

CONNECT

A MAGAZINE FOR PHYSICIANS

WINTER 2025

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Gastroenterology
Expands Footprint** > pg. 4

**New Minimally Invasive
Treatment for Debilitating
Lumbar Spinal Stenosis** > pg. 12

**Antibody-Drug Conjugates
Changing Landscape for Some
Cancers** > pg. 14



**Comprehensive
PCI Services
Now Available at
MedStar Franklin Square
Medical Center**

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Connect is a publication of MedStar Health. Published for physicians, Connect is focused on MedStar Health's regional service lines in Central Maryland. The information provided in this publication is intended to educate readers about subjects pertinent to their professional practice or personal health, and is not a substitute for consultation with other physicians.

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On the Cover

John Wang, MD, chief of the Cardiac Catheterization Laboratory at both MedStar Union Memorial Hospital and MedStar Franklin Square Medical Center is pictured in the new state-of-the-art lab.

Dear Readers,

Since our formation more than 25 years ago, MedStar Health has been on a transformational journey to evolve into what we are today—the largest healthcare system in the region, with a comprehensive, integrated delivery network of hospitals all sharing a united vision—to be the trusted leader in caring for people and advancing health. But our journey is far from over. We highlight a few of our most recent initiatives in this issue of *Connect*.

At MedStar Heart & Vascular Institute, we have expanded the percutaneous coronary intervention program that has long been offered at MedStar Union Memorial Hospital to MedStar Franklin Square Medical Center, making it possible for patients there to receive the critical care they need without having to transfer to another facility. This development comes at a time when the area's burgeoning population has increased the demand for more comprehensive cardiovascular services.

We have grown our Gastroenterology footprint to address the needs of individuals with digestive diseases ranging from minor issues to life-threatening conditions. Digestive diseases can be quite debilitating, yet some patients don't see a healthcare provider until they worsen. Our gastroenterology team has the specialized expertise to accurately diagnose and treat even the most complex of conditions, so patients can get the personalized care they need, when they need it.

In addition, we recently opened the Innovation in Motion Lab at MedStar Union Memorial, a 2,700-square-foot, state-of-the-art research hub for human motion analysis, aimed at advancing new methods and technologies for the characterization, augmentation, and restoration of motor functions. With the addition of the new lab, the hospital now has a total of 10,000 square feet of well-equipped research space dedicated to musculoskeletal research and surgical skills training.

We hope you find this issue of *Connect* of interest and welcome your input. With your support, we continue our quest to provide our patients and their families with access to the highest quality care, where they live and work. It's how we treat people.

In good health,



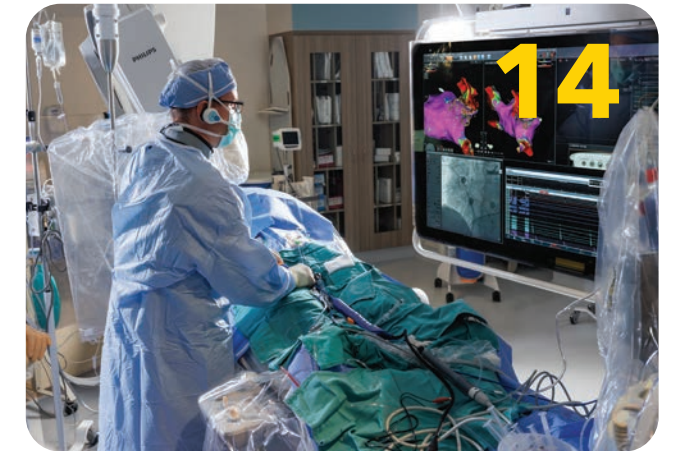
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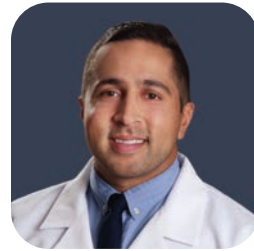
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New connections.

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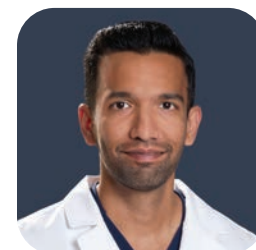


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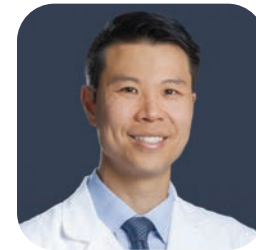
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MedStar Health Gastroenterology expands footprint in region.

Between 60 and 70 million Americans are affected by digestive diseases each year, according to the National Institutes of Health. That's twice as many people as those with diabetes. And it's cause for concern.

"Digestive conditions are so common that just about everyone knows someone with one or more of them... gastric reflux, lactose intolerance, celiac disease, Crohn's disease, ulcerative colitis, inflammatory bowel disease, irritable bowel syndrome... the list goes on," says **Dana Sloane, MD**, gastroenterology site director at MedStar Franklin Square Medical Center.



"The problem is that many patients are reluctant to discuss their symptoms, and don't raise concerns until they worsen."

