Connecting Cardiologists to Chagas
The Marriage of Research and Exceptional Clinical Care

In today’s highly competitive health care marketplace we greatly value our “product differentiators.” For academic medical centers, clinical care, education and research are the defining elements—the “three-legged stool” from which advancements in medicine emerge and distinguish us. However, in many instances, and for many years, the three have functioned somewhat independently.

At MedStar Heart & Vascular Institute, we’ve established a research model that sets us apart. It features substantial integration between clinical care, basic and preclinical research, clinical trials and translational investigations.

We have developed a structure in which all aspects of research and clinical care intersect, linked inextricably together. They form a strong, supportive pillar with solid foundations in our 50-year history of accumulated knowledge.

This is a progressive approach that promotes collaboration between staff members from different disciplines and perspectives. It enhances a clinician’s notion about the scientific basis of practice and gives basic scientists an important understanding of the clinical applications of their research.

NO RESEARCH SILOS

There is no “research bubble” here. Silos have been broken down to create active synergy between clinical activities and scientific investigations. Ideas flow at weekly meetings where everyone is at the table.

We’ve created a culture that helps accelerate the pace of discovery and delivery of safer, more effective, and more efficient care to patients. Virtually every member of the MHVI medical staff is involved in research, and our most committed investigators also wear clinical hats. Intellectual capital is shared daily in an ongoing partnership that stimulates improved strategies in research and care delivery.

ACCELERATING PROGRESS

In 2011, the formation of MHVI, the creation of the MedStar Cardiovascular Research Network, and the appointment of Ron Waksman, MD, as director of cardiovascular research, catapulted our research program forward at warp speed. It marked a fundamental change, allowing us to conduct clinical research at not just a single acute care hospital, but at five, and at multiple ambulatory care sites across the region.

Today MHVI investigators are tackling a wide spectrum of research topics from the use of stem cells as a cardiovascular therapeutic tool to understanding the progression of Chagas disease from an insect bite to heart disease. You can read about both in this issue of Cardiovascular Physician.

We all recognize there is no progress in clinical medicine without a robust research program. And research flourishes where the active life of the mind is a cherished commodity, and a valued “product differentiator.” And that’s a competitive edge we’re proud to promote.

Connecting Cardiologists to Chagas

Bolivia is more than 4,000 miles from Washington, D.C. Yet, these days it feels much closer for cardiologists in the region, thanks to several physicians at MedStar Heart & Vascular Institute (MHVI). In the clinic, in outreach and through their research, these physicians are spreading the word about the growing local incidence of Chagas disease, a parasitic infection that can damage the heart.
Chagas Reaches Communities in the U.S.

Chagas, which affects eight million people worldwide, according to the World Health Organization, is widespread in Latin America, but relatively unknown in the U.S., explains Federica Asch, MD, director of cardiac imaging research at the MedStar Cardiovascular Research Network. During his training and practice in Argentina, he observed that “the public health campaigns alert everyone to the signs and symptoms. I used to see patients with Chagas regularly.” In the U.S., however, it is much less common and almost every Chagas patient acquired the illness from living in Latin America.

With the largest Bolivian immigrant population in the U.S. now residing in the D.C. area, the local community is beginning to encounter Chagas patients, says Rachel Marcus, MD, MHVI echocardiologist. The Centers for Disease Control and Prevention estimates that about 300,000 in the U.S. have the disease, of which an estimated 30,000 to 45,000 have Chagas cardiomyopathy. About 300,000 in the U.S. have the disease, of which an estimated 30,000 to 45,000 have Chagas cardiomyopathy. U.S. blood banks began screening for Chagas in 2007. The parasite can be transmitted through transfusion and organ donation.

Dr. Marcus began working with Chagas in 2012, when she was debating whether to pursue a Master’s Degree in Global Health. When she shared her thoughts with a local community expert, he advised her to forget the public health degree and instead open a Chagas clinic. With support from Doctors Without Borders, Dr. Marcus co-founded the non-profit Latin American Society of Chagas (LASOCHA). She receives queries from experts around the globe with American cardiologists and other parts of Asia. Some studies also suggest the T. cruzi parasite is shifting further north as animal populations migrate in response to climate changes.

