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Stay Connected
Dear Friends,

It is fascinating to watch the spine at work. Imagine: 33 individual bones — connected and aligned by a powerful system of ligaments and muscles — working as one unit to support your body. Together, they make it possible for you to walk, run and even dance at your child’s wedding.

In many ways, the human spine is like our very own Sandra and Malcolm Berman Brain & Spine Institute. Here, dozens of renowned doctors from many different specialties — including neurology, neurosurgery, neuropsychology and rehabilitation — come together as one team. They are aligned by a common mission: to be your primary source of support for exceptional brain and spine care.

A Powerful Connection
Much like the spine, the Berman Brain & Spine Institute is connected by a powerful network of services at Sinai Hospital, Northwest Hospital and Carroll Hospital. From the moment patients arrive in our emergency rooms or physicians’ offices, we make sure that they and their families have virtually everything they need on the road to recovery. In this issue, we’ve highlighted a number of these services, including our Pain Center, Comprehensive Epilepsy Center and Physical Medicine and Rehabilitation program.

The Natural Curve
There is something else inherently beautiful about the spine: It has a natural curve to it, a curve that’s designed, in part, to give your body a greater range of motion.

The Berman Brain & Spine Institute also has a natural “curve” to it. Our providers aren’t rigid textbook-treatment-plan followers. They are collaborators who rely on one another for new perspectives. They are tailors, custom-fitting every treatment plan to meet patients’ unique needs. And they are game changers. Through research, teaching and clinical trials, they are pushing the limits of what brain and spine care can do on a global scale. It is no wonder that patients like two-time Olympic soccer gold medalist and World Cup champion Briana Scurry turn to us — our team doesn’t settle for “impossible” as an answer. You can see Scurry’s story on page 16.

I hope as you read this issue, you’ll understand why I think the spine is such a fitting symbol for our Berman Brain & Spine Institute. At the institute — and across LifeBridge Health — we strive to be the nerve center of your health.

OUR JOB: to help you live the life that matters to you, whether you want to walk, run or dance.

Sincerely,
Neil M. Meltzer
President and CEO
LifeBridge Health
Peace of Mind
The Sandra and Malcolm Berman Brain & Spine Institute brings patients the promise of better outcomes.

It’s an ordinary fall day, but inside an operating room at Sinai Hospital of Baltimore, something extraordinary is happening. Neurosurgeons and neurologists are working together with advanced surgical procedures and EEG monitoring equipment to locate the area in a patient’s brain where his seizures are occurring. Identifying this location will aid the physicians in deciding if surgery is an option to help prevent this patient’s daily seizures.

It’s not science fiction; it’s what happens in an advanced epilepsy monitoring unit with surgical capability, and it’s one of the many boundary-pushing medical procedures offered to patients at LifeBridge Health’s Sandra and Malcolm Berman Brain & Spine Institute.

Advanced Care Close to Home
“‘We are doing the same level of highly advanced care, research and teaching that you’d find at a top academic institution,’” says Russell Starkey, M.B.A., director of the institute, “but it’s all delivered in a community hospital setting that is much more patient-focused.”

No other community health system is as advanced as LifeBridge Health’s or offers the same breadth of services. Team members are dedicated to ensuring that patients receive the entire spectrum of care they need to fight their brain and spine disorders in full force, from diagnosis to treatment to rehabilitation.

“A patient recovering from stroke, for example, can go from our emergency department to our dedicated neuroscience unit to our full-service rehabilitation center at Sinai Hospital — all without leaving the hospital campus,” says Starkey. “And once they’re discharged, all of their ongoing support services, such as neurology appointments, psychological consultations and physical therapy sessions, are provided at a comprehensive outpatient center.”

Dedicated Experts
Powering the full-service approach to care is a team of experts in some of neuroscience’s most highly specialized fields (see page 5). One hundred percent of the institute’s physicians are fellowship-trained in their subspecialties, and many have become nationally renowned leaders in their disciplines.

P. Jay Foreman, Ph.D., M.D., director of the Comprehensive Epilepsy Center, examines a patient at the Berman Brain & Spine Institute.
At its Sinai and Northwest Hospital locations, the Berman Brain & Spine Institute brings together experts from all corners of neuroscience to deliver specialized, comprehensive care. Specialties include:

- Adult hydrocephalus
- Alzheimer’s disease and dementia
- Concussion
- Epilepsy
- Headache
- Interventional neuroradiology
- Neurodiagnostics
- Neurointensive care
- Neuromuscular disorders
- Neuropsychology
- Neurorehabilitation
- Orthopedic spine surgery
- Physical medicine and rehabilitation
- Stereotactic radiosurgery
- Traumatic brain injury

See all of our care services for brain and spine at www.lifebridgehealth.org/BSI.

Lucy Ferko, R.N., M.A.
Vice President of Service Lines

“Access to high quality patient care in an academic setting is a huge priority for our community,” says Lucy Ferko, R.N., M.A., vice president of Service Lines at LifeBridge Health. “The Berman Brain & Spine Institute is unique because we have a large number of specialized physicians and programs, but our providers make it a priority to see any patient who needs care for any neurological condition. They believe in our mission to maintain and improve the health of the community through ensuring timely access to patient care, building advanced subspecialty neuroscience programs, achieving quality measures and advancing research.”

