

A health and lifestyle publication from NorthShore University HealthSystem

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Empowered Decision

Patient comes from the Boston area for a risk-reducing, nipple-sparing mastectomy and reconstructive surgery by highly trained surgeons at NorthShore University HealthSystem. Welcome to the October/November issue of *Connections*, a bimonthly publication bringing you the latest in medical technology, research and patient care from NorthShore University HealthSystem (NorthShore). Each issue of *Connections* features several articles about how caring for patients at our three Hospitals—Evanston, Glenbrook and Highland Park—and at our physician offices contributes to serving our communities and supporting our overall mission "to preserve and improve human life."

While our mission remains a constant, several dynamic changes are occurring within our organization. The most readily apparent change is from our old name Evanston Northwestern Healthcare to our new name: NorthShore University HealthSystem. In deciding on a new name, we needed to consider several factors. Our new name needs to communicate who we are; where we are located; what we do; and also to be distinctive in a more cluttered marketplace. Let's look at the individual components of our new name and brand—and then pull it all together.

First, the core of our new name is "NorthShore." NorthShore not only signifies a geographic area—and a much broader terrain than "Evanston"—but also connotes prestige, quality and a favorable destination.

Second, we are moving from healthcare to "HealthSystem." Healthcare is a good name but is overused. Our organization is uniquely positioned in northern Illinois as a preeminent comprehensive integrated delivery system of caring.

Third, we needed to communicate our valuable differentiation and distinction by capitalizing on our position as an academic health system, and the name "University" is part of our new brand equation. It also refers to our new teaching affiliation with the University of Chicago Pritzker School of Medicine, which became effective in July 2008.

For the past 30 years, the Kellogg Cancer Care Center on our Evanston Hospital Campus has provided patients with access to nationally award-winning All of us at NorthShore University HealthSystem are delighted to have the opportunity to embrace changes that will enhance the service and quality of care for you—the patients and families we are so privileged to serve.



oncology specialists, knowledgeable clinical staff and leading-edge research. Construction is now under way so that by 2010, the new Kellogg Cancer Care Center will be twice as big and will provide even better care and services for our oncology patients.

To further expand our services within the community, we have announced a merger agreement with Skokie-based Rush North Shore Medical Center. Conditional upon obtaining final government approvals, the Rush North Shore campus will ultimately provide another location for you and your family to receive the same level of care you have come to know throughout the NorthShore system of Hospitals— Evanston, Glenbrook and Highland Park.

All of us at NorthShore University HealthSystem are delighted to have the opportunity to embrace changes that will enhance the service and quality of care for you—the patients and families we are so privileged to serve.

Best regards,

Mark R. Learnam

Mark R. Neaman President and CEO NorthShore University HealthSystem

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CONNECTIONS

is a publication of the Office of Corporate Communications, 1301 Central St., Evanston, III. 60201; PublicRelations@enh.org.

Publisher: Art Massa

Editor: Sara S. Patterson

Managing Editor: Patricia McGhee

Writers for this Issue: Sara S. Patterson, Martha Robbins and Susan White

Connections Editorial Advisory Board:

Ken Anderson, D.O., Chief Medical Quality Officer, NorthShore University HealthSystem (NorthShore)

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Design and Production Management the magazine group

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Unusual Discovery

A NorthShore-affiliated podiatrist and infectious disease physician work in tandem to diagnose a serious underlying disease for a patient born in India.

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A Beneficial Match

NorthShore University HealthSystem and University of Chicago Pritzker School of Medicine share a commitment to the highest level of patient care and medical research.

orthShore University HealthSystem (NorthShore) and the University of Chicago Pritzker School of Medicine signed an academic affiliation agreement effective July 14 that will place Pritzker medical students, residents and fellows at NorthShore Hospital locations for a portion of their educational experience.

The Pritzker School of Medicine is one of the most selective medical schools nationwide with a long tradition of close interaction between students and their mentors serving on the medical school faculty. This new teaching affiliation makes the NorthShore Hospital campuses the primary off-site learning environment for Pritzker students and residents.

"NorthShore University HealthSystem and the University of Chicago Pritzker School of Medicine will usher in a new generation of healthcare on the North Shore and beyond," said Mark R. Neaman, NorthShore President and CEO.

The advantages for the Pritzker School of Medicine are equally compelling. "The partnership takes our medical school, one with a top national reputation and highly ranked programs, and makes the educational experience that much stronger," said James L. Madara, M.D., Dean of the Biological Sciences Division and the Pritzker School of Medicine and CEO of the University of Chicago Medical Center (UCMC). "Both organizations have many "NorthShore University HealthSystem and the University of Chicago Pritzker School of Medicine will usher in a new generation of healthcare on the North Shore and beyond."



similarities across their missions of teaching and research. But we also have a variety of differences in our enterprise strategies that actually complement rather than compete with one another."

NorthShore is one of the most fully integrated, multihospital, research and primary care organizations serving the Chicago metropolitan area with an established reputation for advanced information technology and the highest quality of healthcare. As its complement, University of Chicago has a strong focus on complex care and biomedical science with many distinguished programs that draw patients nationwide.

The NorthShore-University of Chicago affiliation will create opportunities for collaborative research projects that take advantage of each institution's respective strengths, including the areas of clinical outcomes, clinical trials, oncology and imaging.

Diabetes Awareness

ovember is National Diabetes Awareness month, and NorthShore University HealthSystem (NorthShore) is hosting a free health fair from 9 a.m. to 1 p.m. Wednesday, Nov. 12, at the Park Center, 2400 Chestnut Ave., in Glenview.

