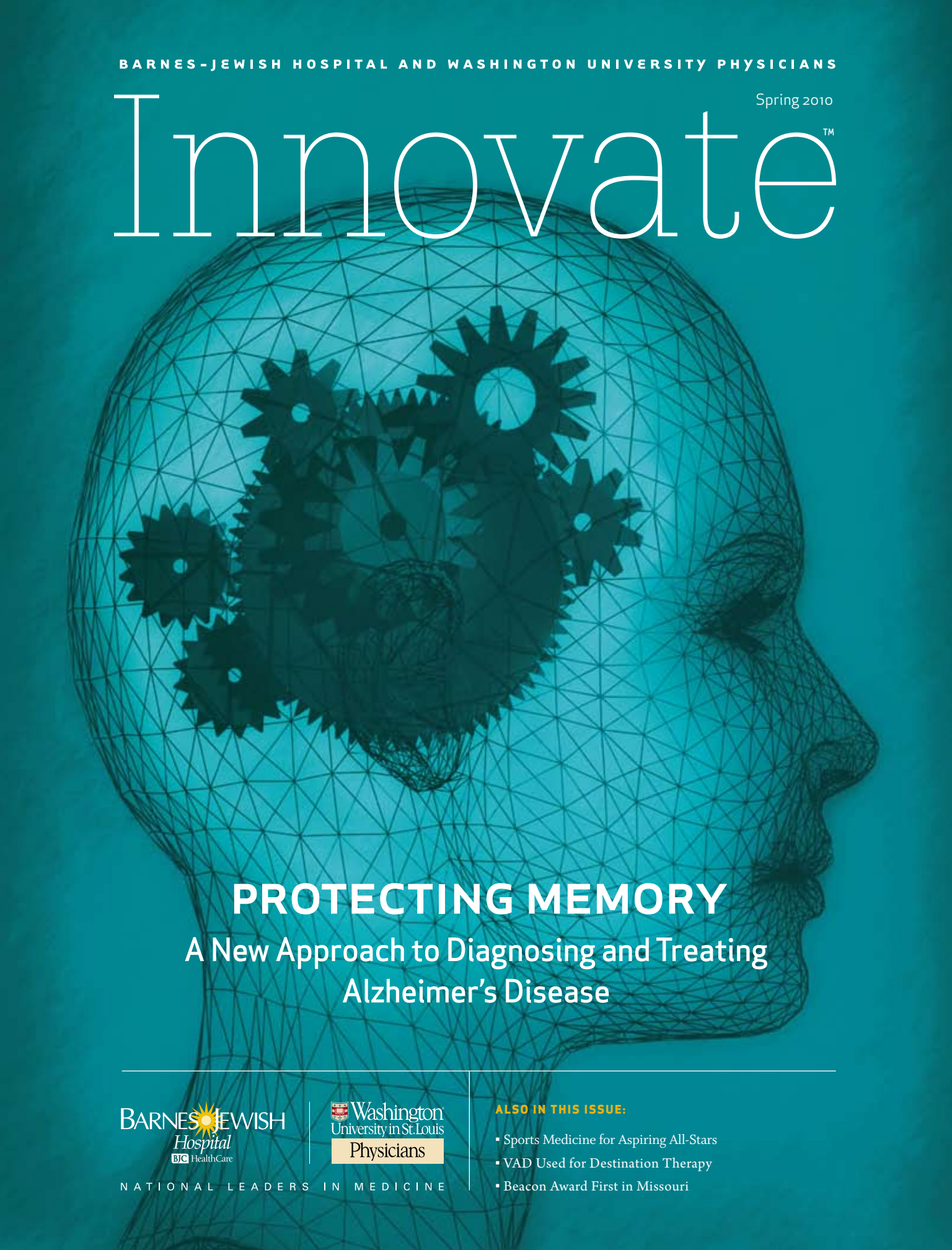
BARNES-JEWISH HOSPITAL AND WASHINGTON UNIVERSITY PHYSICIANS

Spring 2010

Innovate™



PROTECTING MEMORY

A New Approach to Diagnosing and Treating Alzheimer's Disease

BARNES-JEWISH Hospital BJC HealthCare

Washington University in St. Louis Physicians

NATIONAL LEADERS IN MEDICINE

ALSO IN THIS ISSUE:

Innovate

News

BARNES-JEWISH HOSPITAL, a nonprofit academic institution, is the largest hospital in Missouri and is consistently ranked among the Honor Roll of America's best hospitals by *U.S. News & World Report*. The adult teaching hospital of Washington University School of Medicine, Barnes-Jewish was the first adult hospital in Missouri to be certified as a Magnet hospital for its nursing excellence.

BJC HealthCare

Barnes-Jewish Hospital is a member of BJC HealthCare, one of the largest nonprofit health care organizations in the United States.

