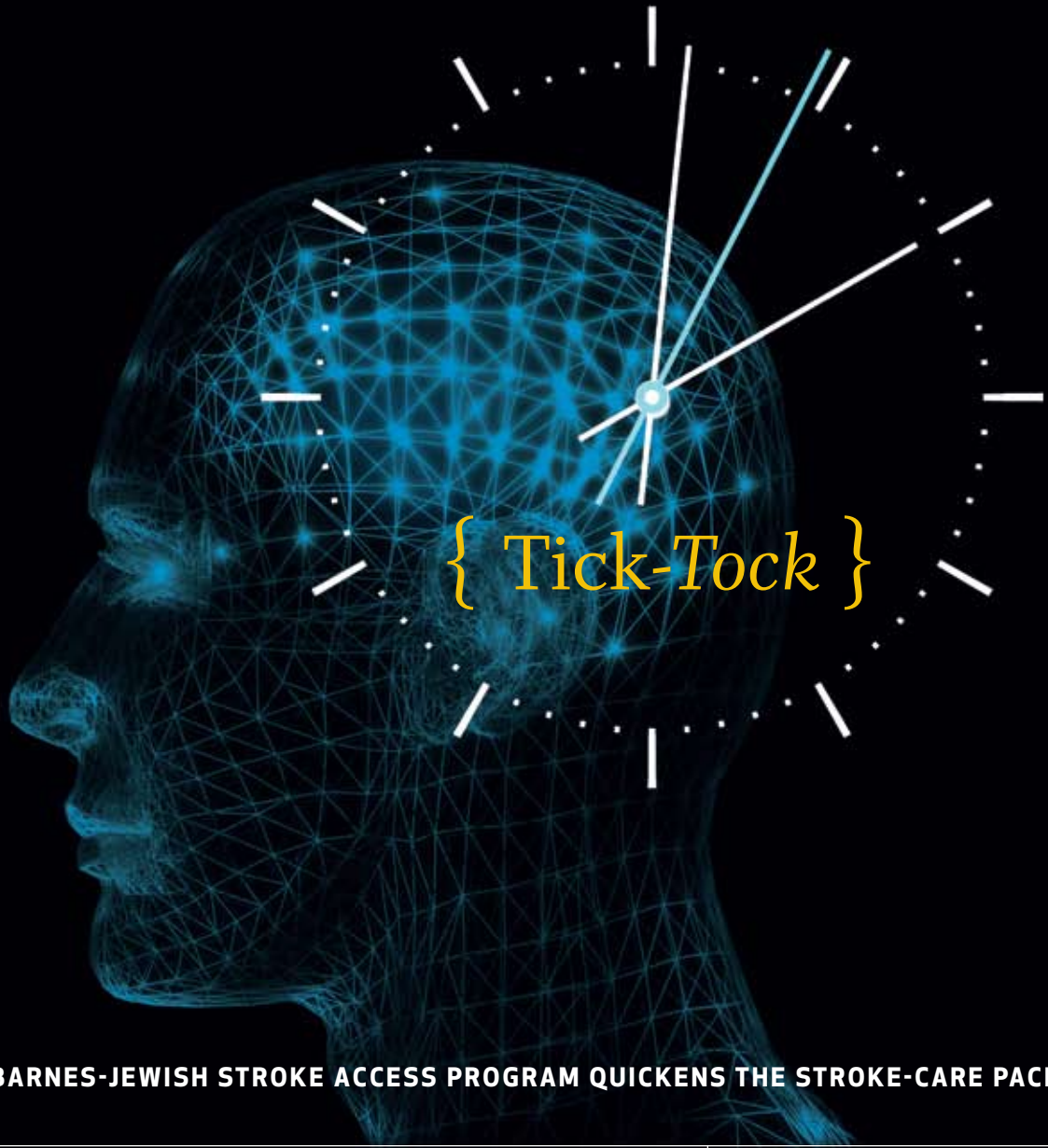


# Innovate™



**BARNES-JEWISH STROKE ACCESS PROGRAM QUICKENS THE STROKE-CARE PACE**



**ALSO IN THIS ISSUE:**

- New Procedure for the Inoperable: Transcatheter Aortic Valve Implantation (TAVI)
- Nanotechnology to Treat Heart and Lungs