Those infected with Chagas may not know they have it. The initial acute phase is different for different people, says Dr. Marcus, ranging from mild flu-like symptoms to life-threatening myocarditis or meningoencephalitis. “Usually it’s diagnosed through a blood test,” she says. Unless treated at an early age and early stage with anti-parasitics nifurtimox or benznidazole, Chagas remains in the human body for life. About 30 percent of those infected experience health effects decades later, such as cardiomyopathy, heart failure, and altered heart rate or rhythm and, less commonly, gastrointestinal issues, such as megaoesophagus or megacolon.

Despite more than 40 years of study, understanding exactly how heart disease evolves decades after infection with Chagas isn’t clear, says Dr. Marcus. For MedStar Heart & Vascular Institute heart failure expert Maria Rodrigo, MD, the Chagas patients she treats present with more challenges. “When compared to patients with other etiologies of heart failure,” she says, “Chagas patients seem to have higher mortality and a higher rate of arrhythmia.”

THE CHALLENGE

Unfortunately, once Chagas has been in the body for years, effective therapy is limited. “We had been crossing our fingers that a study released this fall would show a benefit to treating adults with the antiparasitic drug benznidazole, but there was no reduction in risk of heart disease progression,” Dr. Marcus says. “For the majority of people with Chagas disease, we don’t yet know if treatment will be helpful, because good quality clinical trials in the patient population are scarce. It is a neglected disease of poverty.”

Dr. Marcus traveled to Bolivia last year as the echocardiologist in a Chagas study, and presented at the American Society of Echocardiography in June. “I started with, ‘You’re not going to believe this is here,’” she says. She hopes to return to Bolivia next year as part of a study that will attempt to image the earliest stages—and then the evolution—of Chagas-related heart disease.

Individuals with Chagas are migrating worldwide from Latin America. The World Health Organization estimates Chagas affects 80,000 to 120,000 Latin American immigrants in Europe, with increasing cases in Japan and other parts of Asia. Some studies also suggest the T. cruzi parasite is shifting further north as animal populations migrate in response to climate changes.

For now, the MHVI team continues to educate local colleagues. Dr. Asch is leading an effort to connect experts around the globe with American cardiologists “to disseminate knowledge that’s not yet widely known in North American cardiology practice.”

Dr. Rodrigo’s patients testified before the Federal Drug Administration about the need for medications and rapid blood tests for Chagas in the U.S. Dr. Marcus conducts grand rounds for Internal Medicine as well as Cardiology residents in the hope that U.S. physician familiarity with the disease increases quickly. “One of our MHVI fellows diagnosed two cases of Chagas. I told him he is now qualified as a local expert on the subject.”

CONCERNED ABOUT A PATIENT?

Any cardiac patient with arrhythmia, conduction abnormality (particularly RBBB with LAFB, or LV dysfunction), should be screened for Chagas.

Rachel Marcus, MD, is available to physicians who would like to discuss how to screen and how to treat any patient identified with Chagas. Please email your questions to rachel.r.marcus@medstar.net.

Visit LASOCHA.org for more information.

TRIATOMINE LIFECYCLE

1. Triatomine bug takes a blood meal (passes metacyclic trypanosomatids in feces, trypanosomatids enter bite wound or mucosal membranes, such as the conjunctiva).
2. Metacyclic trypanosomatids penetrate various cells at bite wound site. Inside cells they transform into amastigotes.
3. Amastigotes multiply by binary fission in cells of infected tissues. Trypanosomatids can infect other cells and transform into intracellular amastigotes in new infection sites. Clinical manifestations can result from this infective cycle.
4. Intracellular amastigotes transform into trypanosomatids, then burst out of the cell and enter the bloodstream.
5. Triatomine bug takes a blood meal (trypanosomatids ingested).
6. Epimastigotes in midgut
7. Multiply in midgut
8. Metacyclic trypanosomatids in hindgut
I = infective stage
D = diagnostic stage

New Vascular Labs Offer Patients Easier Access

MedStar Heart & Vascular Institute has expanded its vascular imaging facilities, giving physicians and patients broader access to this life-changing technology.

