JenaValve™ Pericardial TAVR study for aortic valve leakage, Dr. Thourani expects to introduce this FDA trial to MHVI by the summer of 2018, with additional studies anticipated along the way. Altogether, he currently serves as either the national principal investigator or member of the executive committee for seven major new surgical and transcatheter trials on valve repair and replacement devices.

"Through research and clinical trials, we're truly pushing the frontiers of what's possible in cardiovascular care," he says. "MHVI is a great place to do that, as it combines the benefits of an academic medical setting

with efficiency and flexibility. As a result, our clinician/researchers can quickly bring promising new therapies and techniques to bear upon our patients' care, even as we continue to produce excellent outcomes for the sickest of the sick."

### A LIFELONG PURSUIT

Pushing the frontiers is something Dr. Thourani has done since childhood.

"From the time I was eight or nine, I knew I wanted to be a doctor," he says, recalling summer days shadowing his cardiologist father. "He'd let me use the stethoscope, watch EKGs and just hang around in his clinic. It was great!" But in medical school, he "fell in love with" anatomy and surgery, and never looked back. After a research fellowship in cardiothoracic surgery, he delved even deeper into the heart, becoming mesmerized by the valves.

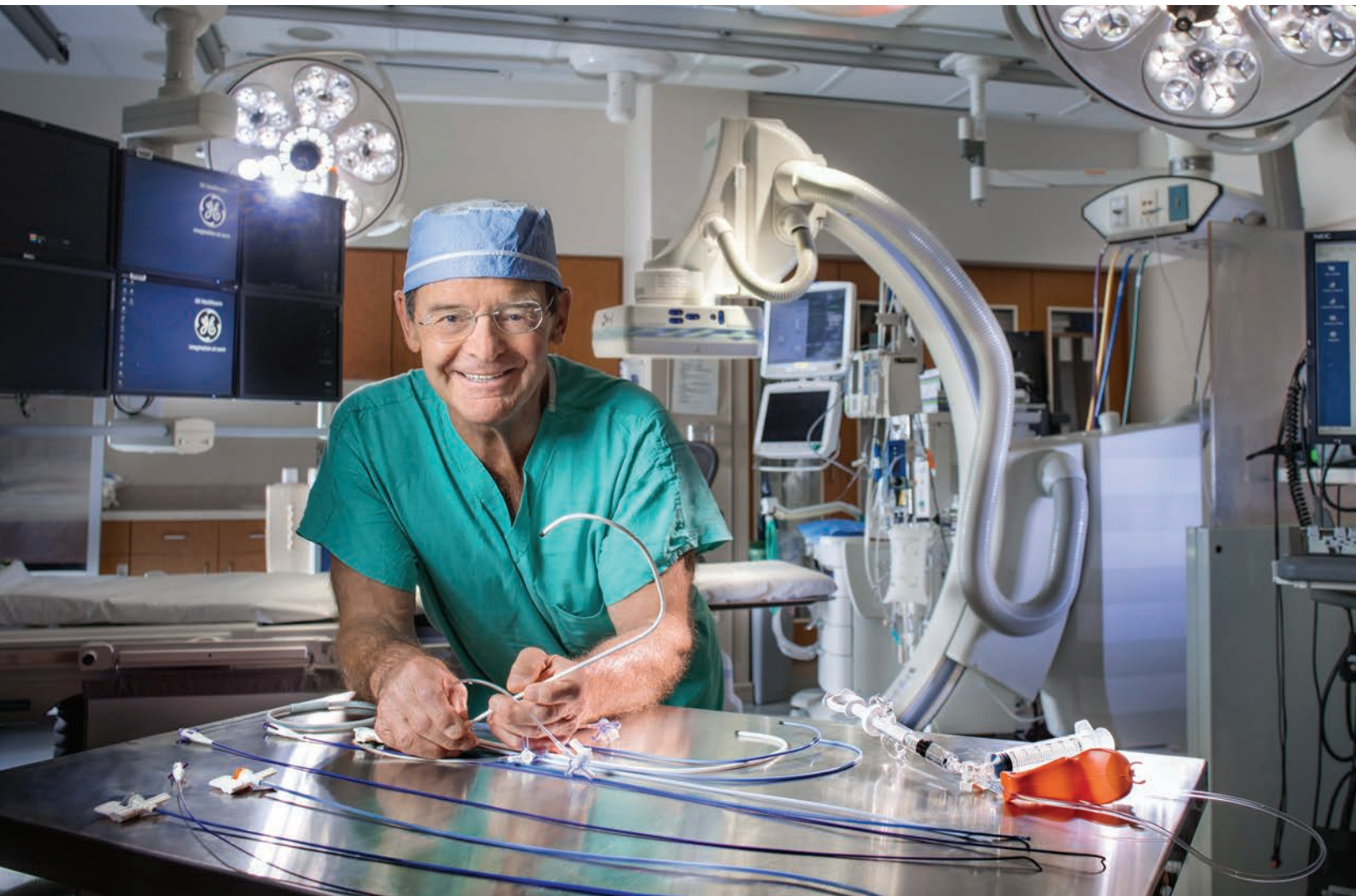
"They're like little individual organs that live inside a larger one," says Dr. Thourani, who was among the vanguard of cardiac surgeons to start specializing in structural heart disease when the field was in its infancy. "I was fascinated by the complexities of their repair or replacement."

Dr. Thourani expects the incidence of structural heart disease, mostly a condition of old age, to rise as more Americans live longer.

"The field of cardiovascular care, and particularly structural disease, is only going to grow," Dr. Thourani concludes. "With its emphasis on structural heart disease, MHVI is on top of that wave. Working as a team, I want to contribute to the Institute's reputation for excellence in patient care and satisfaction, education, and research, and help move us to the next level."

"It's an exciting time to work in heart care, and I'm thrilled to be at the epicenter here at MHVI."





## Worley Brings Groundbreaking Cardiac Treatment Expertise to MHVI

Eighteen years ago, Seth Worley, MD, began developing new tools and techniques to make it easier for physicians to implant electronic pacing leads in the heart's left ventricle (LV) to treat heart failure. Known as interventional device implantation for cardiac resynchronization therapy, Dr. Worley's unique approach is internationally recognized and relied upon as a breakthrough method for treating patients with heart failure.

By applying Dr. Worley's innovations, cardiac electrophysiologists can implant LV leads more quickly and substantially reduce radiation exposure. His unique procedure also offers a higher success rate, thereby improving patient quality of life, cutting hospital stays and eliminating the need for more invasive surgical procedures.

Dr. Worley joined MedStar Heart & Vascular Institute (MHVI) at MedStar Washington Hospital, becoming the tenth physician in the Section of Cardiac Electrophysiology, a senior consultant of Cardiac Rhythm Device Management, and director of the MHVI Interventional Implant Program.

He recalls how his knack for building began by watching his father, Pittsburgh-area plastic surgeon Carl M. Worley, MD, invent devices to protect patients undergoing complex facial reconstruction.

"I had this natural curiosity to see what my dad was doing during all those hours in the basement," he says. "As I went from watcher to helper, I got used to the idea that if there's a problem, you try to figure out a way to fix it."

That hands-on experience gave the younger Dr. Worley a high comfort level with both electricity and electronic devices as he entered Temple University Medical School in the mid-1970s, sparking his interest in the emerging field of cardiac electrophysiology (EP).

"As a new discipline, EP offered many opportunities for innovation," he says. "It really was a natural fit."

Dr. Worley proved to be a prolific researcher as well. During his subsequent 30-year career at Lancaster General Hospital in Pennsylvania, he led dozens of studies and clinical trials, analyzing the viability and effectiveness of new treatment approaches, some of which challenged the then-current thinking of his peers.