## A LETTER FROM RICHARD LIEKWEG

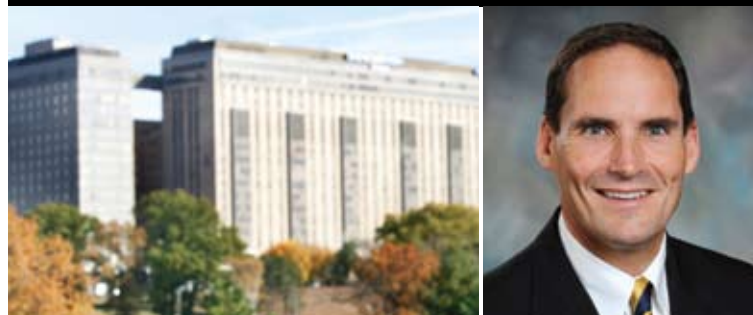


Photo by Tim Mudrovic

Dear Friends,

This issue of *Innovate* is dedicated to the groundbreaking initiatives that are changing the way stroke patients are treated. The research of our Washington University physicians is proving that tPA—a clot-busting drug that can sometimes minimize damage from a stroke—can be given to patients who previously were not candidates because they arrived at the emergency department too late. For patients in rural areas who do not have timely access to a Stroke Center of Excellence such as Barnes-Jewish Hospital, technology is allowing us to make an impact in the quality of care.

Newly deployed robots at Parkland Hospital in Farmington, Mo., allow emergency physicians, stroke neurologists and other specialists at Barnes-Jewish Hospital to communicate face-to-face in real time. Although the robots do not provide the care, the technology allows our physicians to visually and remotely assess the patient, then in collaboration with the Parkland emergency department staff and physicians, treat the patient rapidly or facilitate a transport to Barnes-Jewish for a higher level of care. Caring for stroke patients across the region and restoring mobility, speech and function is just one of the many ways Barnes-Jewish Hospital and Washington University physicians remain national leaders in medicine and help BJC make medicine better.

With 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](mailto:innovate@bjc.org)



NATIONAL LEADERS IN MEDICINE

**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 240-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 Siteman Cancer Center.



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

*Innovate* is published quarterly by Barnes-Jewish Hospital.

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Contributing Editors: Jennifer Arvin, Mary Lee, Juli Leistner and Jackie Stack

Address Changes:

*Innovate* circulation | Mailstop 90-94-204  
600 S. Taylor Ave. | Suite 202  
St. Louis, MO 63110

If you no longer wish to receive *Innovate* or received multiple copies, please call 314-TOP-DOCS (314-867-3627) or toll-free 866-867-3627, or e-mail [innovate@bjc.org](mailto:innovate@bjc.org).

## BY THE NUMBERS

OCTOBER 2010:

# 26,807

## FREE FLU SHOTS

given by Barnes-Jewish Hospital and St. Louis Children's Hospital

funded by the Barnes-Jewish Hospital Foundation



THE ST. LOUIS CARDINALS  
RAISED MORE THAN  
**\$57,000**  
with their limited-edition baseball cap to help fund research at the Siteman Cancer Center

# 5,500

vascular procedures ANNUALLY with 10 active clinical trials

In 2010, **2,200** patients were treated with botox for spasticity, dystonia and other neurological disorders  
<http://bjhne.ws/botox>



BARNES-JEWISH RECEIVED A  
**Consumer Choice Award** from the National Research Corporation, as chosen by the people in our community

## MINI-MEDICAL SCHOOL FOR THE ST. LOUIS COMMUNITY

Washington University School of Medicine's Mini-Medical School is in its 12<sup>th</sup> year and is still considered one of the best-kept secrets in St. Louis! Spring session begins the week of March 22nd, meeting on Tuesday or Thursday nights, from 7-9 p.m., over eight weeks.

Come and learn about medicine without any exams directly from the experts. Class size is limited and fills up quickly. Must be at least 15 years old. The tuition of \$150 includes lectures, syllabus, dessert, hands-on labs, and tours. For more information please see <http://minimed.wustl.edu> or call 314-362-6585.





## BREAKTHROUGHS

at Barnes-Jewish Hospital and Washington University School of Medicine

### Friends, Family Detect Early Alzheimer's Disease Better

Family members and close friends detect early signs of Alzheimer's dementia better than traditional screening tests, according to a new study published by researchers at Washington University School of Medicine.

Doctors often evaluate a person who is having memory problems by testing them with a variety of cognitive tasks, such as recalling a list of words or comparing shapes of objects. In this study, the researchers validated a different approach: a two-minute questionnaire called the Ascertain Dementia 8 (AD8) questionnaire.

The AD8 relies on a friend or family member who knows the person well to evaluate whether cognitive changes have caused the individual to have difficulties in performing everyday activities.

The AD8's results corresponded with biological indicators of Alzheimer's disease more consistently than traditional cognitive tests.

The AD8 has been translated into several languages and validated in those languages. It is currently used in clinics around the world.