Currently, 24 million Americans have diabetes, and statistics suggest that one of every three Americans born in the year 2000 will develop the disease. Diabetes educators, nurses and physicians at NorthShore are working to provide greater education and awareness in the community, offering information on prevention, treatment and managing diabetes. Area residents can learn more and have their personal risk assessed with free screenings at the health fair.

NorthShore endocrinologist Pauline Shipley, M.D., will present a lecture on diabetes and prevention from 10 to 11 a.m. Podiatrist



New Beginning Based on a Strong Legacy

Evanston Northwestern Healthcare is changing its name to NorthShore University HealthSystem. The name change will not adversely affect our organization's ability to deliver the quality of healthcare you and your family have come to expect from us.

hy are we changing our name to NorthShore University HealthSystem?

"Our new name more accurately reflects that we are an integrated health system delivering a broad array of healthcare services to patients residing across northern Cook and Lake counties," said Mark R. Neaman, President and CEO of NorthShore University HealthSystem. "It also recognizes our new academic affiliation with the University of Chicago Pritzker School of Medicine, which continues our long tradition as one of the nation's great teaching environments."

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More Than 100 Years of History

NorthShore University HealthSystem has evolved from Evanston Hospital, which was established in 1891. Since then the organization has extended its health system to include Glenbrook and Highland Park Hospitals.

Along the way, NorthShore University HealthSystem also created its Research Institute, which is in the top 9 percent of all institutions that receive funding from the National Institutes of Health and ranks ninth in the nation among multispecialty independent research hospitals; the multispecialty Medical Group, which now numbers more than 550 physicians at the three Hospitals and 75 medical offices; and the Foundation, which contributes toward advancing research and providing more healthcare resources to the community.

"We have a strong legacy of innovative, skilled and compassionate healthcare for the members of our community," Neaman said. "Our new name not only continues that tradition but also demonstrates that we have continued to grow in capability and become an even better health system. Our academic affiliation with the prestigious University of Chicago Pritzker School of Medicine provides tremendous opportunities to advance medical education and clinical research. And our mission remains constant—'to preserve and improve human life.'"

Paul L. Goodman, D.P.M., will be on site for foot care, and pharmacists, certified diabetes educators, dieticians and nurses will be available for individual discussions. Also, cardiologist Jeffrey Marogil, M.D., will be available to take blood pressure readings and answer questions. Experts from ophthalmology and integrative medicine also will participate in the interactive community event.

The National Kidney Foundation's kidney mobile will offer free

blood pressure and blood sugar readings as well as microalbumin urine testing and body fat analysis. "Offering these free kidney screenings with virtually immediate results is an exceptional service for a health fair," said Mary Bennett, R.D., L.D.N., C.D.E., Diabetes Education Manager at NorthShore University HealthSystem.

The event is open to the public. For more information, please call Bennett at (847) 492-5700 (Ext. 1277).

Building the Best in Oncology Care

or some 30 years, the Kellogg Cancer Care Center at Evanston Hospital has given its patients access to preeminent oncology specialists, skilled clinical staff and leading-edge research. But soon, a new, larger Center will provide even better care and services for its patients.

The demolition of the older facility and construction of the new Kellogg Cancer Care Center began this fall and is expected to be completed in 2010. The new facility, which is twice the size of the former Center, will allow NorthShore University HealthSystem to provide state-of-the-art cancer services from prevention to detection to survivorship. This will help to accommodate the needs of the 8 percent more cancer patients expected in the communities Evanston Hospital serves.

"We are creating a more comfortable environment to support our patients and enhance their care," said Ray Grady, President of Hospitals and Clinics. "Many of these enhancements came directly from our patients and will make for a better experience. We are also creating an environment where our staff can do their best at what most fulfills and rewards them—taking care of patients and families.

"The Kellogg Cancer Care Center has always been known for detection and prevention of cancer. In the last few years, we have added support mechanisms for survivors that offer a full continuum of care such as the Living in the Future (LIFE) program—one of the first survivorship programs in the nation."

Designed with input from the NorthShore University HealthSystem Oncology Patient Advisory Board, the building focuses on patients' needs—to make their experience more comfortable while respecting their privacy and dignity. The new clinic space is structured around multidisciplinary pods, which provide staff with easier access to their patients. This configuration allows patients to see their care team in one visit.



"We are creating a more comfortable environment to support our patients and enhance their care. Many of these enhancements came directly from our patients and will make for a better experience."

In addition, the new building conforms to the Leadership in Energy and Environmental Design (LEED) Green Building Rating System. Developed by the U.S. Green Building Council, LEED provides a suite of standards for environmentally sustainable construction, such as energy-efficient mechanical systems; daylight throughout a central atrium and within each treatment room; interior finishes with low-emitting materials and a green roof that minimizes heat; and storm water flows.

Many Advisory Board recommendations may seem like minor improvements, but they provide more comfort to patients under stressful circumstances, according to Barbara Wick, Chair of the Oncology Patient Advisory Board. "For example, we asked for sturdy, comfortable chairs, improved design, and more natural light and greenery in the treatment rooms," she said. "The architects listened carefully and incorporated our suggestions."

For more information about the Kellogg Cancer Care Center, call (847) 492-5700 (Ext. 1278). ■

Expected Merger

NorthShore University HealthSystem and Rush North Shore Medical Center recently entered into a definitive merger agreement as part of our continued efforts to provide the finest healthcare to a growing number of patients in our communities.