Cardiac resynchronization therapy would prove to be the culmination of Dr. Worley's personal and professional commitment to improving patient care. Tapping those innate problem-solving skills honed during the many hours spent with his father, he repeatedly shaped and reshaped the tiny tools he felt would overcome anatomic challenges that had made placement of LV electrodes difficult, if not impossible.

As his techniques were proven and accepted, Dr. Worley found himself in demand as a teacher. For the last several years, his monthly training program has attracted physicians from around the world to watch him demonstrate the tools and techniques on patients who have had a failed implant attempt at another center, or when a previously implanted lead does not achieve the desired clinical effect. Often, physicians attending the program will accompany their own patients for the procedure.

Dr. Worley looks forward to continuing his role as researcher and teacher at MHVI, ensuring that patients with heart failure continue to benefit from his work.

"That personal connection with the patient, and what he or she would experience, is what keeps me going," he says.

### INTERVENTIONAL DEVICE IMPLANTATION FOR CARDIAC RESYNCHRONIZATION THERAPY



Seth Worley, MD, uses his own innovations to treat heart failure patients who have had a failed left ventricular lead implant attempt at another center, or when a previously implanted pacing lead does not achieve the desired clinical effect. His unique procedure also offers a higher success rate, thereby improving patient quality of life, cutting hospital stays and eliminating the need for more invasive surgical procedures.

***Before sending a patient for a surgical epicardial lead or accepting ineffective cardiac resynchronization therapy, consider a consultation with Dr. Worley. Contact him at 202-877-7685 or Seth.Worley@Medstar.net***





# CRT18

CARDIOVASCULAR RESEARCH TECHNOLOGIES  
MARCH 3 - 6, 2018  
OMNI SHOREHAM HOTEL | WASHINGTON, DC

CRT 2018 Keynote Address:  
President Barack Obama, Monday, March 5

## Celebrating Four Decades of PCI Innovation

In early March, the annual conference *Cardiovascular Research Technologies: Impact Your Practice* takes on a celebratory tone in recognition of the 40th anniversary of the advent of percutaneous coronary intervention—and the dramatic effect this innovation has had on cardiology.

“The meeting will pay homage to the rapid expansion of percutaneous treatment options for previously untreatable cardiac disorders and disorders for which surgery was once the only option,” says Ron Waksman, MD, CRT course chairman and director of MedStar Health Cardiovascular Research.

### BOUTIQUE STYLE; SIX TRACKS

The meeting features its popular boutique style with à la carte offerings in six tracks: Coronary; CRT Valve and Structural Heart; CRT Endovascular; Technology and Innovation; Atherosclerosis and Research; and Nurses and Technologists.

The conference, March 3 to 6 at the Omni Shoreham Hotel in Washington, D.C., is expected to draw its largest crowd yet. “We expect 3,000 attendees—a diverse international mix of physicians, fellows, nurses and allied health professionals, regulators, and industry reps,” Dr. Waksman says. “It’s a chance to sit at the table together, network and share ideas.”

### PRESIDENT OBAMA KEYNOTES

On Monday evening, March 5, President Barack Obama will deliver the Keynote Address. “I’m proud to say that President Obama is the third former President to address a CRT conference. We’re especially excited to have President Obama with us and anticipate a timely look back at his time in office and a look ahead at the future of health care in the U.S.,” Dr. Waksman adds.

### DIVERSE CURRICULUM

With a faculty of 500, the meeting offers a rich curriculum with some special highlights. It includes a look at the growth of percutaneous interventions for structural heart disease and an update on current research in aortic, mitral and tricuspid valve replacement. In addition, panelists will review the growing momentum in research to test the use of new devices in the treatment of peripheral artery disease.

One panel of experts will look at the current scope of knowledge in the prevention of atherosclerosis—and another examines the ins-and-outs of social media as an effective way to disseminate information.

The Women in Interventional Cardiology Symposium returns with some unique features, including a live case presentation from Mt. Sinai Hospital with a female patient and all-female medical team. This is one of six live case presentations that will be featured from medical centers across the U.S. and abroad.

The Women and Heart Disease Luncheon—now in its 10th year—highlights the importance of fitness to disease prevention with Keynote Speaker Dolvett Quince, well-known fitness expert and former trainer for *The Biggest Loser*.

At the Sunday evening symposium hosted by the Association of Black Cardiologists, former Congresswoman Donna Edwards draws on her personal experience to address Disparities and Closing the Gap. An accomplished legislator who was diagnosed with MS in 2016, Edwards gives a first-hand look at health disparities—and at ways to close the racial divide in care.

### FDA: REGULATORS, INDUSTRY, AND INNOVATION

Three sessions held in conjunction with the FDA are devoted to the intersection of technological innovation and regulation. The Town Hall returns featuring two keynoters: Peter Fitzgerald, MD, PhD, of Stanford University, Director of Cardiovascular Innovation; and Michael Mahoney, President and CEO of Boston Scientific.

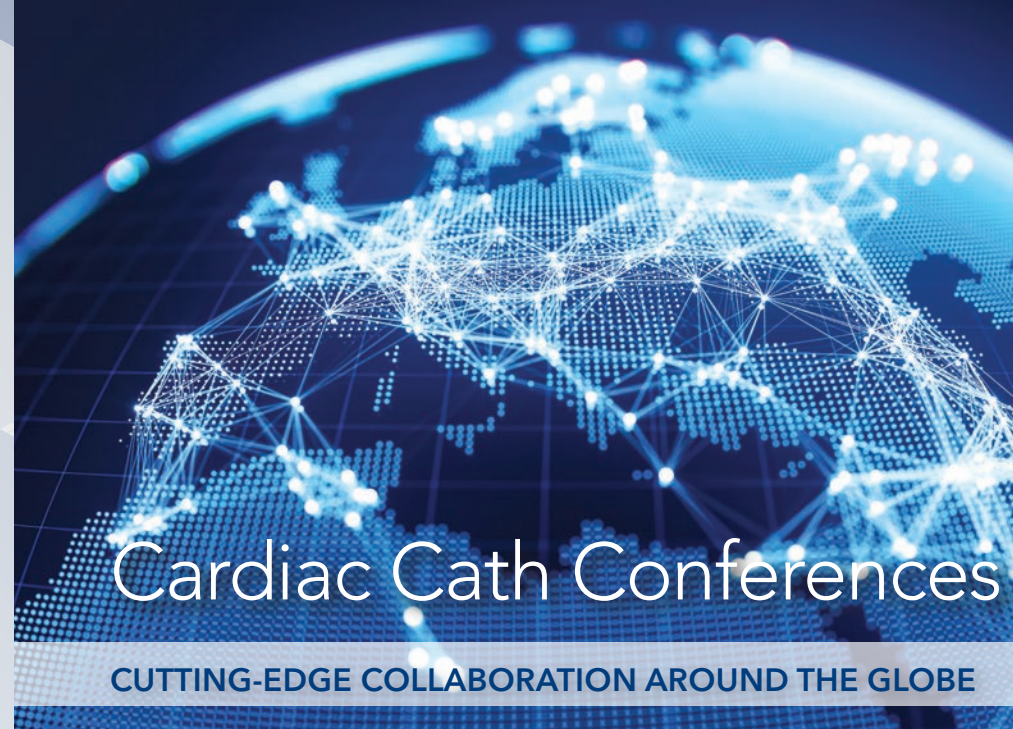
Another FDA-focused session highlights the differences between the U.S. and Japan, and a third session focuses on regulation of the newest structural heart disease devices.