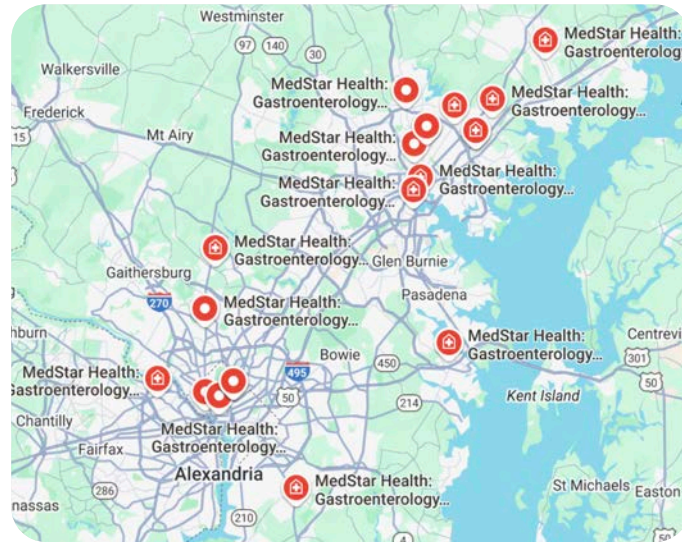
Digestive diseases range from the occasional upset stomach to life-threatening colon cancer and encompass disorders of the gastrointestinal tract, the liver, the gallbladder, and the pancreas. They may be acute and self-limiting, chronic and debilitating, or sudden and devastating. Yet some patients suffer for years until their digestive condition is accurately diagnosed.

At MedStar Health, our gastroenterology team has specialized training and extensive real-world experience that allows us to accurately diagnose and treat even the most complex of conditions.

"We have greatly expanded our footprint in the past few years and now have some of the country's most widely respected gastroenterologists available to see patients in locations throughout the Baltimore and Washington regions including clinics in Anne Arundel County, Baltimore City, Baltimore County, and Harford County,"



notes **Nadim Haddad, MD**, system physician executive director; chief, MedStar Health Gastroenterology; and chief, Gastroenterology, MedStar Georgetown University Hospital.



"Plus, with the launch of our MedStar Health GI Connected Care program, qualifying patients referred to our team can receive the expert care they need within 24 to 72 hours," he says.

Designed to help identify problems your patients may be facing before they become critical, the GI Connected Care program offers a convenient telehealth appointment with a GI specialist prior to procedures, eliminating the wait for an in-person visit.

The program is available to patients who need a pre-procedure appointment for a screening colonoscopy or present with new GI symptoms such as bleeding, bloating, constipation, diarrhea, heartburn, pain, nausea, and vomiting. Once a referral has been received, the patient is contacted immediately to schedule a telehealth appointment. After the appointment all consult notes are shared with the referring provider.

"We understand that some patients are uncomfortable talking about GI symptoms. As GI specialists, we know what questions to ask. Through this program, we hope to streamline the process for referring patients to us when there are GI concerns," Dr. Sloane adds.

"Many of our physicians are at the forefront of developing nationwide standards of care. With our extensive research network, our patients often have the opportunity to participate in procedures and technologies available at only a handful of centers across the country."

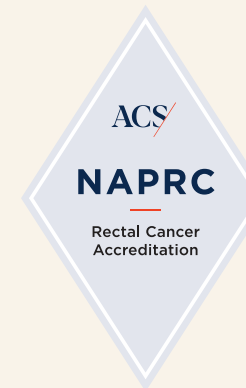
MedStar Health also offers advanced technology for the diagnosis and treatment of digestive disorders. This includes now being able to perform endoscopic retrograde cholangiopancreatography (ERCP), which uses a combination of endoscopy and x-ray technologies to identify and treat problems of the bile and pancreatic ducts. This advanced procedure offers a potential cure for certain GI diseases and provides a new alternative to invasive procedures that require longer recovery.

"Our gastroenterologists have training in advanced interventional endoscopy and years of expertise in performing ERCPs. Throughout the MedStar Health system, we handle a high volume of these procedures each year with an excellent success rate," says Dr. Sloane.

"We also collaborate closely with our surgical colleagues including colorectal, bariatric, oncological, thoracic, and general surgeons, when needed. Together, we provide a diverse range of endoscopic and surgical procedures while leveraging the latest, most innovative technologies and techniques to optimize clinical outcomes." •

For a consult with a GI specialist, or to refer a patient to our MedStar Health GI Connected Care program, call 443-782-7640.

Rectal cancer program first in Maryland to achieve national accreditation.



MedStar Franklin Square Medical Center has earned the distinction of being the first and only Maryland hospital to earn a three-year accreditation for its rectal cancer program by the National Accreditation Program for Rectal Cancer (NAPRC) of the American College of Surgeons.

Over the last 20 years, the outcomes of rectal cancer have relied on specialization, training, and volume. In response to this variability in how rectal cancer

patients are cared for, the NAPRC was developed to create standards, based on care models from around the world, that would ensure better outcomes for patients, to include a reduction in recurrence rates, better quality of life, improved function, and increased survival.



"Achieving this accreditation required a strong commitment from our team to meet the high standards that are part of the evaluation process," says program director and colorectal surgeon **David Lisle, MD**. "So, the rectal cancer patients we treat can be assured they're getting the quality of care that leads to the best outcomes."

The Innovation in Motion Laboratory: A research hub for movement analysis.



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The Gait Real-time Interactive Laboratory (GRAIL) is projecting the subject's foot placement on the screen.

With the recent opening of the Innovation in Motion Lab (iMoLab) at MedStar Union Memorial Hospital, researchers now have even more resources at their fingertips to conduct cutting-edge, meaningful, and multi-faceted research that will ultimately enhance the care of patients with a wide range of conditions.

"The Innovation in Motion Laboratory is a 2,700-square-foot, state-of-the-art research hub for human motion analysis aimed at advancing new



methods and technologies for the characterization, augmentation, and restoration of motor functions," explains **Dario Martelli, PhD**, senior research scientist and director of the new lab. "Our research activities cross multiple disciplines including engineering, kinesiology, and medicine, with a strong

emphasis on biomechanics, robotics, rehabilitation, and neuroscience."