The agreement is conditional on obtaining final government approvals, which is expected to be completed by Jan. 1, 2009. Once those approvals are in place, Rush North Shore Medical Center in Skokie will become part of NorthShore University HealthSystem (NorthShore) and will provide another location for area patients and their families to receive the same level of care they've come to know and expect at Evanston, Glenbrook and Highland Park Hospital campuses.

Our system of healthcare ensures that our patients have access to the best care in locations most convenient for them.

NorthShore's service reaches south to Chicago's northern neighborhoods, as far north as the Wisconsin border and west of Interstate 94.



"This merger is a logical step in our system's longstanding commitment to growth and patient loyalty," said Mark R. Neaman, NorthShore University HealthSystem President and CEO. "We look forward with much anticipation to the day in the very near future when we can announce Rush North Shore Medical Center has fully joined the NorthShore University HealthSystem family."

A 265-bed acute care hospital in Skokie, Rush North Shore is currently affiliated with Rush University Medical Center. The hospital is recognized for many areas of expertise including orthopaedics, cardiac care and women's health.

"This is a momentous step forward for our hospital. The merger will provide enormous

benefits to the patients and families we serve for generations to come," said James T. Frankenbach, President of Rush North Shore Medical Center.

NorthShore University HealthSystem Health Radio

ealth Radio is a regularly scheduled online radio broadcast to bring listeners up-to-date health information from experts at NorthShore University HealthSystem (NorthShore). Join us as Health Radio Host, Melanie Cole, M.S., goes one-on-one with physicians, researchers and other NorthShore professionals and patients to answer your questions about important health issues.

Tune in at www.northshore.org by clicking the microphone at the bottom of the page or go directly to www.northshore. org/aboutus/press/radio. You can ask guests questions either by calling (877) 711-5611 or sending an e-mail to melanie@health radio.net to join the discussion. Here are the programs from mid-October through November*:

Date and Time: Oct. 15; 1 to 2 p.m. Topics: Prevention of Breast Cancer, Therapies to Help Alleviate the Side Effects of Treatment and Living in the Future (LIFE) Cancer Survivorship Program

Guests: Leslie Mendoza Temple, M.D., and Helen Hackett, a patient

- Date and Time: Oct. 29; 1 to 2 p.m.
 Topics: Genetics of Breast Cancer and Risk-Reducing Surgery
 Guest: Wendy Rubinstein, M.D., Ph.D., and David J. Winchester, M.D.
- Date and Time: Nov. 4; 1 to 2 p.m.
 Topic: Lung Cancer
 Guest: John Howington, M.D.
- Date and Time: Nov. 19; 1 to 2 p.m.
 Topics: Eye Surgery and Helpful Eating Tips for Diabetics During the Holidays
 Guests: Marian Macsai, M.D., and Lisa Abrams, M.D.

If you miss a live program, all of our shows are archived and can be downloaded for free by clicking on "Podcast" at www.northshore.org.

* Physician appearance may be subject to change due to patient care.

Hailing from Hingham, Mass., Robin Dellot had to persuade her insurance company to allow her to come to NorthShore for a type of bilateral mastectomy not being performed in the Boston metropolitan area.

는

PATIENT COMES FROM THE BOSTON AREA FOR A RISK-REDUCING, NIPPLE-SPARING MASTECTOMY

EMPOWERED DECUSION AND RECONSTRUCTIVE SURGERY BY HIGHLY TRAINED SURGEONS AT NORTHSHORE UNIVERSITY Robin Dellot does not have breast or ovarian cancer. But she does have an 80-percent lifetime risk of getting breast cancer and a 30-percent chance of having ovarian cancer. A DNA test in 2007 revealed that she inherited the BRCA2 gene from her mother who survived stage I ovarian cancer.

Dellot's dilemma was to undergo preventive surgery, focus on preventive screenings or rely on fate that she would be one of the lucky few who never develop breast or ovarian cancer.

But her family history weighed on her decision. In addition to her mother and herself, two of her sisters tested positive for the BRCA2 gene. One of her aunts and a first cousin died young—in their 40s and 30s, respectively, from breast cancer.

"I talked to my gynecologist and she said, 'You have three daughters.' I thought about them and realized I have to be proactive about my healthcare," said Dellot, 41, the mother of three and a pre-kindergarten teacher from Hingham, Mass. "At the same time, I wanted to know that I would have the best possible outcome with the least impact to my life from a double mastectomy."

Best Outcome

Dellot started researching her options. A friend's husband had recommended a story in *The New York Times* about Deborah Lindner, 33, who had the same choice to continue rigorous screening for breast cancer for the rest of her life or have a double mastectomy to reduce her risk by 90 percent. A former medical resident at NorthShore University HealthSystem (NorthShore), Lindner decided to have the nipple-sparing technique and reconstructive surgery performed simultaneously by a team of surgeons at Evanston Hospital spearheaded by David J. Winchester, M.D.

After discussing this option with Dr. Winchester and Lindner, Dellot decided the less-invasive procedure combined with surgical reconstruction would be her best choice. But surgeons at her local hospital— Massachusetts General—were not performing the nipple-sparing mastectomy but



instead the total mastectomy, which removes all tissue and the nipple and areola (the pigmented area around the nipple).

Currently, most surgeons in the United States opt for the total mastectomy instead of the subcutaneous mastectomy. Although there are no direct comparisons of long-term outcomes for these two operations, the risk reduction is substantial—in excess of 90 percent and similar for both approaches, according to Dr. Winchester.