### PROMOTING INNOVATION; ENCOURAGING ACADEMIC AND CLINICAL EXCELLENCE IN YOUNG LEADERS

The Young Leadership Recognition Program will acknowledge clinical and academic excellence in physicians practicing interventional cardiology. And once again, the Best in Innovation awards will recognize the most ingenious inventions, innovations, and therapies.

“Finally, in a continued effort to support the next generation of cardiovascular specialists, we are hosting a seminar to provide fellows with tips on finding a position following their training,” Dr. Waksman adds.

For more information and to register, visit [CRTmeeting.org](http://CRTmeeting.org).



## Cardiac Cath Conferences

CUTTING-EDGE COLLABORATION AROUND THE GLOBE

Every Wednesday, 50 or more cardiovascular specialists routinely file into MedStar Washington Hospital Center’s Cardiovascular Training & Education Center (CTEC) auditorium for an opportunity that is anything but routine: the chance to hear what’s new in the field, direct from the newsmakers themselves.

For the next hour or so, experts from as far afield as Boston or Budapest, Seoul or Seattle, will discuss their latest research. Sometimes, research results are replaced by case studies involving investigational devices. Regardless of the topic, each conference is followed by a question-and-answer session so attendees and the speaker, often many miles and international time zones apart, can further explore what was presented, all in real time.

The weekly event is the MHVI Cardiac Cath Conference—an extraordinary, long-standing, continuing medical education program. It’s designed to expose the Institute’s interventional cardiologists, cardiac surgeons, imaging specialists, fellows, residents and other health care professionals to the latest thinking from the world’s pre-eminent heart hospitals, universities and research institutes.

It’s also a monumental undertaking, made possible through the wonders of Cisco WebEx, and the labors of Lowell Satler, MD.

“Dr. Satler reviews the top cardiac medical journals as soon as they come out and contacts the principal investigators of the studies he thinks might be most informative or provocative,” says Eileen Searson, MHVI’s manager, Transformational Technologies, who coordinates the events.

Each presentation is broadcast directly to CTEC, while colleagues from MedStar Georgetown University Hospital and MedStar Southern Maryland Hospital Center participate from their own cath labs. Community cardiologists may listen in remotely. Presentations are recorded and posted online.

“We’re in a period of unprecedented growth in novel techniques and technologies in cardiac care,” says Dr. Satler. “Through this forum, our physicians can gain access to the latest in cardiac research and remain ahead of the knowledge curve.”

To view past presentations, visit [www.CRTonline.org](http://www.CRTonline.org) and scroll down to MHVI Cath Conferences. To find out how you can attend upcoming presentations, please contact Eileen Searson at 202-877-2704 or [Eileen.M.Searson@Medstar.net](mailto:Eileen.M.Searson@Medstar.net)



### HOSPITALS PARTICIPATING IN MHVI CARDIAC CATH CONFERENCES 2016-2017

#### Northern Europe

Rigshospitalet: København, Denmark  
Academic Hospital Maastricht: Maastricht, Netherlands  
Erasmus MC: Rotterdam, Netherlands  
Academic Medical Centre: Amsterdam-Zuidoost, Netherlands  
Catharina Hospital Pharmacy: Eindhoven, Netherlands  
Medisch Spectrum Twente: Enschede, Netherlands

#### Europe

Asklepios Klinik St. Georg: Hamburg, Germany  
German Heart Centre Munich / Deutsches Herzzentrum: Munich, Germany  
Heart Center Leipzig GmbH: Leipzig, Germany  
University of Lübeck: Lübeck, Germany  
University Hospital Carl Gustav Carus Dresden Heart Center: Dresden, Germany  
Universitäts-Herzzentrum: Bad Krozingen, Germany  
Asklipieio Voulas: Voula, Greece  
Simmelweis University: Budapest, Hungary  
Universita' Cattolica Del Sacro Cuore: Rome, Italy  
Parrocchia Di Santa Chiara: Pisa, Italy  
Università Degli Studi: Catania, Italy  
Azienda Ospedaliero-Universitaria di Bologna Policlinico S. Orsola-Malpighi: Bologna, Italy  
University of Padua: Padova, Italy  
San Luca: Florence, Italy  
San Raffaele Hospital: Milan, Italy  
Hospital Clínico: Valladolid, Spain

#### United Kingdom

North Bristol NHS Trust: Bristol  
University Hospital of Wales: Cardiff  
Sheffield Teaching Hospitals NHS Foundation Trust: Sheffield  
University of Leeds: Leeds  
University of Leicester: Leicester  
King's College London: London

#### USA

Central Arkansas Veterans Healthcare System: Little Rock, Ark.  
Cedars-Sinai Medical Center: Los Angeles, Calif.  
Rady Children's Hospital: San Diego, Calif.  
VA Eastern Colorado Health Care System: Denver, Colo.  
University of Miami, Miller School of Medicine: Miami, Fla.  
Jackson Memorial Hospital: Miami, Fla.,  
Grady Memorial Hospital: Atlanta, Ga.  
Beth Israel Deaconess Medical Center: Boston, Mass.  
Brigham and Women's: Boston, Mass.  
Tufts Medical Center: Boston, Mass.  
University of Michigan Medical Center: Ann Arbor, Mich.  
Spectrum Health: Grand Rapids, Mich.  
Mayo Clinic: Rochester, Minn.  
University of Minnesota Medical Center, East Bank: Minneapolis, Minn.  
Saint Luke's Mid America Heart Institute: Kansas City, Mo.  
Hackensack University Medical Center: Hackensack, N.J.  
Mt Sinai Medical Center: New York, N.Y.  
Presbyterian Hospital - Columbia University Medical Center: New York, N.Y.  
Vanderbilt University Medical Center: Nashville, Tenn.  
Fort Belvoir Community Hospital: Ft Belvoir, Va.  
Harborview Medical Center: Seattle, Wash.  
Wisconsin Heart Hospital: Milwaukee, Wis.

#### Canada

University Hospital-London Health Sciences Centre: Ontario  
Institut universitaire de cardiologie et de pneumologie de Québec: Québec  
Vancouver General Hospital: Vancouver, British Columbia

#### Middle East

Carmel Medical Center: Haifa, Israel  
Tel Aviv Medical Center: Tel Aviv-Yafo, Israel

#### Asia

Medanta Heart Institute: Haryana, India  
Shonan Kamakura General Hospital: Okamoto, Japan  
Okayama Medical Center: Okayama City, Japan  
Asan Medical Center: Seoul, South Korea

#### Australia

St. Vincent's Hospital Melbourne: Fitzroy  
The Queen Elizabeth Hospital: Woodville South





# VADs: The Heart of the Deal

(L to R) Steven Boyce, MD; Tonya Elliott, RN, MSN; and Samer Najjar, MD

In 1988, patients diagnosed with heart failure (HF) faced a grim future, with steadily worsening health and few donor hearts available for transplantation. But that year an exciting new technology became available: a Left Ventricular Assist Device (LVAD or VAD), which boosted the function of the left ventricle until a donor heart became available. Patients who lived in the Washington, D.C., area were particularly fortunate, as MedStar Washington Hospital Center was among the first in the nation to test this treatment option for the sickest patients. The device was implanted next to the heart, with power leads that extended outside the body and connected to a large pneumatic pump, which required patients to remain hospitalized and tethered to the machine until a donor heart became available.

Today, patients with advanced HF still have the option of a VAD, and Washington is one of the 10 busiest sites for VAD implantation in the country, with excellent clinical outcomes. In 2017, cardiac surgeons implanted more than 80 VADs, each the size of two "D" batteries, with a wearable battery pack. Even better, the device is seen as a more long-term solution to advanced HF. One Hospital Center VAD patient has lived an active life for 10 years.