Ferko notes that having so many different experts together within an institute also creates a more collaborative approach to patient care.

“Our physicians are constantly interacting. The epilepsy team holds weekly conferences to review cases and determine if medication or surgery is the best option for each patient,” she says. “But it’s often as simple as a spine surgeon walking over to a neurologist’s office for a quick consult. That kind of teamwork ultimately means better, more complete treatment plans for our patients.”

Between patient appointments and case reviews, the physicians of the Berman Brain & Spine Institute are making strides in research, education and advocacy. Clinical trials at the institute are giving patients access to cutting-edge treatment options in areas such as stroke, hydrocephalus and epilepsy. And the institute’s concussion specialists were instrumental in getting Maryland’s landmark legislation passed that requires that student-athletes with suspected concussions be removed from play until cleared by a health care professional.

This progress has helped gain national recognition for the institute. U.S. News & World Report has twice ranked it among the top 50 hospitals nationally for neurology and neurosurgery. NeuStrategy has also designated it a Neuroscience Center of Excellence, a distinction given to fewer than 75 hospitals in the country to date.

“It’s certainly a testament to the hard work of all of our physicians, nurses and house staff,” says Ferko. “But it’s not what drives us. What we care about is achieving the best possible outcomes for our patients. The awards are just a bonus.”
The Sandra and Malcolm Berman Brain & Spine Institute

Chiefs’ Corner: 
Words From the Leaders of the Berman Brain & Spine Institute

Adrian J. Goldszmidt, M.D.  
Chief, Neurology, LifeBridge Health  
Director, Stroke Program  
Director, Headache Program

Now in its ninth year, the Sandra and Malcolm Berman Brain & Spine Institute continues to increase and enhance its array of services in the neurosciences. Unique programs include the Comprehensive Epilepsy Center, the Sports Neurology Center and the Adult Hydrocephalus Center. The specializations of the institute’s neurologists are diverse, ranging from headaches, concussion and dementia to stroke, epilepsy, neuromuscular disorders and adult hydrocephalus. The institute is dedicated to providing exceptional, comprehensive and compassionate care for patients with disorders of the brain and spine. It succeeds in this mission by providing innovative care from a team of collaborating physicians in an accessible, welcoming environment.

Neal Naff, M.D.  
Chief, Department of Neurosurgery  
Surgical Director, CyberKnife Radiosurgery  
Sinai Hospital

Cutting-edge technology, curative procedures and comprehensive care are the hallmarks of neurosurgery at the Berman Brain & Spine Institute. With revolutionary robotic equipment, for example, we can deliver beams of high-dose radiation with extreme accuracy to tumors in the brain, head, neck and spine. Through the continued support of Sandra and Malcolm Berman, we have enhanced our systems so that patients with epilepsy and movement disorders can benefit from new surgical treatment options. Thanks to technologies like these and our dedicated medical support team — physician assistants and nurses specially trained in neuroscience — we can deliver the highest level of complex care, 24/7, at a community hospital that’s closer and more convenient to our patient population.

Scott E. Brown, M.D.  
Chief, Department of Physical Medicine and Rehabilitation  
Medical Director, Sinai Rehabilitation Center

The Department of Physical Medicine and Rehabilitation at Sinai Hospital was established in 1965, making this past year its 50th anniversary. We have since become a premier destination for rehabilitation services, especially for neurologic rehabilitation, brain injury and pain management. Thanks to generous philanthropic support, we were able to open the Louis and Phyllis Friedman Neurological Rehabilitation Center in 2012 and enhance other programs such as our driver evaluation and treatment program. We recently launched the Sinai Pain Center and added advanced pain treatments such as pulsed radiofrequency nerve blockade. We are dramatically expanding the outpatient space with new exam rooms and a dedicated procedure room. As we look to the next 50 years, we remain committed to providing high quality comprehensive care focused on improving and maintaining the health and quality of life for our patients.
When people ask Jennifer Berkeley, M.D., Ph.D., about her work caring for patients with traumatic brain injury (TBI) in Sinai Hospital’s Intensive Care Unit (ICU), they tend to expect dramatic backstories. High-speed car crashes. Gunshot victims. Construction site accidents. We do see these types of dramatic cases, but, as Dr. Berkeley attests, the cause is often much simpler.

“The vast majority of our patients with TBI are older adults who fall and hit their heads,” she says. “Maybe they were playing with their grandkids and tripped, or tried to go down the steps in the dark. And because they are older, their injuries are likely to bring along a host of complications.”

Looking at the Whole Picture
Minimizing complications is why Dr. Berkeley’s expertise is so invaluable in the care of patients with brain injuries. As a neurointensivist, Dr. Berkeley cares for critically ill patients who have been diagnosed with a neurological condition, such as TBI, stroke or epilepsy. Her specialty: monitoring how the function of all the other systems of the body affects the recovery of the patient’s brain.

“Many of our older patients arrive with bad hearts. Delirium is common. Kidney injury can happen. Even the simple fact of being bedridden takes a toll on the body,” Dr. Berkeley explains. “All of this is monitored and managed around the clock in conjunction with the patients’ other specialists and the ICU team.”

Jaime Barnes, D.O., medical director of critical care medicine at Sinai and Northwest hospitals, says that having a neurointensivist on staff is especially rare for a community hospital. “Having Dr. Berkeley’s expertise gives us the ability to care for a much broader spectrum of patients. Patients who might otherwise have to go to a large university hospital can stay here, in their home hospital,” she says.