"I was blessed to find these surgeons doing this procedure in the Midwest," Dellot said.

To have Dr. Winchester perform the surgery, Dellot needed permission from her health insurance company, Harvard Pilgrim. Her fourth appeal with the insurer was her last chance.

"I found out an hour before my final appeal that an independent physician did not recommend the nipple-sparing mastectomy based on four research articles," Dellot said. "I Googled the articles and read their conclusions, and each one was positive for this surgical procedure."

On the conference call for the fourth appeal, she told the assembled group of doctors and a Harvard Pilgrim case manager of her findings from the conclusions. After a few moments of silence and a couple more questions, the group said she would know their decision within one week. Twenty minutes later, the case manager told Dellot that she had won and that this decision "made her weekend."

Successful Procedure

Thrilled by the blessing from her health insurer, Dellot scheduled her procedure—for a bilateral mastectomy and reconstructive surgery—for May 23 with Dr. Winchester and his team at Evanston Hospital.

"Robin had the perseverance to make this happen under her terms," said Dr. Winchester, Chief of Surgical Oncology and Co-Director of the Patricia G. Nolan Center for Breast Health at Glenbrook Hospital. "She was very motivated to protect her longevity. In the last few years, I've seen a change in many of our patients who are doing their own research, asking intelligent questions of the experts and coming to their own conclusions about what they want to do."

During the seven-and-a-half-hour surgery, Dr. Winchester performed his part first to remove the breast tissue but preserve the nipple and areola. He made a series of small incisions under each of Dellot's breasts and removed the breast tissue from the overlying skin and underlying muscle to perform the bilateral mastectomy.

Next, the plastic surgeon restored the original contour to her breasts through silicone implants. "My surgery went well," Dellot said. "I wouldn't have done this surgery without Dr. Winchester and his team. They were vested in me, spent hours discussing this decision with me and gave me the best treatment—surgically and compassionately—that I could find. They were a huge catalyst for me to do this preventive surgery."

Road to Recovery

Dellot stayed at Evanston Hospital for four days and then her husband joined her for another two weeks in Lake Geneva, Wis., while friends and one of her sisters nursed her back to health. Dellot needed to be close enough to return for postsurgery office visits and gain enough strength to fly back to Boston.

"The nurses, patient care technicians and food service staff were all stellar," Dellot said. "I was also thrilled to have a private room."

She experienced a common side effect of the surgery—post-surgical ischemia and skin loss, which occurs when there is not enough blood reaching the tissue. To increase the blood flow to heal a dime-sized black spot, the surgeons recommended Dellot use a nitropaste, and her tissue fully recovered in about three weeks.

During her journey to recovery, she is getting physical therapy and massage. Dellot has retained some fluid on one side of her chest, but that will heal.

Minor complications aside, she has no regrets about her decision to severely lessen her risk of getting breast cancer. "If

PREVENTIVE DILEMMA: INHERITING A BRCA1 OR BRCA2 MUTATION

BRCA1 and BRCA2 are alterations in certain genes that make those women who have inherited them much more likely to develop breast or ovarian cancer.

Annually, more than 192,000 women in the United States are diagnosed with breast cancer. About 5 to 10 percent of these women have a hereditary form of the disease through the BRCA1 or BRCA2 mutation that make them more susceptible to developing breast or ovarian cancer.¹

The high risk for developing breast or ovarian cancer is most likely in families with a history of multiple cases of breast cancer or cases of both breast and ovarian cancer, or an Ashkenazi (Eastern European) Jewish background.² A woman with this background has a 50-percent chance of inheriting the alteration of the gene from a parent—either her father or mother.

Previous generations of younger women did not know this mutation existed. But advances in genetic research have changed what women can find out if they have a family history and are worried about their risk of inheriting one of these mutations.

Additionally, access to genetic testing is changing the patient population for bilateral mastectomies at NorthShore University HealthSystem. For example, two years ago the majority of patients later determined to be carriers of a BRCA mutation were newly diagnosed with breast cancer. This statistic has quickly shifted. Today the majority of carriers are coming to electively explore the option of risk-reducing surgery, according to David J. Winchester, M.D., Co-Director of the Patricia G. Nolan Center for Breast Health at Glenbrook Hospital.

"It's a remarkable turnaround in my patient practice," Dr. Winchester said. "These women who have discovered they have BRCA1 or BRCA2 mutations want to prevent breast cancer from occurring. Every year with carrier status is an unpredictable event, especially since ovarian or breast cancer is more likely to develop before menopause for many of these patients."

For more information about genetic testing at NorthShore University HealthSystem, call (847) 492-5700 (Ext. 1279).

¹ "Genetic Testing for BRCA1 and BRCA2: It's Your Choice," National Cancer Institute at www.cancer.gov/cancertopics/factsheet/risk/brca.
² Ibid.

I got cancer, I would have no one to blame but myself," Dellot said. "It's a huge decision, but if you have an opportunity to avoid it [cancer], you should take it.

"I'm a big advocate for the option of the nipple-sparing mastectomy to be available to all women. They should know it exists. I think it softens the blow of having a double mastectomy."

Now Dellot is secure in knowing her risk of developing breast cancer has gone from high to low. She can focus on being a wife, mother and teacher again. ■

Unusual

A NorthShore University HealthSystem podiatrist and infectious disease physician work in tandem to diagnose a serious underlying disease for a patient born in India.

Discovery

nitially, Muralikrishna Harirao thought he had sprained his left ankle. It started swelling, and a few days later he developed a fever. A native of India, the then 24-year-old computer programmer didn't know any doctors in the Chicago area. But Harirao knew something was seriously wrong with his foot, so he consulted a neighborhood podiatrist.