@ To find out more about the AD8 study and what researchers look for, visit <http://medschool.wustl.edu/AD8>

### New Bariatric Program Helps Curb Adolescent Obesity

The rate of obesity among teens has more than tripled in the past 30 years. Today, 18 percent are obese, which increases their risk of heart disease, diabetes, stroke and dying young. Barnes-Jewish Hospital and Washington University Physicians have partnered with St. Louis Children's Hospital to open the first bariatric surgery program in the St. Louis area for obese adolescents.

"Obese adolescents face a lifetime of long-term health problems related to their weight," says Washington University bariatric surgeon Esteban Varela, MD, who directs the program. "Bariatric surgery increasingly has become a viable treatment option for extremely obese teens who can't lose weight by other methods."

Adolescents ages 14-19 may be eligible for weight-loss surgery if they are extremely obese with a body mass index above 40. Teens who opt to have the procedure must have been unable to lose weight after participation in

the Head to Toe weight management program at St. Louis Children's Hospital. They must also be evaluated by Varela and the adolescent bariatric surgery team, along with pediatric experts at St. Louis Children's Hospital, including a pediatric endocrinologist and registered dietitian.

### Barnes-Jewish Hospital is designated as a Bariatric Surgery Center of Excellence by the American Society of Bariatric Surgery.

Varela and the bariatric surgery team offer three types of minimally invasive weight-loss surgeries: laparoscopic adjustable gastric banding, laparoscopic sleeve gastrectomy and laparoscopic gastric bypass. Most patients can return to school or work after two weeks of recovery.

Varela's previous research has shown that bariatric surgery is as safe in adolescents as in adults and that adolescents have fewer complications.

@ Find more about the program and weight management at <http://weightlosssurgery.wustl.edu>

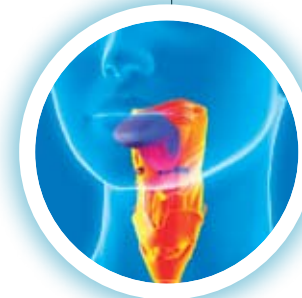
Below: Esteban Varela, MD, bottom left, works with a multidisciplinary team for Barnes-Jewish Hospital and St. Louis Children's Hospital.



#### SIALENDOSCOPY



SALIVARY GLANDS



Blockage of the flow of saliva from the salivary glands is usually caused by stones, narrowing of the duct or thickened saliva. Blockage can cause pain and swelling, and usually results in the removal of the gland. A new minimally invasive procedure using a specialized endoscope allows physicians to use the duct's natural opening to examine, diagnose and often treat the condition in an outpatient procedure.

@ <http://bjhne.ws/sialendoscopy>

#### PATIENT SAFETY



IDENTIFICATION



At the end of 2010, Barnes-Jewish Hospital introduced bar-code scanning to verify medication orders. This technology uses a scanner to read bar codes on patient wristbands and medications. The system verifies that clinicians are giving the right medication to the right patient and at the right time.

@ <http://bjhne.ws/patientsafety>

#### PHOTODYNAMIC THERAPY



PROSTATE



An innovative "microinvasive" procedure is being evaluated in men with localized prostate cancer. Vascular-targeted photodynamic therapy uses a light-sensitive drug designed to selectively destroy tumors illuminated by lasers. The approach has the potential to minimize side effects associated with traditional surgery and radiation therapy.

@ <http://bjhne.ws/PDTprostate>





# Tick-Tock

BARNES-JEWISH STROKE ACCESS PROGRAM QUICKENS THE STROKE-CARE PACE

*What could make the difference between a stroke patient walking out of the hospital rather than being pushed in a wheelchair? Going back to work rather than going to rehab?*

## STROKE EXPERTS SAY THE DIFFERENCE IS TIME.

William was in his 70s. He had high blood pressure, but otherwise was in good health. One day last fall, he noticed his hand going numb and becoming progressively weaker. His speech was slurred. His wife called 911.

The faster you get to the hospital once stroke symptoms begin, the less likely you are to have any lasting effects. That's what the doctors say and statistics bear out. "Time is brain" is the stroke-care mantra.

The Washington University stroke-care team at Barnes-Jewish Hospital is nationally known for excellence in treating stroke, and for researching and developing stroke protocols and treatments.

But what if a stroke patient can't easily get to Barnes-Jewish for treatment?

Then the stroke-care team works with a network of smaller community hospitals throughout the region—making sure patients at those hospitals have access to the best stroke care available.

Currently, when a suspected stroke patient rolls into the emergency room at a network hospital, physicians there can phone the Doctor's Access Line at Barnes-Jewish and within minutes, consult directly with a Washington University stroke specialist.