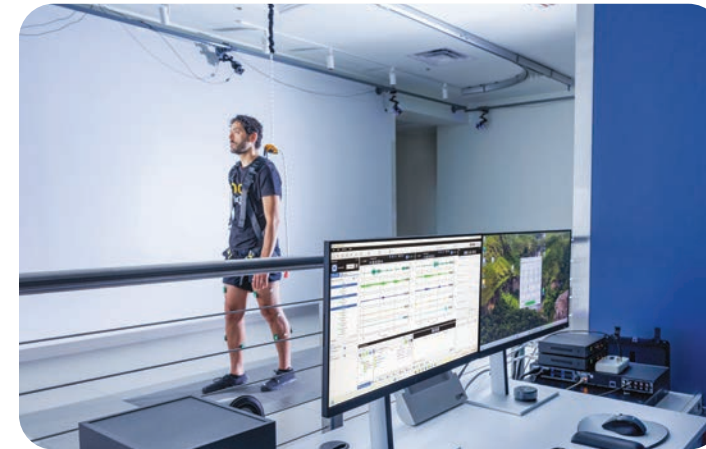
MedStar Union Memorial has long been committed to advancing medicine and orthopaedic care by exploring new treatment approaches, novel surgical procedures, and using the latest technological upgrades to better understand how the human body moves.

To facilitate this, generous donations have been received in recent years to design and develop several state-of-the-art labs for researchers in orthopaedic, sports medicine, and related disciplines to conduct their studies, which are now collectively known as the Musculoskeletal Research and Innovation Center. With the addition of the iMoLab, a key component of the center, the hospital has a total of 10,000 square feet of well-equipped research space dedicated to musculoskeletal research and surgical skills training.

Funded through grants and individual donors, the iMoLab was developed with three objectives in mind. "We want to better understand the neural and biomechanical basis of balance and locomotion, develop more effective and efficient screening tests and diagnostic tools for movement disorders, and identify novel ways to improve a person's ability to move freely," says Dr. Martelli, whose research interests include initiatives to improve gait and reduce the risk of falling in patients with balance disorders.

To that end, the iMoLab is outfitted with a variety of high-tech equipment, many unique to the region. This includes a total package solution for gait analysis and balance training called the Gait Real-time Interactive Laboratory (GRAIL).

Integrating a two degrees-of-freedom motion base, a split-belt treadmill, an immersive virtual reality



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The iMoLab features a 12-camera optoelectronic motion capture system (top), the GRAIL (lower left), and an isokinetic dynamometer (lower right).

environment, a belt projector, two 3D force platforms, a 3D motion capture system, and control software, the GRAIL allows for systematical control of the physical, visual, and audio environments while motion is recorded and facilitates the development of personalized protocols and applications.

The lab is also provided with an open area for overground gait analysis. This side of the lab is equipped with a 12-camera optoelectronic motion capture system, an instrumented walkway that can fit up to 12 3D force platforms, and a fall protection track, used to ensure safety.

In addition, the lab has an isokinetic dynamometer used to test the strength and power of different muscles. It can measure joint torque while controlling the speed of the movement and can provide 22 isolated-joint movement patterns and four resistance modes.

For further applications, the lab has a variety of portable equipment. This includes a motion capture

system with 17 wireless inertial sensors that are fitted on the body with adjustable straps to support fast, easy, and reliable motion capture; a 16-channel wireless surface electromyographic system to measure muscle activation by detecting the electrical activity in a muscle when it contracts; and two portable 3D force platforms.

All of the motion capture systems allow for real-time visualization of full body kinematic data such as joint angles, segment orientations, center of mass and joint centers position.

The lab is also equipped with a virtual reality kit with room-scale technology. It features a high-end professional-oriented VR headset with a resolution of 1440 x 1600 per eye, a field of view of 100 degrees, and up to a 10m by 10m working area using precision tracking with laser base stations. The wireless adapter allows moving around the room without being connected with cables.

"This VR platform is aimed at investigating modifications and adaptations of spatiotemporal gait parameters and cognitive performance during overground walking, navigation, dual motor tasks, visual feedback, and visual perturbations," Dr. Martelli notes.

The laboratory was designed as a resource center for researchers and clinicians within MedStar Health as well as a site for collaboration with other public and private organizations and institutions.

"Our fundamental goal was to provide the best possible environment to collectively advance musculoskeletal research," says Dr. Martelli.

"That's what you'll find at the Innovation in Motion Laboratory." •

To explore research opportunities or learn more about the Innovation in Motion Laboratory, contact Dario Martelli PhD, director, at dario.martelli@medstar.net.



◀ John Wang, MD, chief of the Cardiac Catheterization Laboratory at both MedStar Union Memorial Hospital and MedStar Franklin Square Medical Center performs a PCI procedure.

Comprehensive PCI services now available at MedStar Franklin Square Medical Center.

*Providing more options to
patients in Baltimore region.*

MedStar Heart & Vascular Institute has expanded the percutaneous coronary intervention (PCI) program it has long offered at MedStar Union Memorial Hospital to MedStar Franklin Square Medical Center, making it possible for patients there to receive the comprehensive care they need without having to transfer to another facility or travel far from home. →



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The expanded PCI program in the Baltimore region includes Interventional Cardiologists David Peichert, MD; John Wang, MD; Antony Kaliyadan, MD; and Abhinav Sood, MD.

“There are two types of PCI procedures: primary, an emergency intervention performed shortly after a heart attack begins; and elective, a non-emergent procedure that involves revascularizing coronary arteries that are substantially blocked, relieving patients’ anginal symptoms and potentially reducing the risk of a cardiac event,” explains **John Wang, MD**, chief of the Cardiac Catheterization Laboratory at both hospitals and scientific director for Cardiovascular Research in the Baltimore region. “While MedStar Franklin Square has long performed emergent PCI procedures, our team is now approved to provide elective PCI procedures as well.”