Clearly, a lot has happened in 30 years. "The devices have gotten smaller and more reliable," says Steven Boyce, MD, a cardiac surgeon at MedStar Washington Hospital Center who has been on the leading edge of VAD development. Devices can now supplement the right ventricle, and a biventricular device supports both left and right ventricles. Newer devices also can be used in more patients, including some children.

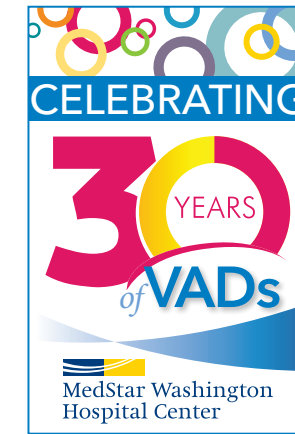
"VADs offer patients with HF a new lease on life," says Samer Najjar, MD, director of the advanced heart failure program at the Hospital Center. "We're committed to offering our patients the latest technology with long-term support."

**First generation**—The HeartMate® VAD was introduced in 1987 at a few hospitals. The original device used a large pneumatic pump, which was replaced with a portable electric motor in 1990 that allowed greater mobility. These devices used a pulsatile action to draw blood in from the left ventricle and push blood out through the aorta. The FDA approved the HeartMate in 1994 as a bridge to transplantation.

**Second generation**—In 2006, continuous flow VADs were introduced, offering a big improvement over their predecessors by using centrifugal flow or axial flow pumps. These pulse-less pumps were powered by wearable battery packs. The HeartMate II® was approved in 2009 as a bridge to transplantation and then in 2010 as destination therapy.

**Third generation**—The newest VADs were introduced in 2008, when Dr. Boyce implanted the nation's first HeartWare® device. These new devices suspended the impeller in the pump with hydrodynamic or electromagnetic suspension, eliminating the need for bearings and reducing the number of moving parts to one, making them virtually "wearless." The HeartMate3® was just approved for short-term use, and the HeartWare pump for long-term use.

Dr. Boyce played a leading role in the development of the HeartWare VAD, working with the manufacturer to design the device. He has worked with VADs since 1990 and is a firm believer in their utility. He has devoted himself to improving the device so it can be used for longer time in a wider group of patients.



"Heart failure is the number one cause of death in the world," Dr. Boyce says. "We still only have about 2,500 donor hearts each year, and we've made little progress in medications that extend life. VADs offer a big step forward for end-stage patients."

Tonya Elliott, RN, a VAD coordinator at the Hospital Center, has worked with VADs since 1990. "When I was in nursing school 35 years ago, we advised patients with advanced HF to get their affairs in order," she says. "Now with VADs, we've had patients live active lives for many years."

The mission now is to educate the public about their use and get more people to consider VADs. "We're only helping 5 percent of the population that would benefit," Dr. Boyce says. To this end, he has developed a website dedicated to VADs—mylvad.com.

Survival rates for VADs and heart transplants are the same for the first two years after implantation. VADs offer a substantial benefit when compared to medications, but heart transplants remain the gold standard for treating heart failure.

"We've made great progress in this journey," Dr. Boyce says. "We still have a long way to go." On the horizon is HeartWare's MVAD pump, a miniature device the size of a thumb. It should be available within the year.

"We can now say that dying of HF should be an elective decision," Dr. Boyce concludes. "VADs will definitively change the course of mortality for heart failure patients."

## Ventricular Assist Devices Facts & Figures

—National Institutes of Health

**5.7 Million** ADULTS IN THE U.S. HAVE HEART FAILURE.

**THE INCIDENCE OF HEART FAILURE IS 10 PER 1,000 POPULATION AFTER AGE 65.**

**8 Million** BY 2030, MORE THAN 8 MILLION PEOPLE WILL HAVE HEART FAILURE, AN INCREASE OF 46 PERCENT.

**HALF OF THOSE WHO DEVELOP HEART FAILURE DIE WITHIN FIVE YEARS OF DIAGNOSIS.**

**\$30.7 Billion** HEART FAILURE COSTS THE NATION AN ESTIMATED \$30.7 BILLION EACH YEAR.

### VADs THROUGH THE YEARS

**1989 to 1994**  
Implantable Pneumatic (IP)



**1994 to 2012**  
Extended Vented Electric (XVE)



**2006 to present**  
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# Doctors Seeking FAME (not Fame!)

Having limited resources to treat unusually sick patients would dismay many doctors, but cardiologist Reed Shnider, MD, finds it a great challenge.

The Foundation for African Medicine and Education, (FAME) is Dr. Shnider's passion and one he enjoys introducing to other physicians. An eight-year medical staff member of MedStar Cardiology Associates, Dr. Shnider first started travelling to the Tanzanian center with his daughter, pediatrician Rachel Shnider, MD, in 2011.

## EVOLUTION OF FAME

FAME was founded by the husband and wife team of Frank Artress, MD, and Susan Gustafson in 2002, after a simultaneously terrifying and enlightening experience on Mt. Kilimanjaro.

Knowing they had more to give in their lives, they sold all of their possessions in California and moved to Tanzania to begin operating mobile clinics out of the Rift Valley Children's Village in 2004. After completing construction on their Outpatient Clinic in Karatu in 2008, they started on a hospital, laboratory, and operating facility. By 2013, FAME's roots reached deep within the community. What began as an outpatient clinic is now a 24-bed hospital and outpatient facility staffed by 50 physicians and nurses with two ORs, Radiology and Ultrasound, an Emergency Department, Recovery Room/ICU, Blood Bank and Lab, and Mother and Child Care Center. Cardiology now includes multiple EKG machines, telemetry monitoring, and a dedicated Echo (which Dr. Shnider is training the Tanzanian physicians to use).

## "JUST CARE FOR PATIENTS"

Since the initial trip in 2011, Dr. Shnider has missed only one annual visit to FAME. In some aspects, he says, practicing medicine feels much simpler at FAME. Without the concept of malpractice, and with no insurance companies to navigate, doctors are able to solve problems, and attend to each patient's needs with acute attention to detail. And without the advantage of electronic medical records and other common communication technologies, doctors work more closely with each other and the patients. It is this close, human interaction that helps prevent Dr. Shnider from feeling burned out and "allows me to do what I was meant to do: just care for patients."

Each trip lasts around three weeks and has provided Dr. Shnider with the opportunity to focus on patient care, palliative care, and diseases he rarely sees in the states. From treating rheumatic fever and congenital heart disease to caring for hyena bites, the issues are varied and include the need to treat traditionally western diseases like diabetes and hypertension as the culture adapts.

One of the most difficult issues facing the doctors is treating the people without judging or condemning their cultural practices. The Masai people continue to practice female genital mutilation. Providing care, he says, "in that environment where you don't think their actions are morally correct is so difficult, but it is something doctors need to learn how to do."

As a doctor, he feels it is his responsibility to help the people "feel comfortable and bring their children to the center for treatment without judgment," but learning to let go of his own sense of how to live is a hard, but essential, lesson to learn.

## LEARN FROM PATIENTS WITH DIFFERENT BACKGROUNDS

Dr. Shnider returned to FAME this December and brought with him Nazeer Mahmood, MD, one of the next chief residents in Internal Medicine at MedStar Washington Hospital Center. Dr. Mahmood says he feels very fortunate to have this opportunity, even though he used his vacation time and paid for the trip himself. "It was an amazing, eye-opening experience for me," he says. "I saw conditions I'd only read about, eumycetoma and brucellosis, for instance."