Alton Memorial Hospital in Alton, Ill., where William went for care, calls on the Washington University stroke-care team at Barnes-Jewish about five to 10 times a month, according to emergency medicine physician Rodger Hanko, MD, interim director of stroke care at Alton Memorial. Working with the stroke-care team allows the Alton doctors to offer patients advanced stroke care, even treatment with tPA—a clot-busting drug used to treat stroke—when appropriate.

"From my view, this relationship extends the expertise of the Washington University and Barnes-Jewish team further into the bi-state area and gives more community members access to quicker care and recovery," Hanko says.

"Ideally we evaluate patients quickly after stroke symptom onset, and communicate early with the Washington University team to begin treatment," Hanko says. "We will work with the Washington University physicians as closely as needed, and keep regular communications going."

Working with the Washington University stroke-care team, the Alton Memorial physicians administered tPA at their facility and then transferred William to Barnes-Jewish for further treatment and follow-up. As a result, he was able to walk out of the hospital several days later. Other than minor, occasional problems with his balance, he has no lasting effects of the stroke and has returned to a normal life.





A patient at Parkland Health Center discusses symptoms and is evaluated by Renee Van Stavern, MD, at Barnes-Jewish Hospital through a new telemedicine robot.

Photo by Kathryn Holleman

CONNECTING PATIENTS TO BARNES-JEWISH CARE

“Barnes-Jewish Hospital is recognized as a national leader in stroke care. For years, our stroke network has helped patients who can’t get to Barnes-Jewish immediately to receive excellent, evidence-based stroke care,” says Renee Van Stavern, MD, co-director of the Washington University stroke-care team at Barnes-Jewish.

Now, the team is strengthening the stroke network with innovations such as a telemedicine robot pilot program, Van Stavern says.

ROBOT ENHANCES STROKE NETWORK

In January, the stroke-care team placed a telemedicine robot in the emergency department at Parkland Health Center

in Farmington, Mo., 60 miles south of St. Louis. Robots are currently used around the country to make specialist physicians “remotely present” in the patient’s room at distant hospitals.

“For acute stroke care, this may mean faster, more accurate onsite treatment to patients presenting to our partner hospitals,” says Peter Panagos, MD, co-director of the stroke-care team.

“This can be especially critical at distant hospitals where transporting the patient to Barnes-Jewish could potentially put the patient outside of the window for treatment with tPA.”

“It takes about 20 minutes by air and an hour and 15 minutes by ambulance

to get to Barnes-Jewish,” says John Hunt, MD, director of emergency medicine at Parkland. “That eats up valuable time.”

Parkland’s emergency room physicians are now the first in the network to work collaboratively through the stroke robot with the Washington University stroke neurologist.

The InTouch robot at Parkland connects to Barnes-Jewish via wireless internet. The Washington University stroke expert at Barnes-Jewish is able to maneuver the robot, and a two-way audio/video feed allows the expert and patient to see and hear each other. This lets the stroke specialist

conduct his or her own neurological examination and interact directly with the patient, family and local medical staff, Panagos says. In addition, the stroke expert receives real-time feeds of vital signs, test results and imaging.

“The robot is an effective tool in helping us collaborate with the Parkland emergency staff in getting patients diagnosed and appropriate treatment started as quickly as possible,” says Van Stavern. “This just enhances our relationship with Parkland and benefits patients in that area.”

“The stroke network and the new stroke robot really give the patient the expert evaluation of a Washington University neurologist, without ever having to leave town,” says Kathy Ferguson, Parkland’s emergency department manager. “It is a tremendous advantage to the patient.”

The Washington University stroke-care team at Barnes-Jewish will be monitoring the pilot program and assessing results. If successful, robots may be placed at other network hospitals in Missouri.

For more information and a video, visit: <http://bjhne.ws/ticktock>



Although tPA was approved 15 years ago by the FDA for treatment of ischemic stroke, it’s estimated that less than five percent of stroke patients get this “wonder drug.”

One reason for this, says Peter Panagos, MD, co-director of the acute stroke network, is that people often don’t know or ignore stroke symptoms.

“People will have symptoms, but go to bed rather than going to the hospital,” he says. “When they wake up, they’ll find they’re paralyzed on one side. It’s very frustrating.”

But even if a person goes to the hospital with stroke symptoms, which hospital they go to can make a big difference.

Barnes-Jewish Hospital recently received the American Stroke Association’s Get with the Guidelines—Stroke Silver Plus Award. The Get with the Guidelines program recognizes hospitals that meet or exceed nationally accepted standards and recommendations of stroke care.

“The Get with the Guidelines—Stroke Silver Plus Award addresses the important element of time in stroke care,” said Jo-Ann Burns, ANP-BC, CNRN, stroke program coordinator.