Formerly, most of the MedStar patients who needed specialized vascular testing traveled to MedStar Washington Hospital Center or MedStar Georgetown University Hospital, says Sony Rashid, director of MedStar’s regional vascular laboratory operations. But with new centers open at MedStar Southern Maryland Hospital Center and MedStar St. Mary’s Hospital, many patients now can schedule testing right in their communities. MedStar Montgomery Medical Center will open a vascular lab in January 2016, bringing the number of labs to five.

“Having additional specialized facilities gives our patients more flexibility,” says Rashid. “We are able to see them sooner and receive their results more quickly. This means our physicians have the information they need to develop treatment plans in a timely manner.”

“We perform more than 15,000 non-invasive vascular laboratory studies each year in D.C.,” says Edward Y. Woo, MD, FACS, director of the MedStar Vascular Program and chairman of Vascular Surgery. “In keeping with MedStar’s distributed care delivery network, we want to offer those same quality services to patients close to their homes.”

Types of imaging available in all the new facilities include peripheral arterial imaging and various vascular ultrasounds, plus specialized testing for conditions such as Raynaud’s disease. Experts trained in vascular imaging, and certified as Registered Physicians in Vascular Interpretation (RPVI), read and interpret the studies, which clinicians can access system-wide.

“Every image generated in our labs is networked to a centralized system and can be accessed at any MedStar facility via VascuBase™, a unique reporting software for vascular ultrasound,” says Rashid. “This allows us to provide more streamlined care and maximizes resources.”

In addition, they provide ongoing free vascular screenings weekly at various locations, says Rashid. “Results are readily available, and if a finding appears to need attention more urgently, a vascular surgeon will contact the patient and his or her primary care physician,” he explains.

“Having multiple vascular resources and physicians in our communities is a win for everyone,” says Rashid. “People rely on us because we are experts in the field, and now we are a one-stop shop.”

Call 202-877-7201 to be connected to any of the vascular labs.

Arthur Flatau, MD
Above and Beyond the Call of Duty

If it’s Friday, Arthur Flatau, MD, vascular surgeon, can often be found listening to war stories from some of the residents at the Charlotte Hall Veterans Home, not far from his office at MedStar St. Mary’s Hospital in Leonardtown, Md.

“It’s not a purely social activity, though. As many of the veterans need treatment for various vascular diseases, Dr. Flatau volunteered to visit Charlotte Hall, saving his elderly patients the inconvenience of being transported to and from appointments.

And while he didn’t serve in the military, Dr. Flatau feels a special kinship with those who did. “I value the sacrifices they’ve made,” he says. “After all, the WWII veterans have been referred to as ‘the greatest generation,’ and because of their efforts, my generation has prospered.”

Originally from Tampa, Fla., where he was in private practice for 23 years, Dr. Flatau came to southern Maryland by way of Bucks County, Pa., where his wife, Karyn, was raised.

“Our kids were grown, and her parents were getting along in years,” he explains. “So in 2008, when I saw an ad for a vascular surgeon at Grand View Hospital in Sellersville, we felt it was a good opportunity for her to spend more time with them.”

Knowing he needed a tertiary hospital for referring cases beyond Grand View’s resources, Dr. Flatau became acquainted with Edward Woo, MD, then the University of Pennsylvania School of Medicine’s vice chief and program director for the Division of Vascular Surgery and Endovascular Therapy.

When Dr. Woo came to MedStar as director of the Vascular Program, one of his first hires was Dr. Flatau.

“Your want to bring people you know are excellent,” Dr. Woo says. He adds that Dr. Flatau’s skills and expertise made him “a perfect fit in a community hospital environment like at St. Mary’s. He’s been nothing but a superstar.”

Having Dr. Flatau on board meant that St. Mary’s can offer a wider range of surgical procedures, such as EVAR, a minimally invasive method for repairing abdominal aortic aneurysms that saves patients both recovery and travel times.