He came away with a deeper appreciation for all we have in the United States, but said it's a double-edged sword. "There, you rely on the history and physical much more. With limited resources and tests available, that's all you have to go on. It makes you a better doctor." But he also watched patients die, including a toddler, because they didn't have the resources to treat them—resources easily available and taken for granted in the U.S.

In addition to treating patients, he and Dr. Shnider made several presentations on basic management of diseases to the medical staff there. "They soaked it up," Dr. Mahmood says. "They can handle routine conditions, but anything complicated, they just don't have the training or experience. They are, however, willing to learn, and teaching them was just as rewarding."

Dr. Shnider is hopeful that by continuing to bring other doctors from MedStar Health to Tanzania he will be able to establish a strong exchange between FAME and MedStar. While common medical tools like computers, Echo Doppler, and EKG machines are available to improve the diagnoses and prognoses for the patients, the most important healing device is simply giving his time.

As for Dr. Mahmood, he says, "I'll definitely be going back. They need our help. They need our resources."

*If you'd like more information about FAME, please contact Dr. Shnider at [Reed.M.Shnider@Medstar.net](mailto:Reed.M.Shnider@Medstar.net).*



Physicians Reed Shnider, MD (on left, in second photo of top row) and Nazeer Mahmood, MD (beside Dr. Shnider) treat patients and help train medical staff at the Foundation for African Medicine and Education (FAME) in Tanzania.





Interventional cardiologists at MedStar Union Memorial Hospital in Baltimore offer patients a safer, more pleasant and cost effective experience by performing the majority of their cardiac catheterizations using a radial approach. This allows patients to recover in the new Radial Lounge before leaving a few hours later. Left to right are Nauman Siddiqi, MD; John Wang, MD, chief of the Cardiac Cath Lab; and Antony Kaliyadan, MD.

A new dedicated space at MedStar Union Memorial Hospital is helping to transform the experience of patients who need interventional cardiac catheterizations. The Radial Lounge is an innovative setting for a procedure that is at the forefront of cardiac care—plus it's the only facility of its kind in the Baltimore area.

"The landscape of cardiac care is changing," says George Ruiz, MD, chief of cardiology at MedStar Union Memorial. "Growing numbers of physicians are becoming enthusiastic practitioners of the radial method of cardiac catheterization, and more patients are asking for it. And MedStar cardiac interventionalists are helping to lead that change."

There are good reasons for the popularity of the procedure, explains John Wang, MD, chief of the cardiac catheterization lab at MedStar Union Memorial. "There are clear and compelling benefits including increased patient safety and comfort, as well as cost savings," he says.

Physicians performing the radial procedure access a patient's coronary arteries via the radial artery in the wrist, instead of using the femoral artery in the groin. That means patients can sit upright after their catheterizations and move around during recovery.

"In the past, patients needed to lie flat for hours to reduce the risk of bleeding, which many of them said was the worst part of the catheterization," says Dr. Wang. "With the radial approach, there is virtually no post-procedure bleeding, and immediately after, patients can sit up, move around, get a drink or go to the bathroom. Patients leave within a few hours of their procedure."

Releasing patients the same day also makes the procedure more cost-effective. "Instead of us monitoring people overnight for possible complications, they are able to return home," says Dr. Wang. "That's not only preferable for them, but we have more beds available for patients with emergent or severe health conditions. And because the

risk of major vascular complications is almost zero, there is also very little need for prolonged monitoring of these patients."

The new lounge, used exclusively for radial procedures, resembles a high-end waiting area with a large open space outfitted with recliners and amenities such as a wide screen TV, computer station and refreshments.

"It's a welcoming space, and there's a sense of familiarity because everyone is having the same procedure," says Cheryl Lunnen, vice-president of MedStar's Heart & Vascular Institute for the Baltimore region. "Instead of a clinical look with individual bays, this arrangement is more relaxing for patients, and easier to navigate for caregivers." Because each caregiver can monitor several patients post-procedure, staffing needs are lower than after traditional femoral catheterization—another cost-saving measure.

### PERFORMING A RADIAL PROCEDURE

The physician inserts a small hydrophilically-coated sheath that slides easily into the radial artery. Then a guidewire is advanced from the radial artery to the ascending aorta, and a tiny catheter is advanced over the wire. Checking for arterial blockages takes just a few minutes, and if the patient's condition indicates a need for a stent, that can be done through the wrist as well. (About a third of diagnostic radial catheterizations progress to stent procedures.)

One major innovation of the last decade has been the radial TR Band®, a wristband that resembles a watch and uses a Velcro strap. The TR band contains an air diaphragm that can be inflated to put gentle pressure on the access site after a radial procedure. Catheters designed specifically for the radial approach have also made it easier to engage the coronary arteries through the small blood vessels in the wrist.

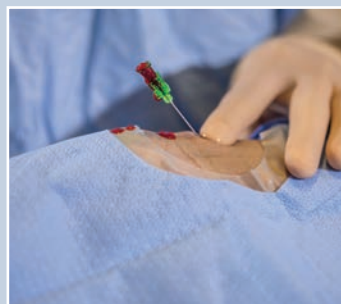
In a small percentage of cases, tortuosity of the blood vessels in the arm or the need for larger catheters in very complex procedures may make femoral access a better option. But according to Dr. Wang, "More than 90 percent of our patients can undergo diagnostic cardiac catheterization using the radial approach."

Dr. Wang performs more than 1,000 total procedures per year, of which 90 percent are performed radially. The total number performed by MedStar practitioners is approaching 10,000. "In 2010, we were doing fewer than 5 percent of cardiac stent procedures radially, and now that figure is well over 80 percent—and that's compared to a national average between 30-40 percent," he says.

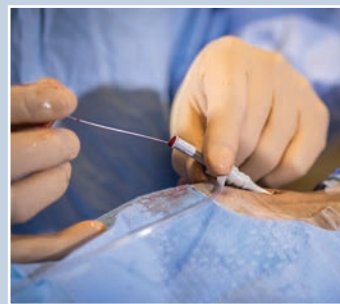
"The reaction of our patients to the new lounge has been fantastic," he continues. "Our goal is always to provide high-quality care in a way that lets people get back to their lives as quickly as possible—and this way of delivering service is truly patient-centered."



## Radial Catheterization Procedure



John Wang, MD, inserts a short needle into the radial artery.



A guidewire is advanced into the needle and is exchanged for a short radial sheath.



A catheter is advanced through the sheath to perform the catheterization.



An inflatable compression band around the wrist puts gentle pressure on the access site at the conclusion of the case.

The Radial Lounge, used exclusively for radial procedures, resembles a high-end waiting area with a large open space outfitted with recliners and amenities such as a wide-screen TV, computer station, and refreshments.



## New Medical Staff



**Harjit K. Chahal, MD, MPH,** is a non-invasive cardiologist at MedStar Cardiology Associates in Bowie and Lafayette Square,

D.C. Dr. Chahal specializes in diagnos-

ing and treating coronary artery disease, heart failure, pulmonary hypertension, advising patients in preventative cardiology, and long-term management, or diabetic related cardiovascular disease.

- Medical degree: Government Medical College, Amritsar, India.
- Residency, Internal Medicine: University of Maryland/MedStar Union Memorial Hospital, Baltimore, Md.

- Masters of Public Health, Biostatistics and Epidemiology: The Johns Hopkins School of Public Health, Baltimore, Md.
- Fellowship, Cardiology and Cardiovascular Imaging: The Johns Hopkins Hospital.
- Fellowship, Cardiovascular Disease: Albert Einstein School of Medicine's Montefiore Medical Center, Bronx, N.Y.