To earn the Silver Plus Award, Barnes-Jewish achieved 12 consecutive months of 85 percent or higher adherence to all Get with

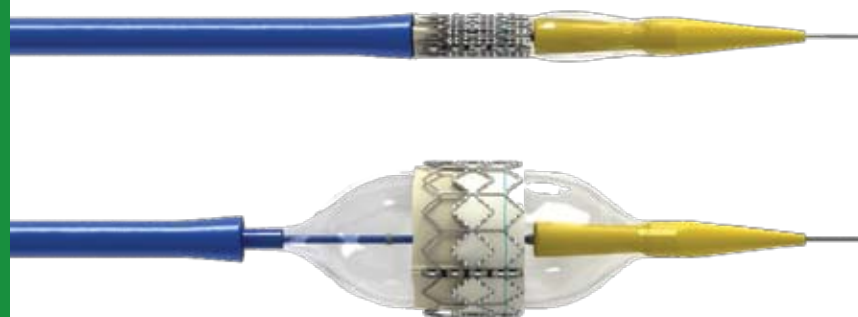
the Guidelines Stroke Performance Achievement indicators and achieved at least 75 percent or higher compliance with six of 10 Get with the Guidelines Stroke quality measures.

Barnes-Jewish has developed a comprehensive system for rapid diagnosis and treatment of stroke patients admitted to the emergency department. This includes providing brain imaging scans, having neurologists available to conduct patient evaluations and using clot-busting medications when appropriate, 24 hours a day.

What this means for the patients is that when they get to the Barnes-Jewish emergency room, “everything is done in a rapid, almost seamless fashion,” says Renee Van Stavern, MD, co-director of the Washington University stroke-care team at Barnes-Jewish Hospital.

In 2009, 69 patients, a record number, were treated with tPA after being admitted to the Barnes-Jewish emergency department. The hospital treated 58 patients with tPA in 2010.

**New procedure makes valve replacement an option for the inoperable**



## Transcatheter Aortic Valve Implantation

Three years ago, Mary Ann Cahalin's heart was so poorly functioning that she was unable to walk up stairs. The aortic valve in the left pumping chamber of her heart had become narrowed with calcium deposits, limiting blood flow from her heart to the rest of her body. She could barely function.

Cahalin was so ill, in fact, that she could not qualify for surgery that may have helped her. Her chance of surviving open-heart surgery to replace her aortic valve was considered too poor to risk the procedure. Unfortunately, patients with her condition—inoperable severe aortic stenosis—typically face rapid decline following the onset of symptoms.

It was that poor prognosis, however, that brought Cahalin into a procedure room at Barnes-Jewish Hospital on January 15, 2008. There, she became the first patient in the St. Louis region

to have her calcified aortic valve replaced without open-heart surgery.

Washington University physicians implanted a new valve into her heart by using a catheter, which was inserted into the femoral artery in her leg and threaded through her circulatory system to the heart. The artery was accessed through a small incision in the groin. Cahalin's heart continued beating during the two-hour procedure.

"They did the procedure on a Tuesday, and I was home by Friday and had my hair done on Saturday," says Cahalin. Four weeks later, the 81-year old mother of five participated in a Girl Scout campout.

"I call it a miracle," says Cahalin. "It changed my life."

Cahalin's procedure, called transcatheter aortic valve implantation (TAVI), is experimental, and she received it as part of a clinical trial.

Results from the trial were published in the Sept. 22, 2010, issue of the *New England Journal of Medicine*. They showed that in patients with severe aortic stenosis who were not suitable candidates for surgery, Cahalin's procedure was superior to the standard therapy of medication and/or balloon valve valvuloplasty—markedly reducing symptoms, the rate of death from any cause including cardiovascular, and the rate of repeat hospitalization.

"The introduction of transcatheter valve replacement will go down as one of the innovative milestones in the history of cardiac surgery," says Ralph Damiano Jr., MD, co-leader of the study and chief of cardiac surgery at Washington University and Barnes-Jewish Hospital. "It has the potential to dramatically reduce the risk of valve replacement, particularly in elderly, high-risk patients. We have seen a much quicker return to full activity in our patients with much less



DISEASED VALVE



UNOBSTRUCTED VALVE

postoperative discomfort when compared to traditional open valve replacement through the breastbone."

"This is a monumental breakthrough for aortic stenosis patients who are considered inoperable," says study co-leader John Lasala MD, PhD, medical director of the cardiac catheterization laboratory at Barnes-Jewish Hospital.