“This comes at a particularly beneficial time as the population of the region surrounding the hospital continues to grow and so, too, has the need for more comprehensive cardiovascular services,” says **Cheryl Lunnan**, regional vice president of MedStar Heart & Vascular Institute in Baltimore. “When it comes to cardiac events, early intervention is a critical factor in improving patient outcomes.”

Justifying the need.

For many years, PCI procedures in Maryland could only be performed in hospitals that provided cardiac

surgery and both emergent and elective PCI services. However, in the last two decades, research has shown that PCI services can be provided in hospitals without on-site cardiac surgery while achieving levels of patient safety, with respect to mortality and complication rates, comparable to the performance achieved in cardiac surgery hospitals.

Based on this, Maryland established a new regulatory model for PCI services. Directed by the Maryland Health Care Commission, the new regulations first permitted hospitals without surgery on site (SOS) to provide primary PCI services if they met certain volume and quality standards. More recently, the changing science in heart disease treatment has demonstrated that the provision of elective PCI in non-SOS hospitals meeting similar standards was equivalent to the provision of elective PCI in hospitals with cardiac surgery on-site.

“Today, the establishment of new PCI programs are considered through a process called a Certificate of Conformance review, with all providers of PCI services now subject to revalidation and authorization through periodic ongoing performance reviews,” Lunnan says. “It’s a long, complex process that requires a great deal of documentation and data collection.”

In July of 2021, MedStar Franklin Square, which had been performing emergent PCI procedures since 2006, submitted its application to offer elective PCI intervention services. In April of 2022, the hospital’s application to expand its PCI program to include both emergent and elective services was approved based on the need to maintain timely access to these procedures for the population in its primary service area.

“According to the American Heart Association, the majority of people who die from coronary heart disease are 65 or older. The average age of a first heart attack is 65.6 years for men and 72 years for women,” Lunnan adds, “That said, Baltimore County is projected to see a growth in its elderly population, age 65 and older, of approximately 23% during the next decade. So having the ability to address the comprehensive cardiovascular needs of this population close to home, where they can benefit the most from timely services, is essential.”

Delivering on the promise.

“We are now offering patients at MedStar Franklin Square access to the highest level of care provided by the same experienced, high-volume specialists that perform these procedures at MedStar Union Memorial, one of the premier heart centers in the region,” Dr. Wang says.

“With the expansion of PCI services at MedStar Franklin Square, we have created one interventional cardiology program with two locations led by a team of highly skilled interventionalists who rotate through both sites. To ensure continuity of care, the program is identical at both hospitals with the same capabilities and protocols in place.”

To accommodate the program at MedStar Franklin Square, a brand-new Cardiac Catheterization Laboratory, equipped with state-of-the-art technology was built, and the existing lab was updated for overflow procedures. A new, contiguous prep and recovery unit was also constructed that includes 12 patient bays, a central nursing station, a family waiting room, a radial recovery lounge, and additional support spaces.

Today, MedStar Franklin Square is averaging more than 300 PCI procedures per year versus approximately 100 when it only offered emergent PCIs, and the program continues to grow. In addition, 90 percent of the PCI procedures are performed radially compared to a national average of 59 percent.

“One of the reasons we were able to ramp up so quickly, is the fact that we were already doing emergent PCIs, so we did not have to build from scratch,” Dr. Wang notes. “With the improvements we have made and the team we have in place, the patient experience is far better. Patients and their physicians can be assured of receiving the highest quality of care for the most complex of procedures, close to home.” •



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The new Cardiac Catheterization Laboratory at MedStar Franklin Square has numerous features designed to improve the experience for both providers and patients.

To refer a patient to our Interventional Cardiology specialists, call 410-554-2332.

New minimally invasive treatment for debilitating lumbar spinal stenosis.

Lumbar spinal stenosis, which typically results from degenerative changes in the spine associated with aging, affects approximately 11% of older adults in the U.S. and can be quite debilitating.

“Common symptoms of lumbar spinal stenosis (LSS) are pain and achiness extending from the lower back to the buttocks and often to one or both legs



sometimes accompanied by numbness or tingling in the lower legs or feet,” says **Matthew Hansen, MD**, an interventional pain management specialist at MedStar Health.

“LSS may be due to a bulging disk and/or hypertrophy of the ligamentum flavum, which lead to narrowing of the spinal canal causing nerve compression. When someone with LSS stands or walks, the spinal canal narrows even more, resulting in low back and leg pain that is relieved with sitting or bending forward, which is called neurogenic claudication. Due to gradual worsening of pain over time, some patients develop severe limitations in activity, which significantly impacts their quality of life.”

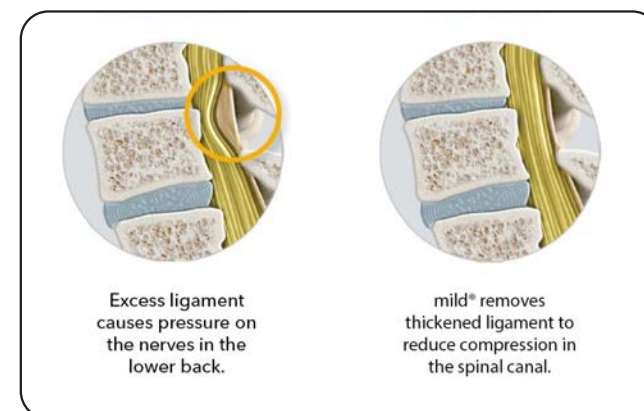
Until a few years ago, the only treatment options available for patients with LSS were conservative non-surgical therapies or open spine surgery. Nonsurgical treatment for LSS includes NSAIDs, physical therapy, and/or epidural steroid injections. When those treatments were no longer effective, patients often required open spine surgery.

For patients who don't respond to conservative treatment and are unable or unwilling to undergo open spine surgery, MedStar Health now offers a novel X-ray guided percutaneous outpatient treatment called *mild*[®], which stands for minimally invasive lumbar decompression.