**Joshua Dearing, MD,** is a vascular surgeon with MedStar Heart & Vascular Institute at MedStar Southern Maryland Hospital Center.

Dr. Dearing specializes in treating a wide

range of conditions affecting the arteries and veins including atherosclerosis, aortic and other aneurysms, carotid disease, limb salvage, and vascular access for dialysis. He has special training in minimally invasive techniques such as endovascular aneurysm repair (EVAR) and endovascular approaches for limb salvage, which allow wound healing to take place, sometimes even avoiding the need for amputation.

- Medical degree: University of North Carolina-Chapel Hill School of Medicine.
- Surgical residency: Albert Einstein School of Medicine's Montefiore Medical Center, Bronx, N.Y.
- Fellowship, Vascular Surgery: MedStar Heart & Vascular Institute at MedStar Washington Hospital Center.

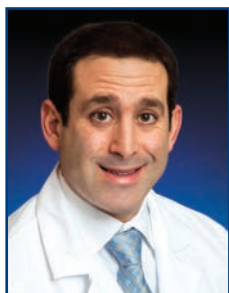


**Avinash Ganti, MD,** is a fellowship-trained vascular surgeon at MedStar Heart and Vascular Institute at MedStar Union Memorial Hospital, MedStar

Good Samaritan Hospital, and MedStar Harbor Hospital. Dr. Ganti specializes in treating patients with peripheral arterial disease, critical limb ischemia, carotid occlusive disease, mesenteric artery and renal artery stenoses, and managing dialysis access. He uses medical treatments, endovascular or minimally invasive techniques, as well as open surgical techniques to manage and treat

diseases of the vascular system.

- Medical degree: Ross University School of Medicine; Portsmouth, Dominica.
- Residency, General Surgery: St. Agnes Hospital; Baltimore, Md.
- Fellowship, Vascular Surgery: Kansas University Medical Center; Kansas City, Kansas.



**Eric S. Ginsberg, MD,** is an interventional cardiologist with MedStar Cardiology Associates in Annapolis. Board certified in internal

medicine, interventional cardiology, cardiovascular disease & echocardiography, Dr. Ginsberg specializes in cardiovascular disease and interventional cardiology.

- Medical degree: Drexel University College of Medicine, Philadelphia, Pa.

- Residency, Categorical Internal Medicine: Mount Sinai Medical Center, New York, N.Y.
- Fellowship, Cardiology and Interventional Cardiology: University of Maryland Medical Center, Baltimore, Md.



**Geetha Jeyabalan, MD,** is a vascular surgeon in Annapolis and Bowie, Md. She specializes in endovascular, minimally invasive, and open surgery

procedures, especially carotid disease, abdominal aortic aneurysm, limb preservation and salvage for peripheral arterial disease, dialysis access, and venous disease.

- Medical degree: University of Michigan School of Medicine, Ann Arbor, Mich.
- Residency: University of Pittsburgh Medical Center, Pittsburgh, Pa.

- Research Fellow, Transplant Surgery: David A. Geller Laboratory, Thomas E. Starzl Transplantation Institute, University of Pittsburgh Medical Center.
- Research Fellow, Transplant Surgery: David A. Geller Laboratory, Starzl Transplantation Institute, University of Pittsburgh Medical Center.



**Ajay Kadakkal, MD,** is a board certified advanced heart failure/transplant mechanical support cardiologist at MedStar Washington

Hospital Center. Dr. Kadakkal focuses on guiding patients through the difficult stages of advanced heart failure and transplant. He keeps patients as healthy as possible while they wait for transplants, and he implements advanced procedures to ensure the best quality of life for patients after surgery.

- Medical degree: University of Virginia School of Medicine,

- Residency: University of Pittsburgh Medical Center, Pittsburgh, Pa.
- Fellowship: University of Pittsburgh Medical Center, Pittsburgh, Pa.
- Fellowship, Advanced Heart Failure/Transplant Cardiology: Stanford University Medical Center, Palo Alto, Calif.



**Preetham Kumar, MD,** is an attending cardiologist at MedStar Heart & Vascular Institute at MedStar Washington Hospital Center. He is board

certified in cardiovascular diseases, echocardiography and internal medicine. Dr. Kumar brings specialized training in 3D, interventional, intra-operative, and adult congenital echocardiography.

- Bachelor of Medicine and Surgery: Bangalore University, Bangalore, India.
- Residency, Psychiatric Medicine: National Institute of Mental Health

- and Neurosciences, Bangalore, India.
- Research Fellow, Medical Genetics: National Institute of Mental Health and Neurosciences, Bangalore, India.
- Advanced Cardiovascular Imaging Fellowship, Echocardiography: Mayo Clinic, Phoenix, Ariz.

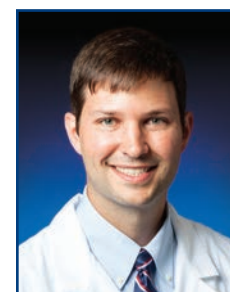


**Rahul Malik, MD,** is a cardiologist with MedStar Cardiology Associates in Brandywine, Md. Dr. Malik is board certified in nuclear cardiology and

internal medicine. Clinical interests include; structural heart disease, difficult to control blood pressure, coronary artery disease, valvular heart disease, cardiomyopathy, pericardial disease, peripheral arterial disease, aortic stenosis, and post-transplant care.

- Medical degree: Maulana Azad Medical College, New Delhi, India.
- Residency: MedStar Georgetown

- University Hospital and MedStar Washington Hospital Center, Washington, D.C.
- Cardiology Fellowship: Advocate Illinois Masonic Hospital, Chicago, Ill.



**Nicholas Andrew Paivanas, MD,** is a cardiologist in Kent Island and Annapolis, Md. A board certified cardiologist, his interests include preventive

esophageal echocardiography, nuclear cardiology, and cardiac intensive care. His primary focus is education and prevention—reducing high cholesterol and controlling lipid abnormalities, preventing serious heart and vascular disease before it begins. His emphasis is on preventive cardiology, hypertension therapy/devices, valve disorders, and lipid therapy.

- Medical degree: Georgetown University School of Medicine, Washington, D.C.
- Residency, Internal Medicine: University of Rochester Medical Center, Rochester, N.Y.
- Fellowship, Cardiovascular Disease: University of Rochester Medical Center.

cardiology, echocardiography, trans-





**Rupa K. Patil, MD,** is a non-invasive cardiologist at MedStar Union Memorial Hospital and MedStar Good Samaritan Hospital.

Dr. Patil is a general cardiologist with interests in echocardiography, valvular heart disease, and preventive cardiology.

- Medical degree: State University of New York at Buffalo, School of Medicine and Biomedical Sciences.
- Residency, Internal Medicine: Osler House Staff Training

Program, The Johns Hopkins Hospital, Baltimore, Md.

- Fellowship, Cardiovascular Disease: New York-Presbyterian Hospital/ Weill Cornell Medical Center, New York, N.Y.

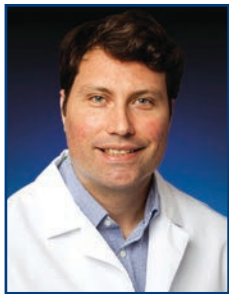


**Ankit B. Shah, MD, MPH, FACC,** is director, MedStar Sports & Performance Cardiology at MedStar Union Memorial Hospital. Dr. Shah is a fellowship trained sports cardiologist from Massachusetts

General Hospital where he participated in the cardiovascular care of the Boston Bruins, New England Patriots, and Harvard University athletes. He offers comprehensive cardiovascular care and physiologic testing for active individuals and athletes, a service unique to the Baltimore/Washington area.