“The vast majority of these aneurysms can be handled this way, and there’s no reason it can’t be performed at a community hospital,” Dr. Flatau says.

Coincidentally, the first EVAR procedure performed at St. Mary’s was on William Hubbard, a U.S. Army veteran whom Dr. Flatau met at Charlotte Hall.

“He’s a nice gentleman, and I’m really pleased he continues to do well,” Dr. Flatau says.

When time permits, Dr. Flatau makes his way back to Florida to join his wife at the barrier island house they were building before they moved to Pennsylvania.

“If it’s anything related to being on the water, you’ll find me down there doing it,” he says.
However, despite encouraging preclinical study results and speculation it would create a new era of medical therapy, the effects of intravenous administration of a novel stem cell therapy, which are reflected in a new clinical trial get-ting underway at MHVI this winter. The trial will determine why the first stem cell trials were not providing the anticipated therapeutic potential, “all variables, such as which stem cells were used, and how they were developed and administered, were open to consider-ation,” says Dr. Epstein.

A key issue was the use of autologous stem cells in all previous studies. Studies demonstrated these “old” stem cells are functionally defective when compared to stem cells obtained from young healthy individuals. So harvest-ing a healthy young donor’s bone marrow and growing the resident stem cells might produce more robust cells.

However, giving a patient allogenic stem cells raised an important issue: whether such cells will be rejected by the body from recognizing the cells as ‘foreign,’ prevent the body from rejecting the donated MSCs. “All previous stem cell trials used cells exposed to, and grown under, room air oxygen conditions,” explains Dr. Lipinski. “All previous stem cell trials used cells exposed to, and grown under, room air oxygen conditions.”

To determine why the first stem cell trials were not providing the anticipated therapeutic potential, “all variables, such as which stem cells were used, and how they were developed and administered, were open to consider-ation,” says Dr. Epstein.

To further explore and refine potential stem cell car-diovascular therapies, MHVI expanded the translational research team to include Michael Lipinski, MD, PhD, an expert in molecular biology and scientific lead for pre-clinical research at the MedStar Cardiovascular Research Network, and Dror Luger, PhD, an expert in immunology and inflammatory responses. “By bringing together these diverse areas of expertise, we forged a team with the potential to produce research that could lead to important breakthroughs in understanding how stem cells might work and thereby provide more successful treatment of patients with cardiac disease,” says Dr. Epstein.

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However, the MHVI team demonstrated a small per-cent-age of these IV administered MSCs did reach the heart, where they could exert beneficial effects. The cells seek out inflamed cardiac tissue after a heart attack because they upregulate receptors that allow them to be attracted to and penetrate inflamed tissue in high numbers,” says Dr. Luger.

The investigators also found the cells residing in other tissues could provide other benefits. “It has been shown that a heart attack activates the immune and inflamma-tory systems, including those in the spleen,” explains Dr. Luger. “The systemic anti-inflammatory effects produced by MSCs in the spleen, lungs and other tissues caused by the molecules secreted by the MSCs could exert positive effects as well.” Dr. Epstein added that “such anti-inflam-matory effects could also benefit the excessive inflamma-tory activities that exist in many heart failure patients.”

For the clinical heart failure trial, MHVI is partnering with CardioCell, which will grow and provide stem cells already used in Phase I and 2a clinical trials and approved by the Food and Drug Administration.

As an extension of their stem cell work, the MHVI investiga-tors are building on the fact that any beneficial effect of adult stem cells will not derive from their transfor-mation into heart muscle, but rather from the molecules they secrete, these, in turn, stimulate pathways favoring tissue healing. The team is investigating the use of lipo-somes as therapeutic delivery vehicles for these secreted products, which include those with anti-inflammatory and angiogenesis activities.

If successful, using MSCs for anti-inflammatory and immune-moduylatory effects could have implications for many different diseases, including arthritis and autoimmue diseases like rheumatoid arthritis. Dr. Epstein cau-tions that a great deal of research is yet to be done before such applications can be routinely used to treat patients with these conditions. For now, they hope the current studies in heart failure patients will demonstrate effectiveness. “If so,” Dr. Epstein says, “it changes the whole playing field for stem cells.”