“Patients with moderate to severe LSS may be candidates for *mild* if they complain of neurogenic

claudication and if the MRI shows that ligamentum flavum hypertrophy is a cause of the spinal stenosis. The *mild* procedure addresses a major root cause of LSS by removing excess ligament tissue to restore space in the spinal canal,” Dr. Hansen explains.

“Performed under sedation through a 1-cm incision, it involves placing a trocar to the lamina and using a bone rongeur and tissue sculptor to posteriorly thin the ligamentum flavum in patients with a hypertrophied ligament to open the spinal canal.”



Because the bony architecture of the spine remains intact, spinal mechanics are not disrupted and patients typically recover quickly. They are discharged home after a couple of hours and are able to begin rehabilitation.

“The *mild* procedure decreases pain and increases mobility while maintaining the structural integrity of the spine,” Dr. Hansen notes. “In the cases I've done, patients have done well with significant reduction in pain and primary improvement in walking distance and activity level. It's a great option for many older patients.” •

To refer a patient to Dr. Hansen to be evaluated for the mild procedure, call 443-777-7180.

Multidisciplinary approach aims to improve outcomes for patients with pituitary tumors.

Despite its diminutive size, the pituitary gland controls the functions of many other endocrine glands, producing hormones that influence bodily processes such as growth, sexual development, and metabolism. Often called the “master gland,” it's about the size of a pea and is located behind the eyes and the bridge of the nose on the bottom side of the brain. Though it's tiny, it can cause huge problems if a tumor develops there.

“Pituitary tumors are quite common with more than 10,000 diagnosed each year in the United States, according to the American Cancer Society,” says **Nawar Suleman, MD**, an endocrinologist and director of Pituitary Endocrinology at MedStar Franklin Square Medical Center. “Fortunately, most of these tumors do not cause problems that need treatment. In fact, we often see patients with pituitary tumors that are picked up as incidental findings during imaging tests for some other reason.”

“Almost all pituitary tumors are benign glandular tumors called pituitary adenomas and don't spread to other parts of the body, like cancers can,” adds **Samir Sur, MD**, a neurosurgeon and director of Cerebrovascular and Skull Base Surgery at MedStar Franklin Square. “That said, even benign pituitary tumors can cause major health problems by pressing on nearby parts of the brain and important nerves, invading nearby structures like the skull or the sinuses, or making excess hormones.”

To address the often-complex issues affecting individuals with pituitary tumors, Dr. Suleman and Dr. Sur recently launched a multidisciplinary initiative that brings together pituitary specialists with a single goal...to give patients expert care for pituitary tumors, including surgery, if needed.

“Once a patient is referred to us, we move quickly,” explains Dr. Suleman. “They'll usually first see me or one of our other endocrinologists to determine whether the tumor is affecting their hormones. They'll also see a neuro-ophthalmologist to evaluate their eye function, as large pituitary tumors can press on the optic nerve and cause vision problems. In some cases, and based on tumor type, patients can avoid surgery by taking highly effective medications to control tumor growth.”

But if a patient needs surgery due to severe symptoms or uncontrolled tumor growth, Dr. Sur has extensive expertise in removing pituitary tumors using minimally invasive approaches that involve smaller incisions and less pain for patients. “For many individuals, it's more like sinus surgery than brain surgery in terms of how it impacts them,” Dr. Sur says. “If a patient isn't a good candidate for one of our minimally invasive techniques, I can perform a craniotomy to remove the tumor.”

After surgery, patients usually stay in the hospital for at least a few days to monitor changes in endocrine function that can occur within the first two to three days after removal of a pituitary tumor. This expert, inpatient care is essential during this time because patients can get sick quickly without monitoring.

“Everything has to come together for patients who have pituitary tumors,” Dr. Suleman notes. “Someone has to notice their condition, they have to get an accurate diagnosis, and they have to find a team of experts to provide the care they need. Our team here at MedStar Health is dedicated to making that happen every day for each of our patients.” •

To refer a patient to Dr. Suleman and the experts in Pituitary Endocrinology at MedStar Franklin Square Medical Center, call 443-777-6351.

Pulsed field ablation: A transformational advance in the management of AFib.



Glenn Meininger, MD, a cardiac electrophysiologist and director of Cardiac Electrophysiology Services for the Baltimore region of MedStar Heart and Vascular Institute, performs a pulsed field ablation procedure using mapping technology.

By 2030, approximately 12.1 million Americans will have atrial fibrillation (AFib) according to the U.S. Centers for Disease Control and Prevention. The most common heart rhythm disorder in adults, AFib occurs in the heart's upper chambers, making the heart beat irregularly due to electrical malfunction. This reduces blood flow and increases the risk of stroke, heart failure, and other heart-related complications.

AFib can be challenging to manage, and some treatment options come with the risk of complications. So, the approval of a new treatment option in early 2024—a procedure called pulsed field ablation—caught the attention of providers and patients alike.



"Pulsed field ablation (PFA) is a transformational advance in the management of AFib. It is a catheter-based, non-thermal technique that emits a series of high-intensity energy pulses to electroporate target cells rather than burn or freeze them," explains Glenn Meininger, MD, a cardiac electrophysiologist

and director of Cardiac Electrophysiology Services for the Baltimore region of MedStar Heart & Vascular Institute.

"This enables rapid, complete, and highly specific ablation of heart tissue associated with irregular electrical activity while sparing surrounding structures (e.g., nerves, lungs, esophagus). It is more efficient and likely safer than previous techniques, and early evidence suggests that it may result in better clinical outcomes."