The foot and ankle specialist gave Harirao antibiotics for 10 days, ordered an MRI of the foot and took a biopsy sample from the fourth metatarsal bone of the foot for lab analysis. But the MRI and biopsy results revealed nothing unusual.

Three weeks later instead of improving, Harirao's pain was worse. "I could not walk on my left foot," he said. "The bandages covering my surgical wound had pus, showing it was infected. One of my friends recommended that I see Dr. Weisman. The decision to see this doctor changed the course of my health and my life."

NorthShore University HealthSystem (NorthShore)-affiliated podiatrist Michael Weisman, D.P.M., realized Harirao's problem was systemic, or affecting his entire body. After performing a thorough clinical examination, he ordered an X-ray and MRI, and scheduled surgery for his patient. In addition, Dr. Weisman consulted Francis Cook, M.D., of the Infectious Disease Department at NorthShore's Glenbrook Hospital.

Suspecting that Harirao could have tuberculosis (TB), Dr. Cook used the acid-fast bacillus (AFB) test, which examines three samples of a patient's saliva collected over three different days. Harirao tested positive for TB.

Harrowing Disease

Due to an extensive vaccination program in the United States, TB is not common here.



Dr. Michael Weisman worked in tandem with a team of NorthShore University HealthSystem physicians to diagnose a serious underlying disease for a patient born in India.

But annually the disease kills nearly two million people worldwide and infects nearly one-third of the world's population. If left untreated, TB can be fatal.

While Harirao's symptom of TB in the bone of his left foot was uncommon, the disease can target almost any part of the body, including bones, joints, urinary tract, central nervous system and lymphatic system.¹ For many years Harirao had TB—probably contracting it when he was a child—but it was inactive. He showed no symptoms until the bone infection on his left foot.

"I did not expect this diagnosis," Harirao said. "I don't smoke, and a lung X-ray was clean. No one in my family had TB, so I cannot blame it on my parents." Harirao needed several treatments—one to heal the infection in his foot, another for his lymph nodes and a third to kill the TB bacteria throughout his body. To treat the lesion on the fourth metatarsal bone of his left foot, Dr. Weisman performed a surgical incision to drain and debride—or remove dead, damaged and infected tissue, which improved the healing potential of the healthy bone tissue.

To destroy the TB, Dr. Cook prescribed a strict regimen of 12 antibiotic pills a day over nine months for Harirao. The bacteria in TB grow slowly, so treatment is lengthy and must be followed precisely. Because TB medication can be highly toxic, Dr. Cook checked Harirao's liver and overall health every month during treatment.

Smooth Sailing

Nine months after Harirao was initially diagnosed with TB, he was cured. "The outcome for advanced tuberculosis is not always this positive," said Dr. Weisman, who serves as the Head of Podiatry at NorthShore. "But Muralikrishna was young and otherwise healthy. In addition, he followed the regimen to the letter. I commend Dr. Cook for being so proactive and recommending the AFB test. Muralikrishna's case is a great example of teamwork among multidisciplinary physicians to restore this young man's health."

As for Harirao, after his TB was eradicated, he accepted a job offer in Los Angeles. He works out regularly and no longer experiences any pain in his left foot.

"I am 100-percent cured of TB," Harirao said. "I thank Dr. Weisman and Dr. Cook for saving my life. Everything went smoothly for me after I met Dr. Weisman."

¹ "Tuberculosis," MayoClinic.com Tools for a Better Life at www.mayoclinic.com/print/tuberculosis/ DS00372/METHOD=print&DSECTION=all

Mission Accomplished

A NorthShore University HealthSystem orthopaedic surgeon replaces a patient's hip joint, allowing him to resume his international research and travels.

n internationally known scholar in electromagnetic sciences and space imaging technology whose latest work is directed at habitat discovery and prevention of natural disasters, Wolfgang-Martin Boerner, Ph.D., travels around the world nearly constantly.

From field work research expeditions to meetings and presentations at international conferences, Dr. Boerner easily logs 150,000 air miles a year.

For the last several years Dr. Boerner kept up his demanding travel schedule despite an increasing amount of pain in his left hip, knee, entire leg and spine. Finally toward the end of 2007, he thought he would have to give in and scale way back as the pain became too debilitating.

At 70, Dr. Boerner was—and is—in no way ready to scale back his work, his intellectual pursuits, his research or his travel.

Thanks to successful total joint hip replacement by NorthShore University HealthSystem (NorthShore) orthopaedic surgeon Rima Nasser, M.D., Dr. Boerner is now pain-free and back to his busy schedule of choice.

Dr. Boerner said he feels healthier than he has in 20-plus years and has been pain-free since the surgery. While he shares eloquent praise for his entire team of caregivers—from physical therapists and nurses to Glenbrook Hospital's radiologists—Dr. Boerner reserves especially high acclaim for Dr. Nasser.

"My integral and fullest thanks are extended to Dr. Rima Nasser, whom I learned to admire more for her fine character and her sensitive approach of listening, for her well-focused advice and



After Dr. Rima Nasser successfully performed total joint hip replacement for Dr. Wolfgang-Martin Boerner, he was able to return to his international schedule of presentations and research expeditions.

for what she was able to achieve for me with an excellent, perfectly executed surgery," Dr. Boerner wrote.