Clinical Trial Will Study Novel Stem Cells in Cardiac Patients

When stem cell research targeted to cardiovascular dis-ease first made headlines almost two decades ago, many speculated it would create a new era of medical therapy for acute myocardial infarction and heart failure patients. However, despite encouraging preclinical study results and enthusiasm emanating from initial small clinical trials, over-views of the results of all published major randomized trials conducted through 2012 were disappointing.

“There was no substantial improvement in clinical end points,” says Stephen Epstein, MD, head of translational research and vascular biology research at MedStar Heart & Vascular Institute (MHVI).

The challenges forced new approaches to cardiac stem cell therapy, which are reflected in a new clinical trial get-ting underway at MHVI this winter. The trial will determine the effects of intravenous administration of a novel stem cell in patients with chronic non-ischemic cardiomyopathy. Dr. Epstein, an internationally recognized authority on stem cell therapeutics targeted to cardiovascular disease, says, “These new strategies have reinvigorated research in stem cell therapies, particularly for cardiac patients.”
Margaret Bell Fischer, MD  
**Congenital Heart Defects Detective**

The device is thinner than a flash drive, elegantly streamlined and slanted at the edges like the latest smart phones. Cardiologist Margaret Bell Fischer, MD, holds the tiny steel implantable loop recorder between her thumb and forefinger as she explains the many ways this wireless device, inserted under the skin in a brief, one-suture procedure, provides important clues for her patients.

Clues are pivotal for Dr. Fischer, a cardiac electrophysiologist who treats pediatric and adult cardiac patients and specializes in the relatively new and growing population of adults with congenital heart defects. “Thanks to improved interventions, more and more children born with heart defects are surviving into adulthood,” she says. “We just are learning all the ways the conditions evolve. But since they were so small when their condition was discovered, the patients often don’t even know what their diagnosis was or how it was treated.”

According to the Centers for Disease Control and Prevention, there is currently no tracking system for older children and adults who started life with heart defects. While there are more than 40 known types of congenital heart defects, according to the Children’s Heart Foundation, there are also dozens that are unique. The difficulty for the older children or adults, says Dr. Fischer, is “that it was the parent who managed the medical interventions.”

The lucky ones, she adds, can bring the parents with them to appointments. Otherwise, “it becomes detective work, and old records often come on microfiche. We combine that with imaging and monitoring to determine what work was done.”

Not many cardiologists can bridge both pediatric and adult cardiac arenas, and very few have Dr. Fischer’s unique background. After graduating from the University of Toledo College of Medicine, she spent nine years in post-graduate training and fellowships that ranged from an internal medicine/pediatric residency to pediatric cardiology and then a combined pediatric and adult electrophysiology program. “I don’t know that many other physicians want to do that much training,” she says.

The breadth gives her unique skills for treating patients, including a 34-year-old who was born with transposition of the great arteries. He had a surgical atrial baffie reoute as a child, but his adult lifestyle led to sustained atrial fibrillation and irreversible muscle damage. “We were able to treat it with a defibrillator,” she says.

As the population of adults with congenital defects grows, Dr. Fischer is optimistic that there will be more expertise to share with other cardiologists. The American Board of Internal Medicine is setting up the first board certification on adult congenital heart disease this year. In the meantime, physicians are coming to realize Dr. Fischer’s expertise: “The best part is offering these people help,” she says. “If you have a patient with a history of a hole in the heart and suddenly they feel it racing, take it seriously.”

**“Thanks to improved interventions, more and more children born with heart defects are surviving into adulthood.”**

—Margaret Bell Fischer, MD

Augusto Pichard, MD, Internationally Renowned Interventional Cardiologist, Moves to Consultant Role

After 32 years of service to MedStar Washington Hospital Center, the creator of what is now one of the world’s highest-volume and most prestigious catheterization labs has entered a new phase in his career. In September, Augusto Pichard, MD, moved from director of the lab’s Cardiac Intervention and Structural Heart Diseases program, which he was instrumental in establishing, to senior consultant.