For the past two decades, cardiac electrophysiologists have turned to ablation techniques to treat AFib when medications don't help. This includes procedures such as radiofrequency ablation, which uses heat to cauterize cells around the pulmonary vein that trigger AFib, making them electrically inert, and cryoablation, which uses extreme cold to achieve the same goal.

While these standard ablation procedures are generally effective, they do carry a risk of complications including bleeding, perforation, and damage to the esophagus, phrenic nerve, blood vessels, and/or heart valves.



All members of the cardiac electrophysiology team in the Baltimore region are trained to perform the pulsed field ablation procedure. The team includes: Richard Jones, MD; Rajiv Kabadi, MD; Sunjeet Sidhu, MD; and Glenn Meininger, MD.

In early 2024, MedStar Washington Hospital Center was the first in the region to begin offering FARAPULSE™ Pulsed Field Ablation to help patients with AFib get back to normal heart rhythm. The technology is indicated for the isolation of pulmonary veins in the treatment of patients whose AFib is paroxysmal, lasting less than a week, or early persistent, occurring for longer than a week. The procedure is now being offered at MedStar Union Memorial Hospital as well.

"Our clinic experience to date shows the advantage of this technology in reducing risk of injury to the esophagus and the phrenic nerve, which controls the diaphragm and is essential to breathing," says Dr. Meininger.

During the PFA procedure, a catheter is threaded through a patient's veins from the groin to the upper chamber of the heart. There, the instrument releases electromagnetic waves into the cardiac tissue responsible for AFib. By a process called electroporation, the waves make microscopic holes in the cell membranes so electrical impulses can't go astray and cause AFib.

Patients usually rest in the hospital for a few hours after the procedure and return home the same day. Over the next few months, patients may stop taking medications for AFib. Depending upon their

individual risk factors, some patients remain on blood thinners.

"Our goal is to minimize long-term medication use for our patients and reduce AFib symptoms," says Dr. Meininger. "Without treatment, AFib can progress and become more challenging to treat. For most patients who are candidates, pulsed field ablation offers a safe option."

Many of the physicians at MedStar Heart & Vascular Institute have been working with pulsed field ablation for several years, participating in clinical trials to help make it a reality for patients. They include:

- The PULSED AF Pivotal Study: This global study used PFA to treat 300 patients with paroxysmal or persistent AFib. The results showed PFA was effective at one year in 66.2% of patients with paroxysmal AFib and 55.1% of patients with persistent AFib. It also showed that PFA is safe for patients.
- The ADVENT Trial: This 12-month randomized clinical trial of the FARAPULSE™ PFA system tested the safety and effectiveness of PFA compared to other ablation procedures to treat paroxysmal AFib. The research showed the system helps more people with AFib stay off medications with a low risk of complications.
- The AdmIMRE Study: Results from this pilot study showed that 80% of patients treated with pulsed field ablation using the VARIPULSE™ platform were AFib recurrence-free after one year and reported no complications.

"The incidence and prevalence of atrial fibrillation keeps rising, and safe, effective, and efficient therapies like PFA allow physicians to treat more patients, reduce complications, and improve outcomes," says Dr. Meininger. "Today, we are better equipped than ever before to care for the most complex cardiac arrhythmia disorders." •

To refer a patient to Dr. Meininger and our team of cardiac electrophysiology specialists, call 410-554-6727.

Antibody-drug conjugates changing landscape for some cancers.

Chemotherapy has long been a mainstay of treatment for numerous types of cancer. While generally effective, it is associated with both short- and long-term side effects and significant toxicities.

This has intensified the search for alternatives to chemotherapy in recent years, resulting in a growing interest in antibody-drug conjugates (ADCs). These drugs are providing new therapeutic options and significant promise for patients with cancer, particularly where existing treatments are limited.

"An antibody-drug conjugate is a biopharmaceutical drug used as a targeted therapy to treat cancer that connects a monoclonal antibody to a cytotoxic drug using a chemical linker," explains



Mounika Gangireddy, MD, a fellowship-trained medical oncologist and hematologist at MedStar

Georgetown Cancer Institute at MedStar Franklin Square Medical Center.

"The linker is the chain that holds the drug to the antibody and once the antibody attaches to the cancer cell the drug is released to kill it. This approach helps to deliver the drug directly to the cancer cells while sparing healthy ones, making treatment more effective and reducing adverse effects compared with the systematic dosing of chemotherapy."

Often referred to as "smart chemo," a growing number of ADCs targeting both solid and hematologic malignancies have been approved by the Food and Drug Administration (FDA) for clinical use following positive results from phase II/III trials when compared against current standards of care.

"We are now using ADCs as a second- or third-line therapy in patients with advanced or metastatic cancers who have not responded to other treatments," says Dr. Gangireddy. "While there are side effects,

such as fatigue, these drugs are very well tolerated in general practice."

First debuting at the turn of the century, early versions of ADCs had a variety of issues that made them less effective than later generations. However, improvements in antibody engineering, more stable linkers, and more toxic payloads have greatly improved their efficacy.

While the first ADC to be approved by the FDA was in 2001 for the treatment of acute myeloid lymphoma, the drug class began to take off in 2011 when the FDA approved an ADC for Hodgkin Lymphoma... the first new drug approved for the treatment of the disease in 30 years. This was followed by approval for another ADC in 2013 for HER2-positive metastatic breast cancer.

Nearly a dozen ADCs have subsequently been given the green light in recent years, with more than half receiving approval since 2020, and they are now being used in the treatment of numerous hematologic malignancies and well as bladder, breast, cervical, fallopian tube, and lung cancers, among others. Today it is estimated that more than 160 ADCs are in development.

"Just five years ago, we didn't have much to offer these patients," Dr. Gangireddy notes. "Now we do. ADCs have changed the treatment landscape for many cancers and will continue to do so as more new ADCs are studied and approved. •

To refer a patient to the oncology experts at MedStar Georgetown Cancer Institute at MedStar Franklin Square Medical Center, call 443-777-7147.