It was NorthShore physical therapist Kellie Cunningham who first suspected that the real root of Dr. Boerner's growing pain was advanced arthritis in his hip joint—an idea also supported by Joseph Alleva, M.D., a physical medicine/ rehabilitation specialist. An MRI and consultation with Dr. Nasser confirmed Cunningham's belief, and Dr. Boerner wasted no time asking Dr. Nasser for her first surgical opening.

From the moment he was scheduled

for surgery, Dr. Boerner had every confidence the procedure would go smoothly.

"He never had a single second of doubt that something would go wrong," said his wife, Eileen, who added she was grateful for the thorough patient education before the procedure.

The severity of Dr. Boerner's arthritis caused multiple bone spurs that Dr. Nasser had to literally chisel away in surgery before placing the metal cup and stem to replace the damaged joint. It is exceedingly important to really clean the surface to prevent possible dislocation of the replacement hip, Dr. Nasser explained.

She described Dr. Boerner as an ideal patient, obviously paying attention to every detail of pre-surgery instructions and, most important, following a thorough rehab program, which Dr. Nasser said is an integral part of a quick recovery. Dr. Boerner now has a dedicated regime of exercising about an hour a day

and walking one to two and a half miles a day, whether at home in Northbrook or in whatever city his travels take him to.

The ability to make a real and virtually immediate difference in a patient's life and return the individual to an active lifestyle is one of the things Dr. Nasser enjoys most about her work, she said.

"With the wear rate of these new hips, hopefully Dr. Boerner's will last him 20 to 30 more active years," she said.

For more information about orthopaedic surgery at NorthShore University HealthSystem, call (847) 492-5700 (Ext. 1280).

Ensuring Genetic Privacy

The recently passed legislation called the Genetic Information Nondiscrimination Act protects individuals in the United States from the inappropriate use of their genetic information by health insurers and employers.

endy S. Rubinstein, M.D., Ph.D., FACMG, FACP, is a nationally recognized specialist in medical genetics who investigates how genetic information can be used to improve patient care.

As Medical Director of the NorthShore University HealthSystem (NorthShore) Center for Medical Genetics, Dr. Rubinstein is using the newest molecular methods to understand how inherited disorders cause illness and helping patients and families to understand-and manage-their risk for disease. In working closely with many patients who have a family history of cancer, she has a unique perspective on the recent federal passage of the Genetic Information Nondiscrimination Act (GINA).

Question: What is the significance of GINA as civil rights-style legislation in preventing job and health insurance discrimination for those who test positive for certain genes?

Answer: GINA will have a large impact on those who may be at risk of inheriting genes that predispose them to certain diseases such as cancer, heart disease, diabetes, neurologic illness and many other conditions. More people in the United States will have confidence in seeking information about their risk and undergoing genetic testing.

orand/NorthShore University HealthSyster

Jonathan Hillen

I hope this will lead to more opportunities to treat diseases during earlier stages or prevent certain diseases altogether. Everyone has a genetic predisposition to some type of illness, but we are at a stage where genetic testing is available only for certain conditions. GINA will even out the playing field as more tests

Q: How will the federal enactment of **GINA** reinforce the legislation against

employment and insurance discrimination that 40 U.S. states have enacted?

A: If people are not covered under the Health Insurance Portability and Accountability Act (HIPAA) or are under a small group insurance plan or live in a state with limited protections, GINA protects their rights. If persons are discriminated against, they can seek redress-for example, file a lawsuit through government groups. I think the biggest impact, though, will be to deter actual discrimination from occurring.

GINA also defines genetic information more broadly than many states' legislation. It covers not only genetic tests but includes generational family histories, which are more far-reaching (e.g., a condition in a relative as distant as your first cousin's child). If a woman has a mother with breast cancer, this is considered to be protected genetic information and may not be considered a pre-existing condition by an insurance company.

Q: How will it protect consumers who undergo genetic testing compared to before GINA was passed?

A: This is breakthrough legislation. Now people can be more assured that their genetic information may not be used in hiring or firing decisions. Additionally, employers may not require an employee or job applicant to take a genetic test.

The passage of GINA may enable more people to feel at ease about becoming involved in clinical trials studying genetic predisposition. People need the reassurance this legislation offers to feel comfortable about participating in research studies.

Q: How does GINA benefit the patients at the NorthShore Center for Medical **Genetics**?

A: Over time, people will become more confident that federal legislation such as GINA and HIPAA and state laws protect



Dr. Wendy Rubinstein is a nationally recognized specialist in medical genetics who investigates how genetic information can be used to improve the care of patients.

their livelihoods. For the medical and genetic community, it was very gratifying to see GINA signed into law. All of us need and depend on health insurance.

For example, patients with a family history of cancer who choose to arm themselves with genetic information are often able to get a much earlier cancer diagnosis than they would have otherwise, which leads to better survival. With advance warning about genetic risks, cancer can also be prevented altogether, and we've seen this happen many times.

What is important now is that people can seek this information without risking loss of their health insurance or job. In the end, genetic testing can save lives. That's what really matters.

For more information about genetic testing at NorthShore University HealthSystem, call (847) 492-5700 (Ext. 1281).



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Groundbreaking Research

Through the use of gene therapy, a NorthShore University HealthSystem researcher is developing cancer-killing viruses with the potential to save the lives of advanced-stage breast and prostate cancer patients with bone metastasis.

rem Seth, Ph.D., had the leap of imagination that has led to a groundbreaking research study at the NorthShore University HealthSystem Research Institute. While studying the biology of adenovirus during his postdoctoral research, he realized that cancer-killing genes could be added to a virus for delivery inside cells to cure tumors. In simple terms, the virus would enter the cell to destroy the cancer from the inside out.