The Alvin J. Siteman Cancer Center at Barnes-Jewish Hospital and Washington University School of Medicine is the only cancer center within a 200-mile radius of St. Louis to hold the Comprehensive Cancer Center designation from the National Cancer Institute and membership in the National Comprehensive Cancer Network.

WASHINGTON UNIVERSITY PHYSICIANS are the medical staff of Barnes-Jewish Hospital and the Alvin J. Siteman Cancer Center.

U.S. News & World Report America's Best Hospitals 2009-10

For more information or to make an appointment, call 314-TOP-DOCS (314-867-3627) or toll-free 866-867-3627.

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A LETTER FROM RICHARD LIEKWEG

Dear Friends,

Photo by Tim Mudrovic

Every day, the staff and physicians at Barnes-Jewish Hospital and Washington University School of Medicine collaborate to provide exceptional, compassionate care to our patients, train the next generation of health-care providers, and discover new ways to treat and prevent disease. Articles in this issue of *Innovate* point out how together, as national leaders in medicine, we are improving the quality of life for our patients and future generations.

Read how some patients suffering from heart failure can now receive an implantable device that keeps their heart functioning, and hopefully never need a heart transplant. As the only provider of this level of care in the region, the work done here is discovering new boundaries to treating heart failure and, most importantly, will allow people to live longer and more functional lives with these devices compared to just a bridge to transplant.

Another article demonstrates how we're improving the lives of future generations by pioneering work in the study of Alzheimer's disease. Much like heart disease, we are exploring how to prevent this devastating illness before it progresses rather than treating the symptoms after they appear.

These are just two examples of how here at Barnes-Jewish Hospital, through collaboration with Washington University School of Medicine, some of the brightest minds in medicine are redefining the treatment for disease and ultimately improving lives. As we work together to continue taking exceptional care of the community, there will be many more stories like these to celebrate.

Sincere regards,

Richard Liekweg
President, Barnes-Jewish Hospital and Barnes-Jewish West County Hospital

Want to send a message to Richard Liekweg?
Have questions or comments? E-mail: innovate@bjc.org

BARNES-JEWISH Hospital BJC HealthCare | Washington University in St. Louis Physicians

NATIONAL LEADERS IN MEDICINE

BY THE NUMBERS

BARNES-JEWISH HOSPITAL HAS PERFORMED MORE THAN

500

heart transplants since 1985

WITH 1-YEAR, 3-YEAR AND 5-YEAR

survival rates that surpass NATIONAL STATISTICS

600+

BRAIN TUMOR PROCEDURES

PERFORMED ANNUALLY

15,000

obstetrical and gynecological ultrasounds annually using leading-edge ultrasound equipment and some of the latest diagnostic techniques

IN 2009, BARNES-JEWISH PERFORMED:

85 LIVER TRANSPLANTS,
TOTAL LIVER PROCEDURES: 335

175
PANCREATIC RESECTIONS

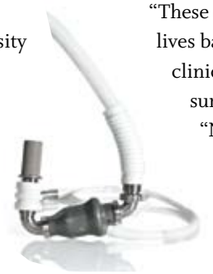
Since 2008, faculty of the Washington University Division of Gastroenterology

published more than 120 peer-reviewed articles, leading the way for MEDICAL BREAKTHROUGHS

FDA Approves VAD Used at Barnes-Jewish for Permanent Use

The FDA approved the use of the HeartMate II device, a left ventricular assist device (VAD), for "destination therapy" or permanent use, allowing an alternative to heart transplant for end-stage heart-failure patients and helping patients survive long term.

"This is an opportunity to expand the use of mechanical assist devices in patients with advanced heart failure who are deemed not to be good heart transplant candidates," says Greg Ewald, MD, medical director of the artificial heart program at Barnes-Jewish Hospital and Washington University School of Medicine. "These devices can provide long-term mechanical therapy, and many of these patients can return to a good quality of life with significantly diminished symptoms."



HeartMate II

VADs help a failing heart pump oxygen-rich blood through the body. They are surgically implanted in the chest cavity and attached to the heart's left ventricle. An electric cable runs from the device through the skin to a pack containing a power supply and the pump's controller.

"These devices give patients their lives back," says Ann Petlin, RN, clinical nurse specialist in cardiac surgery at Barnes-Jewish Hospital. "Now, they're able to get the circulation they need to survive."

Barnes-Jewish Hospital has offered the HeartMate II to patients since 2005 as a "bridge to transplant," allowing patients to live with the VAD until a donor heart becomes available.

The hospital currently implants more VADs every year than it transplants hearts, and it is the only center in the region to implant them.

See videos and listen to podcasts about breakthrough VADs at **barnesjewish.org/lvad**

First Missouri Hospital to Receive Beacon Award

Barnes-Jewish Hospital's cardio-thoracic intensive care unit (56ICU) was the first in Missouri to receive the Beacon Award from the American Association of Critical-Care Nurses. Only 188 critical care units out of 6,000 in the United States have received the award.