Consistent Care for Patients
As the Sandra and Malcolm Berman Brain & Spine Institute’s dedicated, full-time neurointensivist, Dr. Berkeley brings another distinct advantage to patients who have experienced TBI: continuity.

“The way the medical system typically works, there’s so much hand off (between providers). Someone caring for a patient in week 2 might not know why key decisions were made in week 1,” she says. “It helps that I’m there to coordinate team communication and ensure a consistent plan of care from the moment the patient is admitted to the hospital.”

In addition, the continuity enables Dr. Berkeley to develop strong relationships with her patients’ families, which she considers to be one of the most important and rewarding aspects of her job.

“Often with TBI, families are under a great deal of pressure to make life-changing decisions very quickly,” she says. “Talking with families, educating them and helping them feel comfortable that they are making the right decisions — that can feel as good as telling patients that they’re going to make a full recovery.”
Inside the Specialty Hospital at Levindale, J. Michael Anderson, M.D., is hard at work as the medical director of LifeBridge Health’s RECOVER Coma Emergence Program. The father of seven hears the concerns of his patients’ families. He assures them that he and his team will do everything in their power to help. He tells them that he understands — perhaps more than anyone — what’s at stake for the patient. After all, not too long ago, he was quite literally in their shoes.

“I never thought I would be in a coma,” says Dr. Anderson today, a little more than three years after the cardiac arrest that changed his life. It had been an otherwise quiet Sunday in December — until his son found him collapsed in his vehicle in the driveway of their home. Dr. Anderson was rushed by ambulance to Northwest Hospital and then transferred to Sinai Hospital, where the prognosis was grim.

“I was seizing for two to three days and was unresponsive,” he recounts. “Doctors thought I wouldn’t make it.”

A Lifesaving Therapy

Sinai physicians determined that the best strategy was targeted temperature management, today a standard protocol for patients like Dr. Anderson. Also known as therapeutic hypothermia, this protocol cools the body in a controlled manner, allowing it to rest. Therefore, organs don’t have to work as hard to compete for oxygen, and critical brain cells are protected from potential damage in the process.

“After a few days, they warmed my body back to its normal temperature. Gradually, I started to become responsive and alert. My wife was praying by my bedside when I opened my eyes,” says Dr. Anderson. “But I don’t remember much. In fact, I don’t remember anything from two weeks
before (my cardiac arrest) until several weeks after waking up.” Over the next six months, Dr. Anderson underwent intense rehabilitation and neurological and cognitive testing.

Helping Patients RECOVER
The comprehensive RECOVER Coma Emergence Program is designed to help patients in comas to emerge by using a blend of nationally recognized treatment protocols, in-house medical expertise and compassionate care. Patients work daily with a team of physical, occupational and speech-language therapists, all of whom have been certified by the Academy of Certified Brain Injury Specialists. A rehabilitation physician — also known as a physiatrist — oversees patients’ recoveries. Social workers advise families to help them plan for the road ahead.

More than 50 percent of the patients in the RECOVER program emerge from their comas and achieve enough alertness and arousal to actively participate in a rehabilitation program. It’s an astounding rate of success for a patient population that is often given little hope for recovery.

The RECOVER program is a natural extension of the neurorehabilitation services of the Sandra and Malcolm Berman Brain & Spine Institute. Regardless of a patient’s condition, the goal is always the same: to help the patient regain maximum physical, mental and psychological functioning — and to try to make the process fun along the way.

“With a really engaged therapeutic recreation program with daily activities like games and unit challenges,” says Pam Hawkins, director of rehabilitation at Levindale. “It not only helps with patients’ physical and psychological recovery, but also eases them back into life in a community setting.”

A Team Effort
Hawkins adds that including patients’ loved ones in the process is critical to the program’s success. A care team meets weekly with families to address their concerns, answer any questions they may have and actively involve them in treatment decisions.

Dr. Anderson saw firsthand the difference it made in his own recovery to see both family and staff by his side. He believes it was the prayers of his wife and family, combined with the expert care he received at LifeBridge Health, that saved his life.

“Because of the phenomenal care and support I received from my colleagues, I am able to do my work here at the hospital today,” the 33-year veteran health care professional says with gratitude. “I share my story with other families. It gives them hope.”
As you read these words, billions of cells inside your brain are communicating with one another. It’s something they do every second of every minute of your life. The electrical signals they send enable you to do everything from breathing and walking to learning and planning. And it’s all done in a remarkably orderly fashion.

However, for patients living with epilepsy, the orderly signal pattern that keeps the brain running smoothly has a habit of becoming disrupted. These disruptions — often triggered by an injury or a person’s genetic makeup — occur when some of the cells begin to fire in an abnormal manner. These abnormal discharges can disrupt normal activity and result in a variety of unusual behavioral changes such as staring, the inability to speak, or uncontrollable twitching or convulsing.

In the advanced Epilepsy Monitoring Unit, a patient’s brain activity is observed around the clock.

“Between seizures, patients are often normal,” explains P. Jay Foreman, Ph.D., M.D., director of the Sandra and Malcolm Berman Brain & Spine Institute’s Comprehensive Epilepsy Center. “Some seizures are so brief that patients don’t know they have had them. But they often disrupt people’s everyday lives and affect their ability to work and drive.”