- Medical degree and Master of Public Health: Tufts University School of Medicine, Boston, Mass.

- Residency: Cedars-Sinai Medical Center, Los Angeles, Calif.
- Fellowship, Cardiovascular Disease: Lenox Hill Hospital, New York, N.Y.
- Fellowship, Sports Cardiology: Cardiovascular Performance Program, Massachusetts General Hospital, Boston, Mass.



**Joseph C. Wuamett, MD,** is a vascular surgeon in Annapolis and Bowie, Md. His clinical interests include arterial problems, such as peripheral arterial disease, limb salvage, carotid artery

disease, abdominal aortic aneurysm, peripheral arterial aneurysms; and venous problems such as varicose veins, chronic venous insufficiency, DVT, and lower extremity wounds. He also focuses on helping dialysis patients with fistula or graft creation, maintenance of their dialysis access, and catheter placement. He offers minimally invasive endovascular techniques, or more invasive open surgical approaches for very

extensive disease.

- Medical degree: University of Miami Miller School of Medicine, Miami, Fla.
- Residency, General Surgery: St. Luke's Roosevelt Hospital Center, New York, N.Y.
- Fellowship, Vascular and Endovascular Surgery: Eastern Virginia Medical School, Norfolk, Va.



**Raymond K. Young, MD,** is a board certified non-invasive cardiologist at MedStar Good Samaritan Hospital and MedStar Union Memorial Hospital. He specializes in

coronary heart disease, valvular heart disease, heart rhythm disorders, and congestive heart failure, with special interest in treating patients with pulmonary hypertension, and navigating through the complex diagnostic and therapeutic challenges of this patient population.

- Medical degree: Howard University College of Medicine, Washington, D.C.

- Residency: Osler Internal Medicine Internship/Residency Program, The Johns Hopkins Hospital, Baltimore, Md.
- Fellowship, Cardiovascular Disease: MedStar Washington Hospital Center/ Georgetown University Hospital, Washington, D.C.



**Micheas Zemedkun, MD,** is a cardiologist at MedStar Washington Hospital Center and Lafayette Square. Dr. Zemedkun

specializes in coronary artery disease, cardiomyopathy, valvular heart disease preventive cardiology.

- Medical degree: Harvard Medical School, Boston, Mass.
- Residency, Internal Medicine: New York Presbyterian Hospital Center-Weill Cornell Medical Center, New York, N.Y.

- Fellowship, Advanced Echocardiography and Structural Heart Disease: MedStar Washington Hospital Center, Washington, D.C.
- Fellowship, Cardiology: MedStar Georgetown University Hospital and MedStar Washington Hospital Center, Washington, D.C.

# Transitions Clinic

## for Newly Diagnosed Cardiovascular Patients

Patients newly diagnosed with a cardiovascular condition are likely to be frightened and uncertain. Often admitted to the hospital from the Emergency Department, they may know little about their diagnosis and have few resources for ongoing care and treatment.

The new Transitions Clinic, part of The Nancy and Harold Zirkin Heart & Vascular Hospital at MedStar Washington Hospital Center, was created to help those who are unprepared for a cardiac diagnosis and who may be at risk for developing a more serious condition, such as advanced heart failure.

"These patients are unlikely to have a cardiologist and may not even have a primary care physician," says Sharon Taylor-Panek, ACNP-BC, director for Advanced Practice for MHVI. "Many of them are from more vulnerable populations and, without an established follow-up method for their care, they are more likely to have issues—which puts them at higher risk for complications that require hospital readmission."

The new clinic's services aim to fill this void, focusing on the first month after diagnosis to provide a transition period until the patients can establish outpatient cardiology care or resume treatment with their practitioner. The clinic's staff includes a cardiology nurse practitioner, a nurse navigator and a medical assistant, working together to see patients within the first few days of their discharge.

At the first appointment, patients receive an individualized cardiovascular management plan, including an examination, education about medications and healthy habits, and help with prescriptions. The clinic team also assists patients with scheduling cardiac imaging and other necessary testing, and "will facilitate patients' access to nutrition counseling, social workers, and other resources as needed," says Wendy Penny, vice president, MHVI.

Patients are monitored closely for four weeks, with care including weekly phone calls and an additional clinic visit. After this month of intensive management, many patients will have the information and resources to successfully navigate their care on their own. Those who do not will be helped by nurse practitioners and Case Management to set up appointments with MHVI cardiologists and primary care physicians who are accepting new patients.

"Having this infrastructure for patients with newly diagnosed cardiovascular conditions is not common," says Ms. Penny. "By providing medical management and other resources from the beginning, we hope to reduce the risks of accelerating a condition or having patients readmitted to the hospital unnecessarily."

**For more information, please contact Wendy Penny at 202-877-0974 or [Wendy.W.Penny@Medstar.net](mailto:Wendy.W.Penny@Medstar.net).**



Transitions Clinic team members (L to R) Roza Birru, Ambulatory Practice Manager; Sharon Oates, RN, BSN, Director of Ambulatory Practices and Clinical Support; Jennifer Warne, Regional Director, MHVI Interventional Cardiology and Cardiac Electrophysiology; Wendy Penny, RN, MSN, MBA, Vice President, MHVI; and Katherine Ibay, RN, BSN, Ambulatory Nurse Coordinator

*"By providing medical management and other resources from the beginning, we hope to reduce the risks of accelerating a condition or having patients readmitted to the hospital unnecessarily."*

—Wendy Penny  
VP, MHVI



## Special Congratulations to Cardiac Surgery



The Society of Thoracic Surgeons (STS) has given its highest rating, three stars, to three surgical programs at MedStar Washington Hospital Center: coronary artery bypass grafting (CABG), aortic valve replacement (AVR) and combined AVR + CABG.

The STS registry is the most respected clinical database in the country, and the three star rating in all three programs puts our Cardiac Surgery program among a very small, elite group of national programs that meets benchmarks for overall performance, survival rates, complications, and other measures.

Under the leadership of Paul Corso, MD, the achievements from STS represent the hard work of the entire Cardiac Surgery team during the past few years.

***Congratulations and thank you to everyone, for your efforts every day for our patients and their families.***

## Words from the Heart and Across the Globe A Grateful Patient

In July 2016, Aemro Abera Workneh was visiting his daughter and son-in-law from his home in Gondar, Ethiopia, when he began experiencing shortness of breath and difficulty speaking. His family took him to the Cardiac Clinic at MedStar Washington Hospital Center, where he was referred to Cardiac Surgeon Christian Shults. Dr. Shults diagnosed an innominate artery aneurysm with tracheal compression and performed a successful surgery shortly after. A year later, Fetlework Aemro and Workneh Taye, his son and daughter-in-law, asked a friend, Feseha Woldu, MD, vice president, Corporate Management Care at MedStar Health, to help arrange a meeting with Dr. Shults. Mr. Workneh, Dr. Shults' patient, is a poet and was so grateful he composed a poem to thank Dr. Shults for his "God-given knowledge, exceptional skills and professional care." In October 2017, the couple met with Dr. Shults and Dr. Woldu, where they presented the poem, translated from Amharic into English.



**(L to R) Workneh Taye and Fetlework Aemro, Christian Shults, MD, and Feseha Woldu, MD, vice president, Corporate Managed Care at MedStar Health**



## Gold-Headed Cane Award Winner

### Lowell Satler, MD, Embodies "Ideals of a True Physician"



**(L to R) Lowell Satler, MD, receives the cane from Augusto Pichard, MD, former MedStar Washington Hospital Center Cath Lab Director and previous Gold-Headed Cane recipient.**

Lowell Satler, MD, has literally touched the lives of thousands of people around the world in his many years in the Cardiac Catheterization Lab at MedStar Washington Hospital Center. In recognition of his "devotion to duty and patient-care," Dr. Satler was presented with the hospital's highest honor, the Gold-Headed Cane.