The honor recognizes critical care excellence and dedication to the exceptional care of patients and families. The 56ICU succeeded in areas such as retention and patient outcomes. One detail that set the unit apart was the internal education in topics including the evolving field of implantable VADs.

"It's a reflection on the hospital as a whole," says Elaine Thomas-Horton, RN, clinical nurse manager of 56ICU.

"Without the framework and support of many throughout the hospital, such as the Center for Practice Excellence, this would not be possible."

The unit also is the newest ICU at the hospital, and staff nurses were involved in the design of the unit. Large rooms with abundant daylight and room for families promote a healing environment. A unit-based chaplain and social worker help to ensure the staff considers all aspects of each patient's care.

Correction: The article, "Level 1 Trauma Center Designation" (Page 12, *Innovate*, Winter 2010, printed version) incorrectly stated that Barnes-Jewish Hospital was currently designated as a Level 1 trauma center for Illinois and Arkansas. We are currently in the process of applying for Illinois designation as a Level 1 trauma center but currently do not have this designation in either state.

Barnes-Jewish is designated a Level 1 trauma center in the state of Missouri and was the first in the state to be verified as a Level 1 trauma center by the American College of Surgeons.

We apologize for the error.

The Latest in Medical Resources and Technology

BREAKTHROUGHS

at Barnes-Jewish Hospital and Washington University School of Medicine

Left to Right, images courtesy of EndoGastric Solutions, Monteris, and Surgical Information Systems.

HeartMate II, reprinted with permission from Thoratec Corporation.

Images © Masterfile

INCISIONLESS SURGERY

STOMACH

Surgeons are using a new endoscopic device in transoral incisionless fundoplication (TIF) to correct the root cause of reflux disease, or GERD, an anatomic defect at the top of the stomach. The incisionless procedure begins with the device inserted through the patient's mouth under visual guidance of an endoscope. It is then used to construct a durable anti-reflux valve and tighten the lower esophageal sphincter.

barnesjewish.org/gerd

LASER THERAPY

BRAIN

A new neurosurgery device uses an MRI-guided laser probe, passed through a dime-sized hole in the skull, to heat and destroy difficult-to-treat brain tumors from the inside. Real-time MRI heat monitoring allows surgeons to oversee the temperature of the tumor cells and the surrounding brain cells while the laser interstitial thermal therapy (LITT) destroys the tumor cells.

barnesjewish.org/neuro-tumors

TISSUE TRACKING

OPERATING ROOM

Developed at Barnes-Jewish Hospital, the first tissue-tracking software fully integrated with a surgical information system follows tissue—including bones, nerves and vessels—for the full tissue-transplant cycle and allows standardized processes for acquiring, receiving, storing and allocating tissues. The new system helps patient safety, automatically telling employees where tissue is stored and alerting staff of expiration.

PROTECTING MEMORY

A NEW APPROACH TO DIAGNOSING AND TREATING ALZHEIMER'S DISEASE

WRITTEN BY **PAMELA McGRATH**

The goal of preventive medicine is to stop an illness before it starts or to discover and treat a disease before it becomes serious. Screenings for high blood pressure and diabetes, drugs to lower cholesterol, and lifestyle changes such as exercise and a balanced diet are a few examples of how preventive medicine has helped thousands of people remain healthy.

Now Washington University physicians at Barnes-Jewish Hospital are applying the principles of preventive medicine to their research into Alzheimer's disease. As collaborators within Washington University's Alzheimer's Disease Research Center (ADRC), the researchers are developing ways of identifying patients at risk for the disease years before dementia symptoms begin.

The researchers believe that beginning preventive treatment before brain damage occurs is essential to halting the progression of this devastating disorder.

Washington University physicians at Barnes-Jewish Hospital are applying the principles of preventive medicine to their research into Alzheimer's disease.

UNRAVELING THE PUZZLE OF ALZHEIMER'S

Alois Alzheimer, a German physician, first described Alzheimer's disease in 1906. For many years it was thought to be a rare disease. Patients who lost their ability to think, remember and reason usually were diagnosed as having senile dementia—thought an inevitable result of aging—or hardening of the arteries (arteriosclerosis). It wasn't until the 1970s that a group of pioneering researchers began examining dementia and its causes.

At Washington University, Leonard Berg, MD, and his colleagues established a dementia research team that in 1979 obtained funding from the National Institutes of Health (NIH) to inaugurate the Memory and Aging Project. From that initial effort has grown the ADRC, which continues to receive grant funding from the National Institute on Aging of the NIH.

It is one of only 32 federally designated centers dedicated to fostering innovative Alzheimer's research, and the only such center in Missouri.

"As recently as the 1980s, we were unable to tell whether patients truly had Alzheimer's disease until they died and the brain was examined at autopsy," says John C. Morris, MD, director of the ADRC. "Although definitive diagnosis still requires an autopsy, there has been an explosion of knowledge about the disease over the past 30 years."