Although most people with epilepsy take anticonvulsant or anti-seizure medications to control or reduce their seizures, up
to 30 percent of patients don’t respond to them (or can’t tolerate the side effects) and continue to have frequent seizures.

Help From the Epilepsy Center
Fifty-year-old Kenneth Parker of Annapolis began having seizures after a brain hemorrhage in 2013. He was treated with medication and was seizure-free for two years. Then, in June of last year, doctors at the Comprehensive Epilepsy Center uncovered the source of Parker’s seizures. He was found to have abnormal blood vessels (a lesion) and underwent CyberKnife, a noninvasive procedure that delivers, with extreme accuracy, beams of high-dose radiation. The procedure worked, effectively shrinking the lesion that was causing Parker’s seizures.

“I really like the doctors and staff at the Epilepsy Center,” says Parker. “They are truly supportive and make you feel like they care about all that you are going through.”

If medications aren’t effective and minimally invasive procedures aren’t appropriate, the center offers patients other surgical options. Expert physicians work closely with each patient, conducting extensive evaluations to ensure that surgery is safe and that it is the best treatment path to a fuller, happier, seizure-free life.

Many of those evaluations happen within the center’s advanced Epilepsy Monitoring Unit, which is one of four in Maryland. There, physicians can observe patients’ brain activity around the clock while they and their families relax in the comfort of private rooms. Monitoring typically includes a scalp EEG (electroencephalogram), to track patterns of electrical activity in the brain. Video monitoring is also performed so that physicians can compare the abnormal electrical discharges with changes in patient behavior that occur during seizures. Physicians also use high-resolution MRI (magnetic resonance imaging).

“By using all of these tools together, we can identify the cause of the seizures for many patients,” says Dr. Foreman.

What to Do If Someone Is Having a Seizure

Do ...
- Protect the person from injury by removing nearby harmful objects.
- Cushion the person’s head.
- Look for an epilepsy identity card or identity jewelry.
- Stay with the person until he or she recovers.
- Call an ambulance if it’s the person’s first seizure, or if the person is injured.

Don’t ...
- Don’t restrain the person.
- Don’t put anything in the person’s mouth.
- Don’t move the person unless he or she is in danger.
- Don’t give the person food or drink.

Monitoring and Making Changes
Kathleen Flower, a LifeBridge Health employee, recently spent five days in the Epilepsy Monitoring Unit while doctors tracked the performance of a vagus nerve simulator (VNS) that had been implanted in her chest. Much like a pacemaker, which uses electricity to control abnormal heart rhythms, the VNS uses magnetic waves to change the electrical activity of the brain and reduce the frequency and severity of seizures.

Flower’s stay allowed the epilepsy team to learn more about the location of her seizures, which ultimately resulted in an adjustment of her VNS device. Since the adjustment, she has not had any seizures.

For Flower, her time in the Epilepsy Monitoring Unit was time well spent. “The doctors and staff made us really comfortable during my stay. My husband, mom and family were able to visit, and that was reassuring,” she says. “The care has just been wonderful.”
Top Marks Earned for Outstanding Stroke Care at Sinai and Northwest Hospitals

Hinda Pearlman, stroke survivor, and her dog, Little Bear
Stroke is the No. 1 cause of disability in the United States and the fifth leading cause of death in the nation. But, according to the experts at the Sandra and Malcolm Berman Brain & Spine Institute, it doesn’t have to be. Changing the course of stroke outcomes, they say, starts with getting more people to simply pick up the phone.

**Time Is Brain**

“The most important thing you can do for someone who is showing stroke symptoms (see sidebar) is to immediately call 911,” urges Adrian Goldszmidt, M.D., chief of neurology at Sinai Hospital and director of the Stroke Program and Headache Program at the Berman Brain & Spine Institute. “Time is brain. Every 15 minutes you save dramatically improves the chances of recovery.”

That’s because tPA (tissue plasminogen activator) — the drug used to dissolve stroke-causing blood clots in most stroke cases — typically must be administered within three hours of the onset of stroke symptoms for it to be effective. Both Sinai and Northwest hospitals are among the state’s top performers for door-to-needle time, which measures the time it takes for an emergency team to safely administer tPA when a patient with stroke arrives at the hospital. At Sinai Hospital, for example, the average door-to-needle time in 2015 was 38 minutes — 17 minutes better than the state average.

**Care When She Needed It**

Fifty-seven-year-old Hinda Pearlman of Pikesville is grateful for the rapid stroke care she received last April at Sinai. “She was admitted as a Jane Doe. She had no identification, yet our team was able to identify and contact her boyfriend in under an hour so that we could treat her quickly,” says Dr. Goldszmidt.

“I was walking my dog in the neighborhood when I fell and couldn’t move,” says Pearlman. “A doctor driving by saw me, stopped, and realized I was having a stroke. He called 911 and I was taken to Sinai.”

Pearlman was treated within minutes of arrival, stayed in the ICU for three days and was transferred to the Sinai Rehabilitation Center for 10 days before being discharged home. She is now back at work in her role as a job developer and credits the many doctors, nurses, therapists and staff members for her recovery. “If not for them, I would not be here and doing as well as I am,” she says with a smile.