Several years later, Dr. Seth and his team of researchers at the NorthShore University HealthSystem Research Institute have developed the viral therapeutic approach to destroy the primary tumor and inhibit bone metastasis. By attacking the protein in blood, these viral vectors block the tumor activity that feeds cancer growth.

"Through this research study, we are developing a viral therapeutic treatment for destroying the primary tumor and simultaneously inhibiting the bone metastasis associated with breast and prostate cancer," said Dr. Seth, who is an international expert in viral technologies and the Director of Gene Therapy in NorthShore's Department of Medicine. "Currently, these patients have very little hope for recovery."

In the first step of his research study, Dr. Seth grew breast and prostate cancer cells in the laboratory and tested the gene therapy method added to the virus. He then injected the virus into the cancer cells to see if it would attack and kill the protein in blood.

Once those experiments were successful, Dr. Seth moved to step two-experimenting and testing more cell cultures. And now he's embarked on step threegrowing tumors in mice at the bone metastasis site and then using intravenous injections for the cancer-killing virus.



Dr. Prem Seth is developing cancer-killing viruses that may save the lives of breast and prostate cancer patients with bone metastasis.

For advanced breast cancer that has metastasized to the bone, Dr. Seth has inhibited its growth in 80 percent of the mice. For advanced prostate cancer, the researchers just began step three in August, so their results will be available in another two to three years.

In the United States, cancer is the second leading cause of death-exceeded only by heart disease and accounting for one in every four deaths, or 565,650 individuals annually. More than 1.4 million new cancer cases are expected to be diagnosed in 2008.1 Breast cancer for women and prostate cancer for men have a startling similar number of new diagnoses each year-184,450 and 186,320, respectively. But breast cancer patients still have a higher mortality rate—40,930

compared to prostate cancer patients at 28,660 each year.²

"I expect to initiate clinical trials for advanced breast and prostate cancer patients in the next three to five years, which is very exciting," Dr. Seth said. "Currently, many metastases cannot be inhibited with regular cancer treatments such as chemotherapy and radiation. To discover something new that works for these patients could save many lives every year. More important, this treatment could ultimately be applied to patients with metastasis from other forms of cancer such as ovarian, colon and lung."

¹ "Cancer Facts & Figures 2008," American Cancer Society, p. 1. ² Ibid., pp. 2 and 4.



Goal Oriented

NorthShore University HealthSystem Foundation reaches a historic \$150 million campaign goal.

orthShore University HealthSystem (NorthShore) Foundation, the primary philanthropic entity of the integrated multiple-hospital healthcare delivery system, reached its \$150 million fundraising goal well ahead of schedule earlier this year.

"Five years ago, NorthShore University HealthSystem embarked on the largest fundraising Campaign in its history, with an original goal of \$100 million," said Mark R. Neaman, President and CEO at NorthShore. "We reached that goal ahead of schedule and set our sights on a higher goal—raising \$150 million by 2008."

Through generous gifts to the Campaign, thousands of patients have benefited from major renovation and construction projects at Evanston, Glenbrook and Highland Park Hospitals; significant investments in clinical

Examples of the Campaign's impacts include:

- The Charles R. Walgreen, Jr., Building
- The William B. Graham Medical Office Building
- The Ambulatory Care Center, Highland Park Hospital
- The Center for Inflammatory Bowel Disease, Evanston Hospital
- The Patricia G. Nolan Center for Breast Health, Glenbrook Hospital
- H. Earl and Miriam U. Hoover Intensive Care Unit, Highland Park Hospital
- Simms Family GI Lab, Glenbrook Hospital
- Endowed Chairs in areas as diverse as cardiothoracic surgery, breast cancer research, neuroscience research, radiology, anesthesiology, outcomes research, prostate cancer and perinatal research

programs and new technologies; and the benefits of clinical research funded in part by philanthropy.



The Foundation reached its goal of \$150 million in fundraising

"This historic fundraising success has resulted in 10 new facilities, 14 endowed chairs, 15 special research funds and more than 50 new programs to advance medical care toward new cures and treatments," said Colleen D. Mitchell, NorthShore Foundation President. "We could not have accomplished these results without the tremendous leadership and support of our grateful patients and families, physicians, Board members, volunteers, administrators, corporations and foundations. Every day they make a difference in the lives of the patients we serve."

The Foundation raises philanthropic resources to support NorthShore's delivery of clinical care, medical education, innovative research and charity care. With the Campaign's close, the Foundation will continue to pursue the power of philanthropy, partnering with friends to raise much-needed funds critical to finding new treatments and discoveries. The conclusion of this Campaign also marks the continuation of the Foundation's remarkable, donordriven "Culture of Philanthropy."



Photo by Jonathan Hillenbrand/NorthShore University HealthSystem

Altruistic Behavior

NorthShore University HealthSystem employees have a longstanding tradition of community service.

ountless local and international charitable organizations benefit from the generosity and hard work of our employee volunteers. In recognition of those who give so much to improve the lives of others, the Community Relations Department created the Sharing Spirit Employee Volunteer Awards. For the second consecutive year, the organization presented awards to 10 stellar volunteers who give to their volunteer organization.

"I really believe if every person could take a little of their time and give back, the world would be a better place," said Matoula Mikos, who works for the Center on Outcomes, Research and Education (CORE) at NorthShore University HealthSystem (NorthShore). She was recognized for her years of passionate dedication to the United Church of Rogers Park soup kitchen.