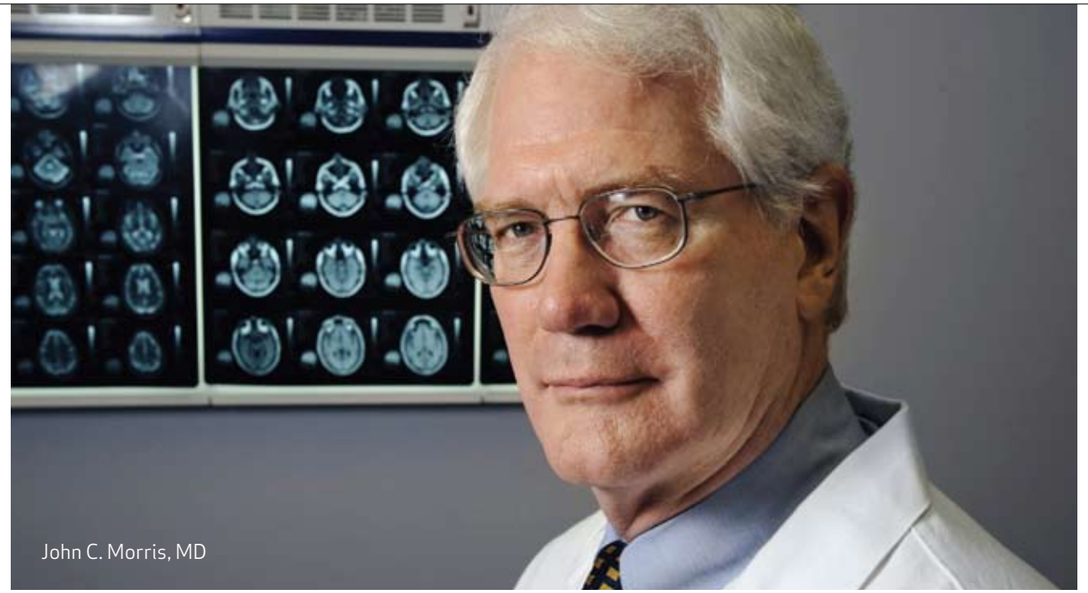
Researchers now know that Alzheimer's disease is caused by a build-up of particular proteins in the brain, which results in plaques and tangles.

As more and more of these plaques and tangles develop in certain areas of the brain, healthy nerve cells work less efficiently, gradually lose their ability to communicate with each other and eventually die. This leads to the cognitive impairments associated with the disease.

DIAGNOSING ALZHEIMER'S IN THE LIVING BRAIN

Perhaps the most startling, and at the same time promising, discovery made to date about Alzheimer's is that brain plaques likely begin to develop years before symptoms arise and may have a genetic component. Much of the evidence supporting this conclusion has been uncovered at Washington University.

"We represent the leading group in the world using cutting-edge technologies that allow us to identify during life the changes in the brain associated with Alzheimer's disease," says David M. Holtzman, MD, Barnes-Jewish neurologist-in-chief and chairman of neurology at Washington University.



John C. Morris, MD

Photo by Tim Parker

One new method of gauging changes in the brain involves collecting spinal fluid through a lumbar puncture.

"The spinal fluid is made up of material coming directly from the cells in the brain," says Holtzman. "By looking at the particular proteins we know are involved in Alzheimer's disease, we think we can identify the changes that occur in these biological markers while people's cognitive abilities are still normal."

He adds, "Over the next five to 10 years, this test has the potential for being integrated into a regular doctor's office visit. At a certain age, patients would get a spinal tap, these proteins would be assessed, and their relative risk for the disease revealed."

Another promising screening for the disease involves the use of a new imaging agent, Pittsburgh Compound B (PiB), during positron emission tomography (PET) scans.

"The unique aspect of the PiB agent is that when it is injected into the vein, it travels to the brain, recognizes the abnormal proteins associated with Alzheimer's, binds to them and gives off a signal that is readily visible through the PET scanner," explains Morris. "This was never before possible except through examining brain tissue under a microscope. Based on the positive results we've seen so far in our studies, we believe that this imaging capability is going to revolutionize our treatment approach to Alzheimer's disease. It likely will allow us to first diagnose the disease 10 to 20 years before symptoms appear and then to intervene with preventive medications to slow or stop the disease's progression."

Currently, medications do exist for lessening the symptoms of Alzheimer's disease, although Morris admits they are limited in their effectiveness.

"We now know that by the time the symptoms of Alzheimer's begin, the brain already has been badly damaged; in some vulnerable areas, 30 percent to 60 percent of nerve cells are gone," says Morris.

"Our hope is that if we begin prescribing these drugs well before this damage begins, they will be more effective in stopping the disease's progress."