This change allows the sought-after expert more flexibility and time to mentor, proctor and lecture worldwide, while continuing as professor of medicine (cardiology) at Georgetown University School of Medicine.

“We’re delighted that Gus will remain an important presence here—caring for patients and training our next generation of specialists with his unique and extraordinary skill set—even as he serves as the Institute’s ambassador to others around the globe,” says Stuart F. Seides, MD, MedStar Heart & Vascular Institute’s physician executive director.

Dr. Pichard was cath lab director from its founding in 1983. In 2013, he became director of the Cardiac Intervention and Structural Heart Diseases program. The program is devoted to developing, testing and disseminating the clinical use of new devices and exploring novel applications of existing therapies, all to advance MWHI’s mission of excellence in cardiovascular patient care.

George Ruiz, MD, Appointed Chief of Cardiology, MedStar Union Memorial and MedStar Good Samaritan Hospitals

George Ruiz, MD, who served for many years in his roles as associate director of Advanced Heart Failure and lead of the Pulmonary Hypertension Unit at MedStar Washington Hospital Center, is the new chief of Cardiology at MedStar Union Memorial Hospital and MedStar Good Samaritan Hospital in Baltimore.

Stuart F. Seides, MD, physician executive director, MedStar Heart & Vascular Institute, says, “George is a ‘culture carrier’ whose infectious enthusiasm will help us drive MHVI toward our goal of full system-wide integration.”

Dr. Ruiz is responsible for all cardiac services delivered at both hospitals, working collaboratively with administrative and medical leadership to ensure a consistently high level of quality and patient service as these hospitals continue to fully connect with MHVI and the Cleveland Clinic Alliance. He succeeds Jeffrey Quartner, MD, who has served these institutions for 10 years, and who will continue his administrative responsibilities supporting key strategic initiatives within MHVI.

Dr. Ruiz says, “I am very thankful for the opportunity to build on the work that Dr. Quartner and Dr. Seides began, and look forward to collaborating with my new colleagues in Baltimore.”

Dr. Ruiz is a graduate of Brown University and received his medical degree from the Albert Einstein College of Medicine in New York City. He did postgraduate training at Brigham and Women’s Hospital in Boston where he was chief medical resident, fellow in cardiology, and one of the first to be jointly trained at Boston Children’s Hospital in the emerging subspecialty of adult congenital heart disease. Since joining MedStar in 2004, Dr. Ruiz has been an active clinician and a champion of numerous initiatives around quality, safety, patient satisfaction, reducing length of stay and preventing readmissions. He received his MBA from Johns Hopkins and served in a one-year fellowship at the White House, during which time he served as a special assistant to the Secretary of Veterans Affairs working on health-related matters.
ACA Appoints Ana Barac, MD, PhD, FACC, Chair of New Cardio-Oncology Section

Hard on the heels of a major national survey assessing the impact of cardio-oncology care, the American College of Cardiology has appointed Ana Barac, MD, PhD, FACC, chair of a new section devoted to the developing field. Dr. Barac is founder and director of MedStar Heart & Vascular Institute’s cardio-oncology program—the first in the Baltimore-Washington area—and lead author of the survey’s seminal report, “Cardiovascular Health of Patients with Cancer and Cancer Survivors,” which paved the way for the section’s creation.

Published in the June issue of the Journal of the American College of Cardiology, the survey examined the current state of cardio-oncology services, practices and opinions among cardiology division chiefs and cardiovascular fellowship program training directors, primarily at tertiary academic institutions. Of survey respondents, 70 percent called the cardiovascular implications of cancer treatment “very important,” and more than half agreed that patient care would improve with a cardio-oncology service or staff.

However, only 27 percent reported having an established, specialized cardio-oncology service with more than one clinician. The absence of national guidelines was frequently cited as a barrier. Despite the significant number of cancer patients experiencing treatment-related cardiovascular issues, we are lacking the proper resources to care for these patients,” says Dr. Barac. “The new cardio-oncology section is dedicated to filling this gap.”