Breast Center recognized for achieving highest quality standards.

The Comprehensive Breast Center at MedStar Good Samaritan Hospital has achieved accreditation status for the third time from the National Accreditation Program for Breast Centers (NAPBC), a quality program administered by the American College of Surgeons (ACS).



^
A patient meets with Theresa Donovan, patient navigator, Stephanie Johnson, PA-C, and Maen Farha, MD, for a consult in the Multidisciplinary Breast Cancer Clinic at MedStar Good Samaritan Hospital.

The achievement positions MedStar Good Samaritan among an elite cadre of hospital breast programs, having demonstrated compliance with NAPBC quality standards that address a center's leadership, clinical services, research, community outreach, professional education, and quality improvement for patients.



"This is a coveted distinction," says breast surgeon **Maen Farha, MD**, medical director of the Comprehensive Breast Center at MedStar Good Samaritan. "It

represents the focus all of us at MedStar Health have on quality metrics throughout the patient's journey with breast cancer or breast disease."

Dr. Farha points to several services that set the Breast Center apart. "Our Multidisciplinary Breast Cancer Clinic takes the concept of multidisciplinary care to a higher level. Here, we embrace a comprehensive approach to cancer care. At our clinic, patients are part of a team

that includes a breast surgeon, medical and radiation oncologists, pathologists, breast radiologists, and more. This team is bolstered by navigators, social workers, occupational therapists, and geneticists, ensuring that every aspect of a patient's care is covered."

Unlike traditional care models that require visiting multiple specialists at different times and locations, the clinic brings the entire care team to the patient in one place, at one time. This model minimizes the logistical burdens of treatment, reduces confusion, and helps avoid delays that could impact recovery. Patients are encouraged to bring loved ones for support.

The center also offers a High-Risk Clinic that provides breast screening with mammogram, ultrasound, or breast MRI, breast exam, chemoprevention, and genetic risk evaluation for those who are concerned about their risk for breast cancer, or have been deemed high risk by a provider.

"With today's advanced diagnostic screening and testing options, individuals who may be at increased risk for cancer now have access to tools that can help them make more informed decisions about how to manage their health," Dr. Farha says. "Our program gives patients a place to start. We conduct cancer risk assessments and genetic testing, if appropriate, to arm them with the information they need to make the best choices. The insight that patients and their providers gain through this can literally be lifesaving."

The Comprehensive Breast Center at MedStar Good Samaritan offers same-day mammograms and is located in the Smyth Building at 5601 Loch Raven Boulevard, Suite 403B, Baltimore, Maryland. •

To refer a patient to the Comprehensive Breast Center at MedStar Good Samaritan Hospital, call 443-444-4673.

Quick reads.

Latest advancement in diagnostic breast imaging now available.

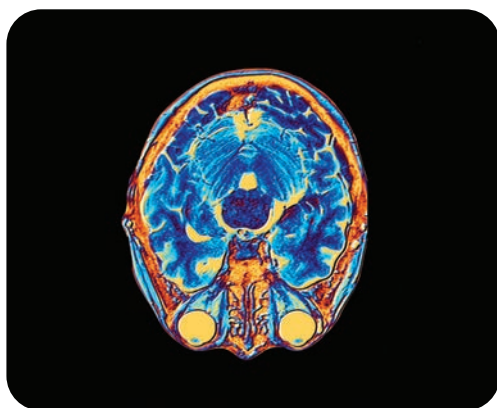


Contrast-enhanced mammography (CEM), the most advanced technology available, is now being offered at MedStar Union Memorial Hospital to women needing advanced diagnostic imaging. CEM is particularly beneficial in the diagnosis of breast cancer among women with dense breasts. Nearly half of American women have dense breast tissue, reducing the effectiveness of mammograms.

"The challenge of interpreting mammograms is that breast tissue is white, and breast cancer is also white," said **Michelle Townsend Day, MD**, chair of Radiology and division chief of Breast Imaging at MedStar Union Memorial and MedStar Good Samaritan Hospital. "The addition of contrast enhanced mammography to our breast imaging offerings gives the radiologist yet another way to detect an underlying cancer, which can be hidden by breast tissue."

To refer a patient to Dr. Day and her team call **443-444-4339**.

Advancing our care for patients with dementia and Alzheimer's.



The diagnosis, treatment, and advanced research of early-onset dementia and Alzheimer's disease have evolved dramatically in recent years. At MedStar Health, we can accurately diagnose these conditions through cognitive assessments done by expert neurologists and geriatricians, blood tests, and sophisticated brain imaging. We believe a comprehensive evaluation for patients with dementia ensures we provide the highest standard of care. Early detection gives patients the opportunity for treatment with new anti-amyloid antibodies indicated for early Alzheimer's disease, slowing disease progression. MedStar Health is dedicated to providing these state-of-the-art diagnostic tools and treatment modalities, with more to come.

To refer a patient to a neurologist at MedStar Franklin Square Medical Center, call **443-777-7320**; at MedStar Union Memorial Hospital, call **410-554-2286**. To refer to the Center for Successful Aging at MedStar Good Samaritan Hospital, call **443-444-4720**.

Revised guidelines recommend genetic testing for colon and endometrial cancer.



The National Comprehensive Cancer Network (NCCN) recently revised their guidelines to recommend that all patients with a personal diagnosis of colon and/or endometrial cancer consider genetic testing. So regardless of age of diagnosis or family history, these patients should be offered genetic counseling and testing.

Of note, this recommendation is a Category 2B recommendation from NCCN so greater than 50% but less than 85% of the panel supported this update. As a result, insurance companies may not cover the tests. At MedStar Health, patients who do not have insurance coverage can elect for self-pay testing at a cost of \$250.