THE ADULT CHILDREN STUDY: LEARNING FROM THE NEXT GENERATION

Integral to the research being conducted by ADRC researchers is the Adult Children Study, which was begun in 2005 and is funded through a second major grant from the National Institute on Aging.

Two groups of volunteers between the ages of 45 and 74—one group whose members had a parent with Alzheimer's, the other group whose parents did not have the disease—are undergoing diagnostic tests over many years' time. The testing ranges from cognitive evaluations to examining spinal fluid and PET scans for biomarkers of the disease.

"A unique aspect of the Adult Children Study is that all the measurements we are taking will be done over time every two to three years," says Mark A. Mintun, MD, Washington University radiologist at Barnes-Jewish Hospital. "If you look at someone just once, you don't know whether over their lifetime they've always had memory problems, don't do well on tests or can't remember numbers. But if you see them over time, they become their own baseline. You are sensitive to any decreases in their function and can compare them over time."

A subgroup within the Adult Children Study is made up of children with a parent whose Alzheimer's disease was caused by a rare genetic mutation that always results in early-onset Alzheimer's—which means the child has a 50-50 chance of inheriting the gene. Washington University is the coordinating center for another National Institute on Aging grant involving 10 sites around the world that will collect and compare data on these volunteers.

"The participants in the Adult Children Study are the most dedicated and highly motivated research volunteers you could want. And it's because they have seen Alzheimer's disease in their parent," says Morris. "They know what it is. Honestly, I don't know whether we will have preventive therapies for them in their lifetimes. Hopefully we will. But most of them participate because they want to help, if not themselves, certainly others such as their children."

THE HOPE FOR THE FUTURE

Morris emphasizes that Alzheimer's disease is not an inevitable result of aging. Although age is a major risk factor for the disorder, many older adults in their 80s and 90s remain alert and active throughout their lives.

"We are at an exciting time in the history of Alzheimer's research," he says. "We are developing the means of identifying people at risk for the disease before substantial brain damage occurs, and there are many promising drugs in development with the potential for effectively stopping the progression of the disease. In addition, we are working to discover how diet, exercise and ongoing mental stimulation play a role in maintaining cognitive health."

For patients with Alzheimer's disease seeking treatment at Barnes-Jewish Hospital, this multifaceted approach to research means they have access to pioneering diagnostic and treatment options.

"The leading clinical and research experts in the world see patients here at Barnes-Jewish Hospital," says Holtzman. "Our commitment is to provide the best care possible to our current patients while finding the means to ensure a brighter future for the generations to come."

Watch videos and learn more about Alzheimer's disease at **barnesjewish.org/memory**

THE ADULT CHILDREN STUDY:

A Volunteer's Perspective

Dianne Kerley, 55, watched both her grandmother and mother slowly slip away as they succumbed to the symptoms of Alzheimer's disease.

"My mom was diagnosed with possible Alzheimer's disease when she was 64 in 1993. She passed away in 2008. Throughout those 15 years we watched as she drew into herself and lost her memories of her older adult life," says Kerley. "Eventually she didn't remember my dad and didn't recall that she had a younger brother."

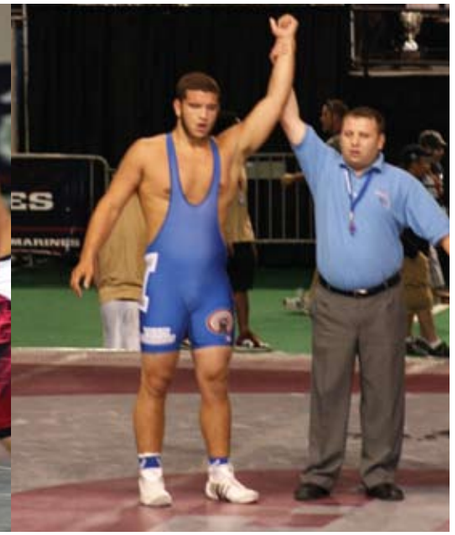
As do many adult children of Alzheimer's patients, Kerley also experienced the reversal of roles required as a caregiver. "I ended up taking on a parenting role with her, especially after my dad died," she says. "It was difficult dealing with all the practical matters in addition to the sadness of basically losing the parent you love even though she is still with you."

Kerley's greatest wish is that her son will not have to experience the same sense of loss and responsibility with her. For that reason, she was one of the first volunteers in the Adult Children Study being conducted by the ADRC.

"We want to be a part of making this world better for our children and grandchildren by helping to discover ways of stopping the progression of—or better still, eliminating—this disease," Kerley says.

‘MVP’ CARE

FOR ASPIRING ALL-STARS



Wrestler Sam Pirtle, Photos by Kelley Pirtle

WRITTEN BY **STEPHANIE STEMMLER**

Taking care of elite athletes means better sports medicine care for all of us

Sam Pirtle is itching to get back to wrestling. Faced with the exciting possibility of sports scholarships, the 16-year-old honors student at Roxanna High School in Illinois was on track to be recruited for college wrestling teams when he injured himself last fall.