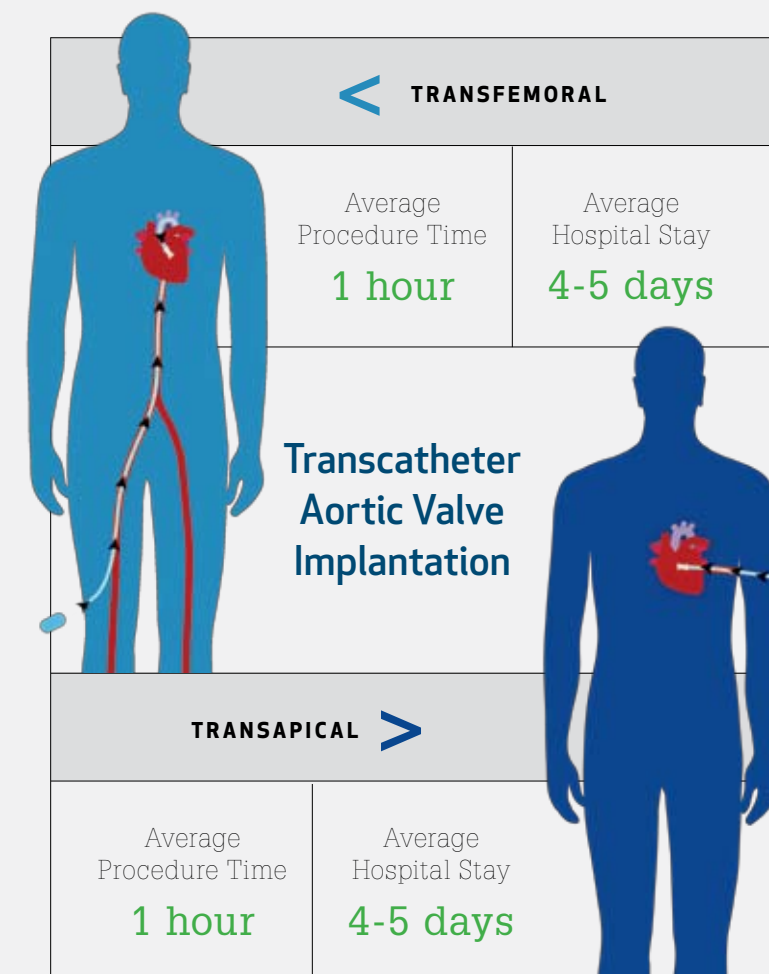
The approach requires the combined efforts of Damiano and fellow cardiac surgeon Hersh Maniar, MD, and interventional cardiologists Lasala and Alan Zajarias, MD—who perform the procedure together—as well as cardiologist Brian Lindman, MD, who performs echocardiographies to evaluate valve positioning.

## HOW IT'S DONE:

Transcatheter valve replacement is a minimally invasive procedure that uses a catheter to deliver and insert a uniquely engineered aortic valve. The proprietary, biomechanical heart valve consists of leaflets made of cow heart tissue sewn into a collapsible stainless steel stent. The stent is crimped to about 8 millimeters in diameter around a balloon at the end of a specially designed catheter.

Getting the valve to the heart may be accomplished in two ways. The first method, used in Cahalin's case, enters through the leg and is called the transfemoral approach.

The second method, the transapical approach, is being studied as a way to treat patients whose leg arteries are narrowed or twisted. The catheter is inserted between the ribs and then through the tip of the heart. Data from a separate study that uses this entry method will be released in 2011.





## WHEN HEART VALVES FAIL

Statistically, four percent of people over age 80 will suffer from calcific aortic stenosis, a condition in which the valve in the heart's left pumping chamber has stiffened and narrowed, making it difficult for the heart to pump blood through the body.

To compensate for its faulty valve, the heart starts working harder, contracting with more force just to produce the same output of blood.

In most cases it is a losing battle. As the aortic valve continues to calcify and narrow, the left ventricle loses its ability to compensate. The result for the heart is progressive damage to both upper and lower chambers. For the heart's owner the result is fatigue, shortness of breath, chest pain, and if the condition is not treated, eventual death.

Fortunately for most patients, aortic valves can be replaced with open-heart surgery with good outcomes.

**Around 70,000 valve replacement procedures were done in the United States last year.**

However, at least 30 percent of patients with severe symptomatic aortic stenosis do not undergo replacement surgery due to age or other risks. Non-invasive treatments such as transcatheter aortic valve implantation can offer a valuable alternative.

Although the transfemoral approach results in generally shorter recovery time and less post-procedure discomfort, the transapical procedure is an option for patients whose leg arteries are too narrow or twisted to accommodate the size of the catheter required to carry the valve.