**Honors and Accreditations**

Because of its ability to deliver outcomes like Pearlman’s, Sinai Hospital has been nationally certified as a Primary Stroke Center by The Joint Commission, the nation’s leading independent health care accreditation and certification body. It has also been designated a Primary Stroke Center by the Maryland Institute for Emergency Medical Services Systems (MIEMSS), a distinction it shares with Northwest Hospital.

The Joint Commission and MIEMSS aren’t the only ones who have noticed the strides LifeBridge Health has made in stroke care. In 2014 and 2015, Sinai and Northwest hospitals were both honored with the American Heart Association/American Stroke Association’s Gold Plus Quality Achievement Award for outstanding and consistent performance within the associations’ national Get With The Guidelines—Stroke Achievement Measures. For their efforts to reduce door-to-needle times, in 2015, Sinai Hospital received the association’s Target Stroke Honor Roll Elite award and Northwest Hospital received the Target Stroke Honor Roll Elite Plus award.

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**How to Spot a Stroke F.A.S.T.**

F.A.S.T. is an easy way to remember the sudden signs of stroke. If you spot these red flags, call 911 for help right away.

**ACE DROOPING**

Does one side of the face droop or is it numb? Ask the person to smile. Is the person’s smile uneven?

**RM WEAKNESS**

Is one arm weak or numb? Ask the person to raise both arms. Does one arm drift downward?

**PEECH DIFFICULTY**

Is speech slurred? Is the person unable to speak or hard to understand? Ask the person to repeat a simple sentence such as “The sky is blue.” Is the sentence repeated correctly?

**IME TO CALL 911**

If someone shows any of these symptoms, even if the symptoms go away, call 911 and get the person to the hospital immediately. Check the time so you’ll know when the first symptoms appeared.
The NEW Pain Center at Sinai Hospital: Cutting-Edge Treatments Offer Relief From Chronic Back Pain

This fall, the Department of Physical Medicine and Rehabilitation at LifeBridge Health (see page 18) opened the newly expanded Pain Center at Sinai Hospital. Led by a team of five physiatrists, also known as rehabilitation specialists, the center features enhanced treatment rooms, state-of-the-art technologies, and a relaxed, tranquil setting, all designed with one goal in mind: to help patients find relief from the burdens of chronic pain.

Banishing Back Pain
Although the Pain Center is a destination for patients living with all types of pain, chronic back pain is the No. 1 complaint that brings patients to the center each day. It’s not surprising; the U.S. Office of Disease Prevention and Health Promotion estimates that up to 8 percent of the population lives with chronic back pain. And after the common cold, back pain is the second leading cause of lost work time in the United States.

Yet despite the prevalence of chronic back pain, the doctors at the Pain Center never take a cookie-cutter approach to treating it.

“For every patient, we start with a comprehensive history and physical examination, followed, when appropriate, by radiology and other diagnostic studies to pinpoint the exact cause of the pain,” says Edward Soriano, D.O., a physiatrist who specializes in the management of acute and chronic pain syndromes. “These steps help us decide the best course of treatment going forward. Our approach to pain relief is to take into account the whole person and his or her needs physically and mentally.”

Various Ways to Feel Better
Indeed, the center has an arsenal of innovative treatment options to help patients manage their back pain in a 360-degree way. Treatment plans can include a mix of physical therapy and rehabilitation, various spinal injections, medications, and pain-management counseling with a health psychologist.

One of the newest treatment options offered at the expanded Pain Center is pulsed radiofrequency neuromodulation, or PRF. With PRF, needles are placed in the spine (under X-ray guidance) or in nerves of the peripheral nervous system (by ultrasound guidance). Then, special equipment delivers an electrical current around the nerve to reduce the patient’s pain. Another technology — spinal cord stimulation — is used to help patients who suffer from nerve-related back, leg or arm pain that has not been relieved by other treatments.

Physicians at the Pain Center meet weekly with neurosurgeons, neurologists and physician assistants from the Sandra Scott Brown, M.D., (left) and Edward Soriano, D.O., (right) explain the anatomy and workings of the spine to a patient with low back pain at the Louis and Phyllis Friedman Neurological Rehabilitation Center at Sinai Hospital.
and Malcolm Berman Brain & Spine Institute to discuss complex spine cases. This type of collaboration is usually conducted only at major academic medical centers.

“We are fortunate to have such a program, particularly at a community hospital,” says Braeme Glaun, M.D., a neuromuscular neurologist and director of the Neuromuscular Division of the Berman Brain & Spine Institute. “Reviewing patients’ histories, CT and MRI images, and other test results as a team enhances patient care. Because we are all in the same room at the same time, we are able to easily share ideas about the approaches to take to achieve the best outcomes for our patients.”

No More Pain
For many patients, the best outcomes can be achieved through simple outpatient procedures. Verte broplasty (also known as kyphoplasty), for example, is an outpatient procedure for patients diagnosed with compression fractures of the vertebrae. During the procedure, doctors inject special medical-grade cement into the damaged vertebra to stabilize it, restore mobility and eliminate pain. The procedure itself takes only 30 to 45 minutes under local anesthesia and light sedation, and patients can often resume normal, non-strenuous activities within 24 hours.

Although vertebral compression fractures can happen to anyone — roughly 700,000 Americans are diagnosed with the condition every year — Dr. Soriano points out that vertebroplasty is especially beneficial to women with osteoporosis.