“Sam’s currently ranked among the top students in Illinois for his weight class in wrestling,” says mom Kelley. “He torqued his shoulder in an odd position during a tournament. It became so inflamed that he couldn’t lift his arm or it popped out of the socket.”

Sam was reluctant to undergo surgery because he might miss the spring state wrestling tournament, where most teens are noticed for scholarships. He came to the Washington University sports medicine specialists at Barnes-Jewish Hospital to explore other options.

“The doctors understood Sam’s goals and recommended an aggressive four-day-a-week therapy program to re-build muscle strength and improve his range of motion while also focusing on injury prevention,” says Kelley. “They really took into account not only Sam’s passion for the sport but also how to get him back to a level where he could compete safely.”

Sports medicine encompasses a wide range of medical fields, from orthopedics to cardiovascular medicine. Far from focusing only on professional athletes, sports medicine focuses on the care of all active individuals — anyone from children to older adults.

“The vast majority of the patients we see are youth involved in competitive sports or weekend warriors who get hurt at work or play,” says Rick Wright, MD, Washington University orthopedic surgeon and co-chief of sports medicine at Barnes-Jewish Hospital. “But what sets us apart is that we do care for some of the best professional athletes in the region, which allows us to take that knowledge and skill and help all of our patients recover and return to their activities as quickly and easily as possible.”

At Barnes-Jewish Hospital, Washington University orthopedic surgeons serve as team physicians for the St. Louis Rams football team and the St. Louis Blues hockey team. Several physicians also work with colleges and high schools. There’s even a former professional soccer player on staff — orthopedic surgeon Robert Brophy, MD — available to see patients with active lifestyle injuries.

“I’m now the ‘weekend warrior’ myself trying to stay active while having a busy career,” says Brophy.

“I think all of us in sports medicine understand the mindset of someone who is active at any level and can help them get through an injury and back on track.”

Matthew Smith, MD, specializes in throwing injuries. “I played sports in high school,” he says. “I suffered a shoulder injury that resulted in surgeries both in high school and right after college, so I have personal experience in treatment, recovery, and in how determined some patients are to get back in top shape.”

Smith has an advanced expertise in shoulder and elbow injuries specifically related to throwing, having completed a focused fellowship on the Throwing Athlete and Sports Elbow at the American Sports Medicine Institute in Birmingham, Ala. “It’s a unique area in sports medicine and one that’s growing because of the trend toward year-round participation in a single sport, which brings with it the increased potential for injuries,” he adds.

> **“In addition to focusing on treatment, I’m also committed to educating trainers, coaches and families on how to prevent such injuries in the first place.”**

Along with prevention and treatment, Smith says actually managing injuries is critical for any athlete, young or old. “We spend a lot of time counseling them on timing — what they need to do and when — so that we can best develop a rehabilitation and injury prevention program that keeps them as active as possible throughout their season while also keeping them safe. That’s what we’re doing with Sam. We are working to get him ready for his upcoming tournaments.”

A thorough physical is the foundation for anyone seeking an active lifestyle or who is involved in competitive sports. Not only can an exam identify potentially career-ending orthopedic issues, it also can catch hidden problems.

MORE THAN JUST ORTHOPEDICS

Earlier this year, pro football was rocked when Chicago Bears’ defensive end Gaines Adams, age 26, died of sudden cardiac death. Among many heart doctors, though, Adams’ death came as no surprise. An estimated 75 young athletes die each year from hypertrophic cardiomyopathy (HCM), a heart problem that often is difficult to diagnose. Suspected as the cause of Adams’ death, HCM occurs in one in 500 individuals and is the most common genetic cardiovascular condition.

“Patients usually have either chest pain or shortness of breath, and some of them will have palpitations,” explains Keith Mankowitz, MD, director of the HCM clinic at the Heart & Vascular Center. “If patients are not counseled on it and then overdo exercise activities, they can be at risk for dying. They need specific management guidelines and treatment protocols in order to live a fruitful and long life.”

Also potentially life-threatening or limb-threatening is a condition known as thoracic outlet syndrome (TOS). Caused when a nerve or blood vessel in the shoulder is pinched or compressed, TOS has been found in active individuals who perform repetitive and strenuous upper-arm movements. While nerve compression symptoms, such as pain, numbness, and tingling, build up over time, patients with blood-vessel compression may require immediate treatment for any blood clots or aneurysms that could develop.

Only a few centers in the country specialize in TOS, and the Center for Thoracic Outlet Syndrome at Washington University School of Medicine and Barnes-Jewish Hospital is now considered a leading authority on TOS diagnosis and treatment, seeing more than 150 patients last year alone.