With either approach, the team, including an interventional cardiologist and surgeon, guides the valve into position within the diseased aortic valve of the heart. Fluoroscopy makes progress and positioning clearly visible on monitors. Neither entry method requires stopping the heart.

When the new valve is positioned inside the calcified valve, the balloon expands to push the old valve aside and lock the new valve into place. The new valve, buttressed by the calcified flaps of the old valve, immediately takes over.

The first available study results concern only patients who participated in the transfemoral trial. In this study, patients deemed too frail to withstand open-heart surgery but were approved for transfemoral catheter delivery were randomly placed in either a control group that received standard treatment, or a group that underwent the transfemoral valve replacement procedure.

The rate of death from any cause at one year was over 20 percent lower in the group that underwent TAVI than the group that received optimal standard therapy. This was a highly significant difference and there was also a significant improvement in quality of life and fewer hospitalizations.

### THE TAVI TEAM



John Lasala, MD, PhD



Alan Zajarias, MD



Ralph Damiano Jr., MD



Hersh Maniar, MD

Randomized trials of both the femoral and transapical methods were completed in 2010, and the Food and Drug Administration has granted permission to offer the investigational procedure to selected patients with severe aortic stenosis who are not candidates for traditional open-heart valve replacement. Cardiologists and cardiac surgeons work together to assess the suitability of patients for the investigational procedure.

**With more than 50 TAVI procedures performed since 2008, Washington University surgeons and cardiologists have developed unique expertise in the procedure.**

“Roughly half of these transcatheter implantations have been done transfemorally and the rest transapically,” Lasala says. “It depends on what is best for the individual patient. The average patient age is 84, but we have done the procedure for patients up to age 98.”

@ For more information and a video, visit: <http://bjhne.ws/partner>

# Mystery Diagnosis



Photo by Robert Boston

### ADAM BREWER, 21

Mystery patient, Florissant, Mo.

#### THE SYMPTOMS

It should have been an episode of *House*. It was that strange. In September 2009 when I started feeling ill, my regular doctor just thought it was the flu. They did chest X-rays, blood work, CT scans; when tests came back with no answers, they did more tests. The doctors asked me everything and couldn't understand why I kept coming back.

#### THE DIAGNOSIS

By the time I went to Barnes-Jewish in February 2010, I was seeing a doctor nearly two days a week. Even on the first visit, the doctor was confident and comforting. He asked similar questions and redid tests, but then something must have clicked. They decided to do a new test for a parasite in crawfish. My mom didn't think it was a possibility until I remembered a float trip the previous summer. Uncles and older cousins had been eating raw crawfish for years, so I had tried a little bitty one to make the kids laugh.

#### THE CURE

For it to last that long and be cured by just 30 pills in a week is mind-blowing. I had given up. I didn't think it would work until I felt the change. And I will never again eat raw crawfish. I've learned my lesson the hard way.

Brewer's story is being featured on Discovery Health's Mystery Diagnosis. See local listings for more information.

### THOMAS BAILEY, MD

Washington University infectious disease specialist

#### THE SYMPTOMS

Paragonimus, a parasitic worm in raw crawfish, is the size of the tip of a pen when ingested. They usually travel from the intestine to the lungs and sometimes to the brain, where they can cause severe headaches and vision problems. Symptoms include fever, difficult breathing, chronic cough, extreme fatigue and chest and abdominal pain. The illness is curable but rare enough that physicians often overlook it. Symptoms, if left untreated, can persist for years, even decades.

#### THE DIAGNOSIS

A medication used to kill tapeworms did the trick. The story of this unusual case highlights the importance of getting a thorough medical history in order to arrive at an accurate diagnosis. You have to be a bit of a detective and remain open to all the clues. In this patient's case, the duration of his symptoms already defined him as having something unusual, if not rare.

#### THE CURE

Adam's case is just one of 13 ever recorded in the US. Sometimes people are just showing off, but it is a nutty thing to do. And crawfish pinch. If you're going to eat them, cook them first. They are better that way anyway.

@ To learn more about the diagnosis, visit: <http://bjhne.ws/crawfish>

## Nanotechnology to Treat Heart and Lungs

Nanoparticles are 1 billionth to 100 billionths of a meter in size. Scientists custom-engineer these tiny particles to deliver imaging agents or therapies, such as drugs, chemotherapies or genetic material to specific targets like tumors, a particular cell type or sites of inflammation.

An \$18 million research program headed by Washington University School of Medicine will research therapies and diagnostic tools that use nanotechnology to treat heart and lung diseases.

The award, from the National Heart, Lung, and Blood Institute of the National Institutes of Health (NIH),

will fund five years of research at Washington University and four collaborating institutions: Texas A&M University, University of Texas Southwestern Medical Center, and the Universities of California, Santa Barbara and Berkeley.