“Many of our patients with osteoporosis come in unable to stand or walk for long, (but after the procedure) they are back on their feet the very next day,” says Dr. Soriano. “The most rewarding experience for me is to see my patients smile when they leave because they are pain-free.”

SCHEDULE A CONSULTATION
If you are living with back pain — or any type of chronic pain — call 410-601-5597 to request an appointment with our Pain Center specialists now.
Briana Scurry had suffered concussions in the past. But the one that leveled the soccer legend on April 5, 2010, was different. It was the one that ended her career.

“With my other concussions, the initial cloudiness after the hit would go away. This didn’t. It just got worse,” explains the two-time Olympic gold medalist and 1999 World Cup champion. “Players’ jerseys were getting blurry. The sunlight started to bother me. I would try to walk and I would sway to the left.”

The cloud stayed with Scurry on the team bus ride home. And then, it never lifted. Days of pain turned into weeks. Weeks turned into months. Debilitating headaches, dizziness and memory loss — coupled with anxiety and depression — made it nearly impossible for the elite athlete to leave her home.

“Even going to the grocery store was too much. I’d forget where I parked my car. I’d bump into displays. The colors of the canned goods on the shelves or the patterns on the floor would make me woozy. I’d think, ‘I’ve got to get out of here,’” Scurry recalls. “I had become a shell of myself.”

At Long Last — A Diagnosis

Over the course of nearly three years, Scurry was seen by physician after physician and underwent countless tests, only to be told the same thing each time:
We’ve done all we can for you. Then she found Kevin Crutchfield, M.D., a nationally recognized concussion specialist and director of the Sports Neurology Center at Sinai Hospital, a state-of-the-art program within the Sandra and Malcolm Berman Brain & Spine Institute that is dedicated to helping athletes of all ages and levels recover — and safely return to the playing field — after neurological injury.

“When Dr. Crutchfield touched the back of my head by my left ear, I almost kicked him,” says Scurry. “It’s hard to believe, but no other doctor had ever done that before — touched me, physically examined me. Within 20 minutes, he had diagnosed me.”

The diagnosis: post-concussion syndrome (‘a basket of ongoing concussion symptoms,” explains Scurry) and post-traumatic occipital neuritis, a condition whereby the nerves at the base of neck are entrapped or inflamed, causing migraine-like headaches.

“There is so much focus on the word ‘concussion,’” says Dr. Crutchfield. “But I have never seen a concussion that didn’t breed some sort of neck injury. Your head is the weight of a bowling ball. And you are asking your neck — which has the weakest ligaments in your entire body — to support it. They are fundamentally connected.”

**Feeling Better, Finally**

Under Dr. Crutchfield’s supervision, Scurry underwent surgery to relieve the pressure on her occipital nerve and put an end to her blinding headaches. The relief was immediate.

“When I woke up in the recovery room, I knew it had worked. I started crying,” she remembers. “I was finally out of the wilderness.”

From there, Scurry worked with Dr. Crutchfield and the Sports Neurology Center’s physical therapy team to — as Dr. Crutchfield puts it — “retrain her brain,” working on everything from balance to cognitive processing to stress management. She estimates that she now has 95 percent of her strength and capabilities back, a feat she credits to Dr. Crutchfield and his athlete-focused approach to neurological care.

“When you’re an athlete, all you want to do is get back on the field,” Scurry explains. “So if I am telling you something is wrong, something is wrong. Nobody — until Dr. Crutchfield — understood that. He saw me not just as a patient, but as an athlete. He honestly saved my life.”

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**More on Concussions**

See more of Briana Scurry’s story and meet Dr. Crutchfield at www.lifebridgehealth.org/Concussion.

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**Sports on the Brain: What You Need to Know About Athletic Concussions**

**Sports that pose the greatest risk for concussion:**

1. Football
2. Rugby
3. Hockey
4. Soccer

Evidence suggests concussion risk in soccer and basketball is greater for females than males.

**Signs and symptoms of a concussion include:**

- Headache
- Sensitivity to light and sound
- Changes to reaction time, balance and coordination
- Changes in memory, judgment, speech and sleep
- Nausea or vomiting
- Loss of consciousness or a “blackout”

Symptoms can appear immediately, or days or weeks later.

**If you suspect a concussion:**

- Remove yourself from play immediately.
- Make an appointment with your health care provider. The provider should be trained in concussion care, as well as more severe brain injury care.

**Do not return to play until:**

- All symptoms have cleared up.
- You are no longer relying on medication to treat lingering symptoms such as headache.
- You have been approved for play by your health care provider.

*Source: American Academy of Neurology*
On the morning of June 21, 2011, Baltimore City Police Officer Teresa Rigby-Menendez was responding to a disabled vehicle on I-83. It was supposed to be a routine call — until, suddenly, it wasn’t.

As the officer stood on the northbound shoulder of the highway, a vehicle driving up the interstate hit her patrol car. The patrol car then struck Rigby-Menendez, knocking her over a retaining wall and down 30 feet onto a concrete parking lot below.

It was an accident that, by all accounts, should have ended her life. But Rigby-Menendez is a survivor. After less than a week in a critical care unit, she went into full rehabilitation mode. She turned to the team at LifeBridge Health Physical Medicine and Rehabilitation for help.