"Some of our patients have undergone long series of medical tests or surgery for neck compression or carpal tunnel without relief," says Robert W. Thompson, MD, a vascular and general surgeon who founded the center and organized the first national symposium entirely focused on TOS in the fall of 2009. "What they find here is a team of professionals — from physicians and nurse practitioners to physical therapists — who follow specific protocols depending upon the type of TOS diagnosed."

"I was really discouraged because my symptoms went on for years," said Bryan Bopp, an Illinois computer consultant who suffered from constant pain, dizziness and vertigo. "It affected my work and my home life, and I didn't even want to play with my sons anymore."

Nerve conduction studies finally done by a physician came back abnormal, and Bopp was referred to Thompson, who found that Bopp was among the .5 percent of the population born with an extra rib extending from a cervical (neck) vertebra. The extra rib compressed a nerve, causing pain. Bopp also had developed an aneurysm behind it.

After surgery, Bopp says, "My limited range of motion and neck pain were gone. I now live life the way it should be with my family, and I'm free of pain."

Thompson, who has treated everyone from baseball players and nationally recognized ballerinas to waitresses and computer workers such as Bopp, says detective work is crucial to uncovering a diagnosis. "We have to look at all the symptoms and evaluate a patient's movement and blood flow as well as the results of nerve conduction studies," he says. "It's like a puzzle, and we work to find the missing pieces to effectively treat a patient in pain."

ACTIVE PATIENT RESEARCH

With widespread expertise in sports medicine, the Washington University physicians at Barnes-Jewish Hospital are engaged in multiple innovative clinical trials evaluating the effectiveness of treatments and gauging the risk of recurrent injury.

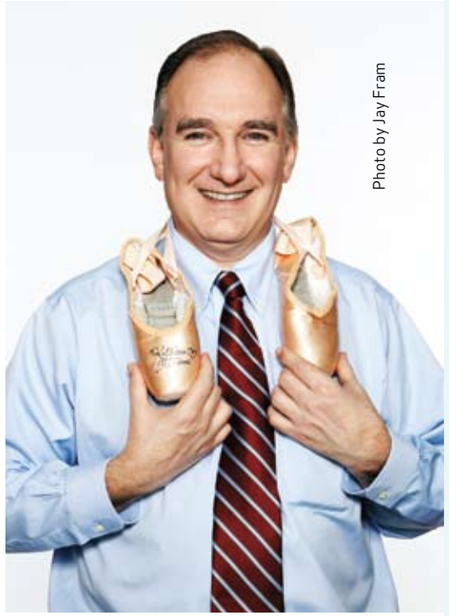


Photo by Jay Fram

Robert W. Thompson, MD, receives gifts from grateful patients, including from a ballerina who recently had surgery for her TOS.

They also keep a constant watch for injury trends that not only affect professional athletes, but also the weekend warrior.

"We are always on the leading edge of sports medicine because of our association with elite athletes, whether through our research activities or clinical care," says Wright. "The knowledge we gain can then be used with all patients to help them achieve their goals. With a wide range of options, including non-surgical therapies, minimally invasive procedures and comprehensive rehabilitation, our patients recover and return to activities as quickly and easily as possible. That way, they don't have to remain on the sidelines of any activity."

To see videos of team physicians, visit:
barnesjewish.org/MVP

Grand Slam Orthopedics

Photo by Laura Thomson

Cliff Politte was a Major League pitcher for nine years, playing for the St. Louis Cardinals, the Philadelphia Phillies and the World Series-winning Chicago White Sox. Since then, he has taught pitching and baseball fundamentals to St. Louis-area students. When a stray ball ruptured a distal biceps tendon in December 2009, he turned to Matthew Smith, MD, orthopedic surgeon at Barnes-Jewish Hospital.

MATTHEW V. SMITH, MD, *35*

Orthopedic Surgery-Sports Medicine, Washington University

ON THE INJURY

A distal biceps tendon rupture is a relatively uncommon injury, prevalent among active men and in laborers who do heavy lifting. We typically see a patient with this injury every couple of months. A patient will usually feel a pop in the front of the elbow after reaching quickly for something or while lifting a heavy object. The cause of Mr. Politte's injury is not unusual.

ON THE TREATMENT

We like to fix complete tears relatively quickly (within 2 weeks of the injury is preferable) for the best recovery. This involves making a 2- to 3-centimeters incision in the front of the elbow and sometimes a small incision on the back of the elbow. Patients are usually in a splint for 1 week after surgery. After a week, controlled motion is started in a hinged elbow brace.

ON THE RECOVERY

He should be able to get back to everything he was doing before the injury. Full motion is usually restored by 6 weeks after surgery. Patients then begin a gentle strengthening program. Unrestricted activity is generally allowed by 4-5 months.

CLIFF POLITTE, *37*

Former MLB Pitcher, St. Louis, Mo

ON CHOOSING BARNES-JEWISH

I had a hip surgery in the past at Barnes-Jewish, so when I tore my biceps this time, I immediately knew where I should go. Dr. Smith impressed me with how he explained the procedure and the overall care he took to get me the right recovery.