By providing a forum for cardio-oncology specialists to share best practices and develop educational tools, practice standards and training programs, the new section will work to expand knowledge of the new cancer therapies and their possible adverse effects on the heart. The goal is to improve patient care and outcomes. Scientists first discovered the link between cancer treatments and deleterious cardiovascular effects in the late 1960s, giving birth to the origins of cardio-oncology. Today’s cancer therapies can cause heart failure, cardiac dysfunction, arrhythmias, valvular heart disease, accelerated atherosclerosis and pericardial disease.

In addition to the JACC publication, a summary of survey results and conclusions also appeared in the June 22 posting of ScienceDaily.

Joint MedStar/Cleveland Clinic CME a Success

At the 2015 Transcatheter Cardiovascular Therapeutics meeting, Toby Rogers, BM BCH, was honored with the Thomas J. Linneheimer Spirit of Interventional Cardiology Young Investigator Award for clinical and academic excellence. Rogers is an interventional fellow at MedStar Heart & Vascular Institute and a research fellow at the National Heart, Lung and Blood Institute.

Augusto Pichard, MD, senior consultant for MHVI’s Cardiac Intervention and Structural Heart Diseases program, says, “Toby’s NIH work is unprecedented, and has already been proven in animal models. His out-of-the-box thinking will lead to new and enhanced treatments for complex heart disease. We’re excited to be working with him.”

Toby Rogers, BM BCH

MedStar Health Joins Maryland’s Angioplasty External Review Group

This fall, Mun K. Hong, MD, FACC, chief of Cardiology at MedStar Southern Maryland Hospital Center, became MedStar Health’s representative to the Maryland Academic Consortium for Percutaneous Coronary Intervention Appropriateness and Quality (MACPAQ). Featuring cardiology experts from Johns Hopkins, University of Maryland Medicine and MedStar, the professional quality assurance monitoring program will conduct external peer review for angioplasty programs throughout the state.

“One of the chief goals is to identify unnecessary or inappropriate use of stents, by objectively assessing case selection, performance and reporting mechanisms for each hospital and physician performing PCI,” says Dr. Hong, an interventional cardiologist who was recommended for the MACPAQ role by Stuart F. Seides, MD, physician executive director of Medstar Heart & Vascular Institute. “But the process is also designed to inform and educate so that individual physicians, hospitals and patient outcomes can improve.”

Reviews are blinded, confidential, cross-institutional and non-punitive. Records submitted to MACPAQ must comprise 5 percent of all angioplasties performed at each hospital by a mix of practitioners over the previous six months. For record selection, each hospital uses the same sophisticated MACPAQ computer system to assure randomization; each record pulled for review is then assigned a unique number. Upon receipt by MACPAQ, records are further blinded by redacting all patient, physician and hospital identifiers. Following peer review, findings and comments are then sent to MACPAQ and the hospital where the procedures occurred for their information.

Maryland mandated the compulsory external review of both angioplasty practitioners and the hospitals in August 2014. In addition to MedStar Southern Maryland, the ruling also affects MedStar Union Memorial Hospital and MedStar Franklin Square Medical Center.

John Wang, MD, Cardiology, Medstar Union Memorial Hospital, addressed the conference goers on “Future Transcatheter Valve Devices.”

MHVI Interventional Fellow Wins Young Investigator Award

Mun K. Hong, MD, FACC, chief of Cardiology at MedStar Southern Maryland Hospital Center

John Wang, MD, Cardiology, Medstar Union Memorial Hospital, addressed the conference goers on “Future Transcatheter Valve Devices.”
New Medical Staff

Misaki Kiguchi, MD, MSc, MBA, has joined the medical staff of MedStar Heart & Vascular Institute as a vascular surgeon, seeing patients at MedStar Washington Hospital Center and MedStar Georgetown University Hospital. An outstanding medical student with new technology, including the use of ground-breaking operative simulation. Her special clinical interests and expertise also include:

- Peripheral artery disease
- Aortic aneurysms
- Carotid disease
- Hemodialysis access
- Venous disease, including cutting-edge therapies for deep vein thrombosis, varicoce veins, and pelvic congestion syndrome