“It was like starting everything all over again. I had to relearn how to talk, how to walk, how to get around my home,” says Rigby-Menendez, who spent several months in outpatient rehabilitation at Sinai Hospital. “It was a fight to regain my independence, but the doctors and therapists at LifeBridge Health helped give me the strength I needed. They really believed in me and I believed in them.”

Setting the Bar From Day One
When Sinai Hospital established the Sinai Rehabilitation Center 50 years ago, it was the first acute care hospital in Maryland to offer an on-site rehabilitation program. It was also the first building block of LifeBridge Health Physical Medicine and Rehabilitation, which today stands as one of the state’s most comprehensive rehabilitation programs for children and adults.

“No one has as broad an array of services for pain management and neurorehabilitation as LifeBridge Health,” says Scott Brown, M.D., chief of physical medicine and rehabilitation.

As Dr. Brown points out, the team is especially adept at handling complex cases like Rigby-Menendez’s. “Our flagship services are pain and brain,” he says. “We offer the latest pain management therapies and rehabilitation treatments for patients who have suffered stroke or traumatic brain injury.” (See page 14 to learn about the newly expanded Pain Center.)

Many of those patients begin their journeys at the Louis and Phyllis Friedman Neurological Rehabilitation Center at Sinai Hospital, an inpatient unit that boasts the highest number of certified brain injury specialists in Maryland. There, physiatrists work closely with specially trained nurses and therapists who provide physical, occupational, speech-language, swallowing, balance (vestibular) and psychological therapies.

“If someone says that his or her loved one can’t swallow without coughing, our therapists work hand in hand with our physicians to address that,” says Paula Leonard, inpatient program manager at Sinai Rehabilitation Center. “We work closely with our patients’ families, too. We have a dedicated care manager on the unit who helps them get through what is usually a difficult situation.”
Help When You’re Home
Following days or even weeks in intensive inpatient therapy, many patients continue with outpatient rehabilitation after returning home. Physical Medicine and Rehabilitation offers a host of specialized outpatient rehabilitation services. These include a comprehensive Mild Brain Injury Program, the Wasserman Gait Lab to assess walking, and the Sinai Occupational Accelerated Recovery (SOAR) Program, which provides early medical intervention for workers who sustain back injuries on the job.

One outpatient service — the RETURN! Program — is devoted exclusively to helping patients re-enter the community and the workforce after serious brain injury.

“People in RETURN! learn life skills, managing money, and tolerating and balancing busy environments,” says Curtis Cunningham, a physical therapist and manager of outpatient rehabilitation services. “We also work on all the little things that are so important to being independent, such as getting packages from the post office or store safely back home.”

At Sinai Rehabilitation Center, patients can also have their driving skills evaluated by a certified driving rehabilitation specialist. Behind-the-wheel training and suggestions for driving accommodations are provided as needed.

Rigby-Menendez — now a wife, mother and founder of Survivor Wear, a fashion line that raises money for survivors of brain injury — was able to return to full-time work in December 2014 as a Baltimore City Police Academy instructor. Though saddened by having to retire from the active police force, she is glad to be working again in the field she loves.

“I am very passionate about police work,” says Rigby-Menendez. “It will always be part of who I am.”
Stop Back Pain Before It Starts

Back pain affects an estimated 8 out of 10 people at some point in their lives. So how can you avoid it? Here are some tips that can help.

Examine Your Lifestyle Habits

People who are overweight, smoke or do not exercise regularly are more likely to develop significant back pain. Practicing good, everyday health habits can cut your risk.

Use Good Posture — Even When You Sleep

Try the following:
- When you stand, keep your ears, shoulders and hips in a straight line. Avoid slouching by holding up your head and pulling in your stomach.
- When sitting, rest your feet on a low stool. Switch positions often, and take frequent walking breaks.
- Choose a sleeping position that keeps your back straight. A good position is on your back with a pillow under your knees. To alternate, lie on your side with your knees bent.

Lift With Caution

If something is too heavy or awkward to lift, ask for help. When you lift, follow these guidelines:
- Face whatever you are lifting to avoid twisting.
- Place your feet shoulder-width apart to widen your base of support.
- Bend your knees and tighten your stomach muscles.
- Lift a heavy load close to your body.

Stretch Regularly

To gently stretch your back muscles, lie on your back with your knees bent. As you press your lower back against the floor, slowly lift your left knee to your chest. Hold for five seconds. Then relax your left knee and do the same thing with your right knee. Do 10 sets of this exercise.

Ease Minor Pains With Good Self-Care

Most types of back pain go away in a few days without medical intervention. These self-care techniques can help:
- Apply cold compresses for 5 to 10 minutes, several times a day, to help reduce inflammation. After two or three days, switch to heat to relax the muscles. Use a heating pad or take warm showers or baths.
- Rest for a day or two to reduce pain and avoid aggravating the injury. But try to resume normal activity as soon as possible. Staying immobile too long can actually delay your recovery.
- With your doctor’s approval, take an over-the-counter pain reliever such as ibuprofen to temporarily reduce pain and inflammation.
- If the pain doesn’t get noticeably better within 72 hours, call your doctor.
Once each month, a group of strangers and acquaintances assembles at the Sandra and Malcolm Berman Brain & Spine Institute, home of the Center for Memory & Behavioral Disorders. At first glance, they appear to have nothing in common. They come from different generations, different career paths, different cultures. But one thing unites them: They are all caregivers.