To learn more about the revised guidelines, or to refer a patient for genetic testing, contact **Emily Kuchinsky, MS, LCGC**, regional genetic cancer program director for MedStar Health, at **443-777-7656**.

Radiation protection system for Cardiac Catheterization Lab is first in Maryland.



A novel protection system, Rampart IC, is now being used in the Cardiac Catheterization Lab at MedStar Union Memorial Hospital. This new technology protects interventionalists from the risks of radiation exposure, as well as potential orthopaedic injuries from wearing heavy lead. With Rampart, the weight of the protection is transferred to a lead-infused, mobile, acrylic barrier that stands between the clinician and the radiation source. Used in conjunction with drapes below the operating table, the clinicians have total body protection from radiation scatter from head to shins, putting the exposure risk at zero.

"With all the innovations in interventional cardiology over the last half century, one thing that had not advanced has been radiation safety measures," says **John Wang, MD**, director of Interventional Cardiology. "Thanks to generous philanthropic support, we now have a wonderful improvement that will benefit our team, as well as the next generation of interventional cardiologists."

Quick reads.

Continuing our tradition of excellence in orthopaedic surgery.



Jason Stein, MD, shoulder and elbow orthopaedic surgeon, has been appointed chair, Department of Orthopaedic Surgery, for MedStar Good Samaritan Hospital and MedStar Union Memorial Hospital. Dr. Stein has served as the department's vice chair since 2020 under the leadership of Henry Boucher, MD, FAAOS, who now focuses exclusively on his role as vice president, Medical Operations, for MedStar Medical Group. Since joining MedStar Union Memorial in 2010, Dr. Stein has been active in advancing patient care, strengthening our services, and contributing to the implementation of new orthopaedic technologies that have increased efficiencies.



James Higgins, MD, chief of MedStar Health's Curtis National Hand Center at MedStar Union Memorial Hospital, has been awarded the prestigious 2024 Andrew J. Weiland Medal by the American Society for Surgery of the Hand (ASSH) for his 20 plus years of groundbreaking clinical work and research, including the development of a novel joint reconstruction technique to repair the devastating effects of Kienbock's disease, which was previously untreatable. The ASSH selects only one surgeon annually among a field of international nominees, whose body of work has most profoundly advanced the practice and science of hand surgery. Today, Dr. Higgins consults with people from all over the world who come to the Curtis National Hand Center for the microvascular bone and cartilage transfer surgery he first performed in 2009.



Frank Ebert, MD, joint replacement surgeon, was recently honored as a 2024 Medical Champion by the Arthritis Foundation of Maryland in recognition of his years of service to patients with arthritis. Noted as one of the forefathers of orthopaedic surgery at MedStar Union Memorial Hospital, his kindness, expertise, tenure, and thought leadership makes this award especially well deserved.



Anand Murthi, MD, chief of shoulder and elbow surgery at MedStar Union Memorial Hospital, was presented with the inaugural Founders' Legacy Award at the 2024 annual meeting of the American Shoulder and Elbow Surgeons Foundation. The new award was created to annually recognize and give appreciation for up to four ASES members and/or ASES front office staff for their efforts in the areas of leadership, service, diversity, or mentorship with each award made in honor of one of the ASES Founders. Dr. Murthi received the diversity award named for ASES Founder Frederick C. Ewald.



Connect with: Mohammed Karim, MD

Mohammed Karim, MD, is a board-certified and dual fellowship-trained surgeon who specializes in both orthopaedic oncology and spine surgery. He cares for patients with benign and malignant tumors detected within the bones and/or soft tissues of the arms, legs, pelvis, spine, and sacrum. He treats patients with both metastatic bone disease and primary tumors that originate within the bones and soft tissues of

the musculoskeletal system, such as sarcomas. He served on the faculty and staff at Mayo Clinic in Rochester, Minnesota before returning to his home state of Maryland this past summer. His extensive clinical training and experience make him a valuable, trusted resource for patients as they are undergoing treatment for complex, life-changing diseases. Here, Dr. Karim shares his perspective on the steps he takes to get patients the answers they need, and the reasons why he is so passionate about his day-to-day work.

Caring for patients holistically is important to you. Why?

My waiting room is typically full of patients who are scared and full of anxiety. Some are wondering if they have cancer. Some already know they have it and are worried about how it will affect their body and their life. My job is to listen, understand, empathize, and then develop a personalized plan of care that will give them answers, clarity on next steps, and often times, connection to other specialists who need to be involved with their treatment.

Why is a multidisciplinary approach to care especially important, as you are treating patients with complex tumors?

I believe strongly that cancer care is a "team sport." As a surgeon, it is important that I collaborate and make decisions with the patient's medical oncologist and radiation oncologist, along with our expert radiology and pathology teams. Coordinated care streamlines the treatment process for patients, assures that their plan of care accounts for all clinical perspectives, and ultimately gives them the best chance for positive clinical outcomes and survivorship.

How has your field evolved over time and how do these changes benefit our patients?

Patients are presenting with extremely complex clinical issues and the best way we can solve these problems is through research and innovation. Clinical research is a primary focus for me, because I am always looking for new, better, and more efficient ways to deliver care.

One change that exemplifies this are the types of novel materials we are using for patients requiring spinal implants. Historically, we used metallic implants, but we are now also using carbon fiber implants, which may help in early detection of tumor recurrence and provide for more accurate and effective radiation dose delivery after surgery. We are also working with the industry in studying the biomechanical properties of carbon fiber spinal implants to see how they compare to traditional metallic implants in terms of durability for spinal tumor surgeries. •

To refer a patient to Dr. Karim, call 410-554-2715.

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