"I was surprised and honored to be accepted into this prestigious group of recipients," Dr. Satler says. "When I received the award, I was thankful. I enjoy teaching our fellows and giving them opportunities. It's exciting to help the physicians who are the future of interventional cardiology."

Dr. Satler currently serves as director of Interventional Cardiology and director, Cardiac Catheterization Laboratory at MedStar Washington Hospital Center. In addition to caring for patients, he is a prolific researcher and author of scholarly publications. He also serves as a mentor to fellows, and is a member of the American College of Cardiology and the American Heart Association.

Dr. Satler's medical education was through the Accelerated Biomedical Program at Rensselaer Polytechnic Institute, Albany Medical College. His internship and residency were at Albany Medical Center, where he served as chief medical resident before completing his fellowship in Cardiology at the University of Alabama in Birmingham.

The tradition of the Gold-Headed Cane Award began in England in 1689, with the passing down of the same cane to physicians over a period of 150 years. John Radcliffe, personal physician to King William III, distinguished himself as "the" royal physician by carrying not just an ordinary gentleman's cane, but a gold-headed cane, adorned by a cross bar for a top, instead of the traditional knob. Dr. Radcliffe passed on his cane to Dr. Richard Mead, beginning the legacy. The Gold-Headed Cane has been a tradition at the Hospital Center, with the tradition beginning at one of the three founding hospitals that became the Hospital Center. The list of Hospital Center physician awardees goes back to 1951.



## MEDSTAR HEART & VASCULAR INSTITUTE PHYSICIAN DIRECTORY

Stuart F. Seides, MD Physician Executive Director

**CARDIOLOGY**

Allen J. Taylor, MD Chief of Cardiology  
MedStar Washington Hospital Center  
MedStar Georgetown University Hospital

George Ruiz, MD Chief of Cardiology  
MedStar Union Memorial Hospital  
MedStar Good Samaritan Hospital

Mun K. Hong, MD Chief of Cardiology  
MedStar Southern Maryland Hospital Center

Sriram Padmanabhan, MD Chief of Cardiology  
MedStar Franklin Square Medical Center

For a complete listing of cardiologists, go to [MedStarHeartInstitute.org](http://MedStarHeartInstitute.org)

### ADVANCED HEART FAILURE

Samer S. Najjar, MD Medical Director  
Advanced Heart Failure Program  
MedStar Washington Hospital Center

George Ruiz, MD Chief of Cardiology  
MedStar Union Memorial Hospital  
MedStar Good Samaritan Hospital

Jennifer A. Brown, MD  
Christopher F. Barnett, MD  
Jonathan Grinstein, MD  
Mark R. Hofmeyer, MD  
Sandeep M. Jani, MD

Ajay Kadakki, MD  
Selma Mohammed, MD, PhD  
Maria E. Rodrigo, MD  
Farooq H. Sheikh, MD

### CARDIAC IMAGING

Federico M. Asch, MD  
Steven Goldstein, MD  
Momina Mastoor, MD

Zuyue Wang, MD  
Gaby A. Weissman, MD  
Jared M. Widell, MD

### CARDIAC SURGERY

Vinod H. Thourani, MD Chairman, Cardiac Surgery  
MedStar Heart & Vascular Institute

Michael Fiocco, MD Chief, Cardiac Surgery  
MedStar Union Memorial Hospital

Reza Abrishamchian, MD  
Ammar S. Bafi, MD  
Steven W. Boyce, MD  
Paul J. Corso, Jr., MD

Jennifer L. Ellis, MD  
Dipin Gupta, MD  
Ezequiel J. Molina, MD  
Christian C. Shults, MD

### ELECTROPHYSIOLOGY

Zayd A. Eldadah, MD Medical Director, Electrophysiology  
MedStar Washington Hospital Center  
MedStar Georgetown University Hospital

Glenn R. Meininger, MD Medical Director, Electrophysiology Programs  
Baltimore region

Rafique Ahmed, MD  
Sarfraz A. Durrani, MD  
Margaret B. Fischer, MD  
Michael Goldstein, MD  
Sung W. Lee, MD  
Jay Mazel, MD  
Susan O'Donoghue, MD

Edward V. Platia, MD  
David J. Schamp, MD  
Manish H. Shah, MD  
David A. Strouse, MD  
Athanasios Thomaidis, MD  
Allison Warren, MD  
Seth J. Worley, MD

### HEART TRANSPLANT AND VENTRICULAR ASSIST DEVICES

Steven W. Boyce, MD Surgical Director, VAD/Transplantation

Ezequiel J. Molina, MD

### INTERVENTIONAL CARDIOLOGY

Mun K. Hong, MD Chief, Department of Cardiology  
MedStar Southern Maryland Hospital Center  
Medical Director, Cardiac Catheterization Lab  
MedStar Washington Hospital Center

Lowell F. Satler, MD

Ron Waksman, MD Director, Cardiovascular Research and  
Advanced Education  
MedStar Cardiovascular Research Network  
Associate Director of Cardiology  
MedStar Washington Hospital Center

John C. Wang, MD Medical Director, Cardiac Catheterization Lab  
MedStar Union Memorial Hospital

Nelson L. Bernardo, MD  
Itsik I. Ben-Dor, MD  
Robert A. Gallino, MD  
Eric Ginsberg, MD  
Antony G. Kaliyadan, MD  
Scott M. Katzen, MD  
John J. Kennedy, MD

Robert A. Lager, MD  
David Peichert, MD  
Venkatesh K. Raman, MD  
Toby Rogers, MD  
Nauman Siddiqi, MD  
William O. Suddath, MD

### VASCULAR SURGERY

Edward Y. Woo, MD Director, MedStar Vascular Program  
Chairman, Department of Vascular Surgery

Raghuveer Vallabhaneni, MD Director, Vascular Surgery, Baltimore Region

Steven D. Abramowitz, MD  
Cameron M. Akbari, MD  
Arthur Flatau III, MD  
Avinash Ganti, MD  
Geetha Jeyabalan, MD  
Misaki M. Kiguchi, MD

Suzanne S. Kool, MD  
Maria E. Litzendorf, MD  
Rajesh K. Malik, MD  
Tareq M. Massimi, MD  
Mark O. Peeler, MD  
Joseph Wuamett, MD

## contacts at a glance

### MedStar Heart & Vascular Institute Important Telephone Numbers

**MedStar Washington Hospital Center**

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## UPCOMING CME CONFERENCES

**CRT18**  
**March 3-6**  
Omni Shoreham, Washington, D.C.  
*Details on page 8*

**ADULT CONGENITAL HEART DISEASE  
IN THE 21ST CENTURY**  
**April 13-14**  
College Park Marriott, Hyattsville, Md.  
*Course Co-Directors: Anitha John, MD;  
Melissa Fries, MD*

**JOHN RITTER FOUNDATION  
COMMUNITY AORTIC SYMPOSIUM**  
**April 14**  
True Auditorium, MedStar Washington  
Hospital Center, Washington, D.C.  
*Course Director: Christian Shults, MD*

**FRONTLINE CARDIOLOGY: CARDIO-  
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**April 21**  
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**INNOVATIVE ECHO-GUIDED  
TREATMENT FOR STRUCTURAL  
HEART DISEASES**  
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FELLOWS COURSE**  
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