“Nanoparticles have several advantages over the small molecules typically used in imaging and therapeutics,” says radiochemist and co-principal investigator Michael Welch, PhD. “Not only can we load them with agents that deliver therapies to specific targets, we can include imaging agents that help us track both the nanoparticles and the therapeutic agent and change the surface of the particles to customize the amount of time they spend in the body.”

The new initiative includes four principal research projects, two of which are being conducted by

Washington University researchers. Steven Brody, MD, Washington University pulmonologist at Barnes-Jewish Hospital, and his team will use nanoparticles to diagnose and treat various forms of acute lung inflammation. The other group, led by Washington University radiologist Pamela Woodard, MD, will work to develop nanoparticles to help physicians detect early atherosclerosis—a condition in which artery walls thicken as the result of a build-up of fatty materials such as cholesterol.

A portion of the funds will support educational programs directed by Carolyn Anderson, PhD, a biochemist at Washington University. One goal of these programs, targeted to audiences ranging from fourth graders to postgraduate students, will be to stimulate interest in careers in medical nanotechnology development.

## NCI Grants Extend Comprehensive Cancer Care

Siteman Cancer Center at Barnes-Jewish Hospital and Washington University School of Medicine has received renewal of its designation as a Comprehensive Cancer Center by the National Cancer Institute (NCI).

**The designation recognizes Siteman’s clinical research, basic science, community outreach and education activities. The renewal includes \$23 million in research funding for the next five years.**

“NCI designation as a Comprehensive Cancer Center confers the highest recognition of our exceptional cancer-focused scientists, clinicians and staff throughout Washington University and Barnes-Jewish Hospital,” says Timothy Eberlein, MD, Siteman director. “Most importantly, we are translating our cutting-edge science into better treatments for the more than 40,000 cancer patients we see each year.”

Siteman also received a new \$4.27 million, five-year grant from the NCI that will enable Washington University researchers at Siteman’s Program for the Elimination of Cancer Disparities (PECaD) to extend their work to eliminate racial and economic gaps in cancer care.

Each day, 3,400 people in the United States are diagnosed with cancer and another 1,500 die from the disease. Minorities, the medically underserved, people with low income or education levels, and those who live in rural areas form a larger percentage of these totals than their proportions in the general population. The grant will enable the program to broaden its community-based outreach, research and training programs.

@ For more information, visit <http://bjhne.ws/sitemangrants>

AT A GLANCE

# Turning the Medical Environment into an Art Oasis

Calming. Relaxing. Rejuvenating. These are words not typically associated with visits to the hospital. But thanks to the Arts + Healthcare program—supported through gifts to the Barnes-Jewish Hospital Foundation—patients, caregivers, visitors and employees are having their spirits raised and their stresses eased.

Most recently, the program has collaborated with Deborah Parks, MD, to initiate the monthly performing arts event *Sundays at Siteman*.

All are welcome for this free event series at the atrium of the Center for Advanced Medicine for live music, refreshments and an opportunity to visit the Arts + Healthcare gallery. Arts + Healthcare fosters the institutional culture at the medical center, which includes the arts as an integral part of hope and healing.

Below: Washington University Department of Music vocalist Greg Storkan, accompanied by Sandra Geary, performed selections from *The King and I* in November.



Photo by Tim Parker

▶ To find out more about the BJH Foundation’s Arts + Healthcare program, and the Sundays at Siteman schedule, please visit <http://bjhne.ws/givingarts>



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## Bringing the News to You

To receive e-newsletters from Barnes-Jewish Hospital and the Siteman Cancer Center about the latest in medical news and **BREAKTHROUGHS**, visit our web site at [barnesjewish.org/newsletters](http://barnesjewish.org/newsletters). You can also join in the conversation through **Twitter** at [www.twitter.com/barnesjewish](http://www.twitter.com/barnesjewish), like Barnes-Jewish Hospital on **Facebook**, or visit our blog at [newsblog.barnesjewish.org](http://newsblog.barnesjewish.org).



## New Year, New Website

Resolve to stay healthy and prevent cancer by visiting the Siteman Cancer Center website. We've redesigned the site, adding more information for patients and the public. In addition to facts about over 90 types of cancer, searchable directories of physicians and clinical studies, and news about Siteman events and treatment advances, we've expanded our cancer prevention content with help from our nationally recognized experts in the field. Get advice on screening, weight control, diet, your risk for cancer and more at [www.siteman.wustl.edu](http://www.siteman.wustl.edu).



This publication in no way seeks to serve as a substitute for professional medical care. Consult your physician before undertaking any form of medical treatment or adopting any exercise program or dietary guidelines.