ON THE CARE

The procedure itself was just an outpatient surgery, in-and-out the same day. Since then I've been back for several follow-ups, and he has me on a light strengthening program. Usually with something like this, after six weeks you're sent on your way. But Dr. Smith is protective and concerned and really cares about the recovery. We are working closely together.

ON THE RECOVERY

It feels really good. The flexibility is pretty much back to normal, and I'll be back in shape real soon. We don't want to push it, but with his help it will be good as new.

See a video with Smith and Politte at
barnesjewish.org/sports-medicine

FYI

New Grant Supports Research in Gynecologic Cancer

The National Cancer Institute (NCI) has awarded a prestigious Specialized Program of Research Excellence (SPORE) grant to researchers at the Siteman Cancer Center and Washington University School of Medicine. The three-year grant funds research in endometrial cancer, which is a cancer that originates in the uterine lining. In addition to studying the causes of endometrial cancer, the project also focuses on strategies for preventing the disease and for the development of new treatment approaches.

For Paul Goodfellow, PhD, and David Mutch, MD, leaders of the SPORE team, the award demonstrates a commitment to what these investigators describe as a seriously underfunded area of women's cancer research.

"Endometrial carcinoma is the 'orphan' disease of gynecological oncology, despite the fact that its incidence is rising every year and its mortality increasing," says Goodfellow.

"Endometrial cancer has been sorely understudied, even though it is the fourth most common cancer in American women with 40,000 cases diagnosed yearly and more than 7,000 women dying annually from the disease."

He adds, "That's almost twice as many as die of cervical cancer. Currently, if a woman's endometrial cancer recurs, there are very few effective chemotherapy treatments available to her."

Listen to podcasts and learn more about the research at **barnesjewish.org/endoresearch**

Personalized Vascular Care

Abdominal aortic aneurysms, potentially dangerous bulges in the artery that feeds blood to the torso and legs, occur in 2 percent to 4 percent of Americans. In recent years, minimally invasive techniques involving stents have improved safety. Yet for many patients, stent placement has not been an option because the stent itself would block blood flow.

Washington University is one of 10 centers nationwide testing new "fenestrated stents" in a clinical trial. The devices feature small openings, or fenestrations, that can be positioned to allow blood to pass into the renal arteries. Since the anatomy of the blood vessels involved varies from person to person, the stent and its openings must be custom-made for each patient.

Watch videos about your vascular care options at **barnesjewish.org/vascular**

Nearly Scarless Minimally Invasive Surgeries

Natural orifice transluminal endoscopic surgery, also known by the friendlier name NOTES, is a technique that combines laparoscopic and endoscopic techniques to access the body through natural openings, such as the mouth or anus. These minimally invasive approaches take the place of larger incisions in traditional surgeries that could leave unpleasant scars, pain and infection.

Michael Awad, MD, a minimally invasive surgeon trained in robotic surgery and NOTES, joined the Washington University faculty in fall 2009. Awad, along with Brent Matthews, MD, chief of minimally invasive surgery, and other faculty members, are using and researching surgical techniques for procedures on the gallbladder, liver, bile ducts, small intestine and other organs.

NOTES is a part of the Natural Orifice Surgery Program at Washington University and Barnes-Jewish Hospital.

Clinical trials will begin in the fall to evaluate laparoscopic cholecystectomy, a procedure in which surgeons remove the gallbladder through the mouth.

"The holy grail of surgery for us would be to operate under just local sedation as an outpatient procedure where the patient could walk out of the hospital the same day with minimal pain and resume normal activity quickly," Awad says.

Only 500 NOTES procedures have been performed worldwide.

AT A GLANCE

World-Class Emergency Care

Within two weeks of the massive earthquake that hit Haiti on Jan. 12, Barnes-Jewish emergency residents Caleb Trent, MD, and Chet Schrader, MD, made their way to Petit Goave, an area of 170,000 people in the mountains west of Port-au-Prince, where Trent's not-for-profit organization Aid For Haiti (AFH) provides assistance.

The Petit Goave hospital was damaged with both operating rooms nonfunctional. AFH essentially coordinated an emergency room for the area and was soon seeing about 400 patients a day, including people who were seeking medical care for the first time since the quake.

"I think what really opened my eyes was that as we traveled and went further and saw more damaged areas, you suddenly realized the scope of this," Schrader says.

"You have to add to [a third-world country] a disaster that's not like things you have seen before. Buildings are just pulverized. Sheets of concrete have been laid down like a blanket. And you realize that this has affected every person you talk to," Trent says.

Several other Barnes-Jewish emergency nurses, residents and Washington University attending physicians have volunteered their vacation time to provide care throughout April.

Photos courtesy of Caleb Trent, MD

See photos and videos about Trent and Schrader in Haiti at **barnesjewish.org/haiti**

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