A culinary school graduate, Mikos does more than just cook dinner for 80 to 150 people twice a month. Working with donated food pantry supplies can be a challenge, but she creates delicious and healthy meals, supplementing the donated goods with herbs from her own garden, fine olive oil or wine for a sauce. "I never come in and just open the cans," Mikos said.

Awardee Donna Hacek, an Evanston Hospital clinical microbiology employee, had a yearning to help AIDS orphans in Africa. "For a while I just sent money, and then I thought, 'I need to send myself,'" she explained. Hacek has now made five trips to Uganda, volunteering with the Juna Amagara Ministries orphanage. This year's two-week trip was different from her





NorthShore University HealthSystem employees are committed to helping the communities they serve. Glenbrook Hospital employees and members of the NorthShore University HealthSystem Associate Board recently helped Rebuilding Together rehab a Glenview home. Rebuilding Together is a national organization dedicated to preserving affordable housing by bringing volunteers and communities together to rehabilitate the homes of low-income homeowners. The Glenbrook Hospital Community Relations Department sponsors one home a year with a financial contribution in addition to volunteer labor.

previous journeys as Hacek led the group's first medical mission.

Hacek was joined by fellow employee volunteers Kamal Singh, M.D., and Suzanne Paule, a colleague from the microbiology lab, who used their own vacation time for the trip. They traveled with nine bins of donated items to stock the clinic with medicine and equipment for a basic testing lab. More than 400 people were treated at the clinic during the team's five very-full days of service.

Hacek plans to return next year hopefully with physicians and other medical professionals willing to donate their time. Africa was ironically the "last place on the face of the earth I ever wanted to go because of all the infectious diseases," Hacek said. She believes her dedication to the Ugandan children is an inspiration from God. "He put the desire in my heart to minister to AIDS orphans in Africa."

The following employees also received the Sharing Spirit Award: Magdalena Espino, who volunteers at Iglesia Bautista North Shore; Wendy Gabry, who volunteers with Habitat for Humanity; Barbara Krause, who volunteers with the American Cancer Society, Public Action to Deliver Shelter (PADS) HealthReach, 4-H and Hurricane Katrina Relief; Tia Morrell, RN, who volunteers with Volunteer Kenya; Peggy Ochoa, who volunteers with Global Health Outreach; Laura Snipes, who volunteers with Northwest Center Against Sexual Assault (CASA); Deborah Taber, Jere Simon, RN, and Barbara Boland, who volunteer with Housing Options; and Alan Wadleigh, who volunteered with Troop 9, Wilmette Boy Scouts of America.

"Award or no award, it's really vital to our communities to help in some way," Mikos said. "Everybody has a skill—and it may be something they take for granted but it can be used to help other people."

Heart Attack Prevention

Patrick Logan, M.D., NorthShore University HealthSystem-Affiliated Internal Medicine Physician

oronary heart disease is the single leading cause of death in America. According to the American Heart Association, there are approximately 1.2 million new and recurrent coronary attacks per year, many of which could be prevented with a heart-healthy lifestyle. NorthShore University HealthSystem-Affiliated Physician Patrick Logan, M.D., educates patients on the importance of understanding and mitigating their personal risk factors.

Question: What are the most significant risk factors for heart attack?

Answer: The highest risks include being male, high cholesterol, diabetes, smoking, high blood pressure, obesity, strong family history and being post-menopausal for women. If my patients have risk factors, we need to work together to modify them.

Q: What are some of the most important steps to modify individual risk factors?

A: I advise my patients to take one regular aspirin a day to help prevent clotting. If they have high-blood pressure, we first try and treat it through diet, exercise and weight reduction. If that doesn't work, we will use medications.

I want my patients to exercise regularly—four or five days a week. That can be as simple as taking a daily 20- or 30-minute walk at a brisk enough pace to elevate their heart rate. I also advise patients to build exercise into their daily activity like riding a bicycle to do errands or taking the stairs instead of the elevator.

I will suggest a dietary intervention for patients who are not at their ideal body weight, have diabetes or high cholesterol. There are some excellent resources available on the Internet with good healthy eating plans through the Duke University Diet, the American Heart Association and the American Diabetic Association.



Q: How do you further assess individual patient risk?

A: It is possible for individuals to have no apparent risk factors, yet have heart disease. After a thorough evaluation of patients' history and potential risk, I send patients for a noninvasive heart scan that detects plaque buildup in coronary arteries. The obvious, visual representation of one's own heart disease and impending risk of heart attack can be a very powerful motivator for healthy lifestyle changes. While stress tests are more commonly ordered, they are often not accurate predictors of heart attack risk.

Q: How important is patient education in heart attack prevention?

A: It is essential for people to understand what the symptoms of heart attack are and to act upon them.

Discomfort that can signal a heart attack generally comes on with exertion and goes away with rest; a heart attack generally doesn't hurt that much. Pain or discomfort can begin in the pit of the stomach and stay there. Or it can radiate up the breast bone and into either or both arms or jaw. Heart pain is often associated with nausea, vomiting, profuse sweating or shortness of breath. Some patients have an impending sense of doom. Some patients only have shortness of breath without pain.

A person having a heart attack may look grey and ashen, and feel cold and clammy to the touch.

Q: What should someone do if they think they may be having a heart attack?

A: Call 911 and get to the closest emergency department as quickly as possible. Patients who get to the emergency department almost always survive a heart attack.

In summary:

- Know your risk factors;
- Reduce your risk factors;
- Recognize the symptoms; and
- Act upon the symptoms.



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