They are also participants in the Caregiver Support Group, part of the center’s free support series for family members and friends of patients with stroke and dementia. The group was started at Sinai Hospital in 2013 by health psychologist Sarah McQuide, Psy.D., who saw it as one more way to complement the center’s “one-stop” care for families struggling with memory and behavioral disorders.

Caring for the Patient and the Caregiver
“It makes a difference when we can provide both medical treatment and emotional support for a family in-house. We can say, ‘Not only has your loved one had a stroke, but here is the treatment plan, and here is how we’re going to help make it work for you day-to-day, as a family,’” Dr. McQuide explains.

The group meets with her each month to learn about the diseases affecting their loved ones, devise strategies for tackling caregiving challenges, and share the emotions and stresses that come with the role.

“Families deal with a significant amount of grief. People have enjoyed years of partnership with a spouse or parent, and they are, in a way, saying goodbye to that relationship,” says Dr. McQuide. “But they also have a desire to maintain normalcy, to find ways to continue to take vacations or visit the grandchildren.” The group’s success spawned a second one — the Young-Onset Dementia Caregiver Support Group — designed specifically for families coping with dementia earlier in life.

“These are patients who are only in their 40s and 50s,” says neuropsychologist Campbell Sullivan, Psy.D., the group’s facilitator. “They are in the prime of their lives and their careers when this disease strikes. Many still have children at home, causing unique factors and financial worries that compound the situation for the entire family.”

Getting the Support They Need
Despite the stress and heartache, Drs. McQuide and Sullivan say that, through the group interaction, most participants walk away with the tools they need to better cope with daily challenges.

“Caregiving is challenging and life-altering,” says Dr. McQuide. “But it’s also a beautiful opportunity for loved ones to rely on each other in new ways. Our patients and families realize that they can still have a meaningful life together.”

MAKE AN APPOINTMENT
If you have a loved one facing the effects of dementia or stroke, call 410-601-9515 to request an appointment with one of our dementia specialists.
LifeBridge Health has an online community calendar filled with upcoming events, screenings and support group meetings and webinars. These activities and events feature LifeBridge Health community health advocates and physicians who want to help you stay happy and healthy.

Visit [www.lifebridgehealth.org/CommunityCalendar](http://www.lifebridgehealth.org/CommunityCalendar) for the event descriptions, dates, times and locations. Here are some of our upcoming events.

**JCC Wellness Expo**
*Sunday, April 3, 9 a.m. – 3 p.m.*
Rosenbloom Owings Mills JCC
3506 Gwynnbrook Ave.,
Owings Mills, MD 21117

Enjoy a day of wellness and fitness for the whole family! Join LifeBridge Health and the JCC to learn how to stay healthy and energized. The day will include presentations and screenings, an introduction to Zumba and yoga, nutritional advice and recipes, raffles, giveaways and more. Representatives from local businesses, The Associated, Jewish Community Services and CHAI (Comprehensive Housing Assistance, Inc.) will also be on hand to provide valuable information. For more info, call 410-559-3606.

**Look Good … Feel Better Workshop**
*Friday, January 15, 2 – 4 p.m.*
Northwest Hospital
5401 Old Court Road,
Randallstown, MD 21133

*Cancer treatment can take a toll on how you look and feel. This free program helps women currently undergoing or scheduled to undergo chemotherapy and/or radiation therapy to feel better about their appearance. A trained cosmetologist will lead the group and provide guidance on makeup techniques. A free cosmetics package is also included in the workshop. To sign up, call 410-601-WELL (9355).*

**Northwest Hospital Stroke Club**
*First Wednesday of the month, 10 – 11 a.m.*
Northwest Hospital
5401 Old Court Road,
Randallstown, MD 21133

If you have suffered a stroke, this club lets you meet other stroke survivors. Share your challenges and success stories in a supportive environment with opportunities for activities, lectures and fun. Membership is free. Call 410-601-WELL (9355) to join.
The Sandra and Malcolm Berman Brain & Spine Institute

Dedicated to the best possible outcomes for patients and their families.

The Sandra and Malcolm Berman Brain & Spine Institute is bridging the gap from diagnosis to healing for patients with disorders of the nervous system and spine. Physicians from our Sinai, Northwest and Carroll hospitals are finding new solutions and offering new hope to patients and their families. From migraines to concussions, epilepsy to stroke, to brain to spinal injuries, we bring together the full range of medical specialties, from the ER to the most comprehensive pain and rehabilitation programs in the region.

Maryland’s most COMPREHENSIVE brain and spine program

LifeBridgeHealth.org/Future • 410-601-WELL (9355)
Gifts of any amount make it possible for LifeBridge Health to strengthen clinical programs, enhance medical technologies, assist in attracting the best clinical staff, and help maintain a healing environment for our patients and families.

Sandra and Malcolm Berman’s transformational gift in support of LifeBridge Health’s unique consortium of specialists at the Berman Brain & Spine Institute changes lives every day.

Designate LifeBridge Health and our affiliated hospitals in your will, and create your own healing legacy.

To learn more, call 410-601-GIFT or visit LifeBridgeHealth.GiftPlans.org.