Michael J. Lipinski, MD, PhD, is an interventional cardiologist for the MedStar Heart & Vascular Institute. He completed his interventional cardiology fellowship at MedStar Georgetown University and MedStar Washington Hospital Center. Dr. Lipinski received his undergraduate degree from Stanford University and his medical degree from Virginia Commonwealth University. He completed his cardiology fellowship, internship and residency in internal medicine, as well as a PhD in molecular physiology and biological physics at the University of Virginia. In addition, Dr. Lipinski was the Stanley J. Samoff Fellow in cardiovascular research at Icahn School of Medicine at Mount Sinai. During his training, Dr. Lipinski’s research received numerous awards of recognition and he has served as co-investigator on a number of investigations. He is the principal author of many articles of original research, and serves as a reviewer for numerous professional journals.

Christy L. Kaiser, MD, joins the medical staff of MedStar Heart & Vascular Institute as an attending cardiologist. Dr. Kaiser recently completed her cardiology fellowship at MedStar Washington Hospital Center, serving as chief fellow. She is a graduate of the Washington University in St. Louis, and received her medical degree from Baylor College of Medicine, where she was recognized as the Outstanding Medical Student Researcher. Dr. Kaiser completed her internal medicine residency at Duke University. During her training, Dr. Kaiser, a fluent Spanish speaker, spent time in Central America providing general internal medicine and cardiology services. As chief fellow, she led training sessions for her colleagues and developed curriculum for the program. Dr. Kaiser's clinical and educational interests include:

- General cardiology
- Echocardiography
- The use of simulation for training in cardiovascular procedures
- Initiating an international elective for fellows to manage patients with advanced cardiac disease in Nicaragua

Dr. Kiguchi has particular interest in improved therapies for arterial and venous disease, and in improving resident surgical training.

Hector M. Garcia-Garcia, MD, PhD, is an attending cardiologist at MedStar Heart & Vascular Institute. He completed his cardiology fellowship training and completed a fellowship in interventional cardiology at the Instituto Nacional de Cardiología-Ignacio Chavez. An accomplished researcher, Dr. Garcia-Garcia is widely published in many international medical journals, with more than 350 publications. He has written numerous book chapters in cardiovascular textbooks, presented at cardiology conferences world-wide, and is an expert in innovative cardiovascular technology. His research and clinical interests include:

- Imaging techniques for the assessment of coronary atherosclerosis
- Treatment of coronary stenosis with bioresorbable scaffolds
- Optical coherence tomography
- Intravascular ultrasound

Dr. Garcia-Garcia received his medical degree from the Universidad Autónoma de Guadalajara, Guadalajara, Mexico, and completed his internal medicine residency at the Universidad de Nacional Autónoma de Mexico. He received his cardiology fellowship training and completed a fellowship in interventional cardiology at the Instituto Nacional de Cardiología-Ignacio Chavez.

Prreetham Kumar, MD, is an attending physician in cardiology for MedStar Heart & Vascular Institute at MedStar Washington Hospital Center. Dr. Kumar received his medical degree from Bangalore University and completed his internal medicine residency at St. John Hospital and Medical Center/Wayne State University, where he served as chief resident. He completed his cardiovascular disease fellowship at Mayo Clinic-Florida, and an advanced cardiovascular imaging fellowship at Mayo Clinic-Arizona. He is board certified in cardiovascular diseases, echocardiography and internal medicine. In addition, Dr. Kumar was a post-doctoral research fellow in medical genetics at the National Institute of Mental Health and Neurosciences, Bangalore, India, where he also completed a psychiatric residency. Dr. Kumar’s clinical and research interests include:

- Echocardiography in the areas of:
  - 3D
  - Interventional
  - Intra-operative
  - Adult congenital echocardiography
- Cardiac Imaging
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.

U.S. News & World Report lists MedStar Washington Hospital Center as the only hospital with a nationally ranked Cardiology & Heart Surgery program in the Washington, D.C., region.

MEDSTAR HEART & VASCULAR INSTITUTE
Stuart F. Seides, MD
Physician Executive Director
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