Endurance Test

P.10
Chicago Marathon is proving ground for event safety

P.14
NUCATS offers concierge-style service to researchers

P.18
Global health rotations help shape residents
Globetrotters
International health experiences help shape residents’ world view

Features:

Endurance Test
Chicago Marathon offers challenge to medical director, Dr. George Chiampas

At Your Service
New NUCATS’ director offers menu of services to researchers

Ward Rounds is published quarterly for alumni and friends of Northwestern University Feinberg School of Medicine and the McGaw Medical Center of Northwestern University. Material in Ward Rounds may not be reproduced without prior consent and proper credit.
Over the past 18 months, as many of you know, there has been an interesting local and national debate taking place in the media regarding the demolition of the former Prentice Women’s Hospital on the Chicago campus. Northwestern University owns the land and needs to replace the abandoned structure to make way for a new biomedical research facility. Preservationists want the building to be granted protected landmark status because they claim the design by Chicago architect Bertrand Goldberg was unique for the 1970s. Developing this site is a key element in the strategic plans of the University, the medical school, and of Northwestern Medicine because it will allow us to grow our research enterprise and enable us to connect floor-by-floor with the Robert H. Lurie Medical Research Center next door, fostering greater scientific collaboration. Ultimately, we believe this expansion will help establish Chicago as a global leader in medical research.

Phase 1 of the proposed new facility is slated to begin with 300,000 to 500,000 square feet of space, later expanding to 1.2 million square feet. The new building would provide much-needed jobs, both in the short and the long term; approximately 2,500 construction workers will be needed over complete build-out, and 2,000 high-paying, full-time research positions will be created. We estimate that it will also attract additional research funding in the amount of $150 million annually, or $1.5 billion in the decade following construction.

The preservationists’ main argument has been that Northwestern has plenty of space upon which to construct another research facility and should find another purpose for the current building. Unfortunately, this is not true. All the existing land owned by the university, or our medical school affiliates, is already earmarked for other purposes.

Northwestern has done its due diligence, commissioning studies to evaluate whether the current facility could be converted to meet today’s research standards. Sadly, it was not constructed in the mid-’70s to withstand the weight-bearing loads and vibration levels required to house the sophisticated research programs.

A criterion for good architecture is that it should continue to provide utility. In 2007, Northwestern Memorial Hospital built a brand-new Prentice facility that was better suited to today’s standards of care, leaving the old hospital nearly vacant. In 2011, the Stone Institute of Psychiatry, which inhabited the three bottom floors, moved into renovated spaces at Northwestern Memorial Hospital. Now the building is ready to come down.

On October 30, Chicago Mayor Rahm Emanuel wrote a Chicago Tribune editorial in support of the university’s plan to erect a new research building, stating that “a modern research facility requires modern design.” On November 1, the Chicago Landmarks Commission met to decide the fate of old Prentice. After nearly six hours of community testimony, the commission decided not to grant the landmark designation. The preservationists filed a lawsuit against the City and the commission, and on November 15 a Cook County Circuit judge granted a temporary restraining order, blocking the city from issuing a demolition permit. On Friday, December 7, the date set for the judge “to hear both sides,” the court set a lawsuit briefing schedule that maintains the temporary restraining order through January 11, 2013.

Although some people are passionate about the current facility being repurposed, no one has been able to present an alternative that would provide the same positive impact to Chicago as our groundbreaking new research facility. At Northwestern, we truly believe that our approach is in the best interests of the city, the university, and the research community.

With warm regards,

Eric G. Neilson, MD
Vice President for Medical Affairs and
Lewis Landsberg Dean
Kurtz Retires After Building Strong Development Group

Written by:
Michele Weber

“Funding bench science or a cure for Parkinson’s really motivates gift officers at a very different level to stay focused and get the job done,” she explains, adding that donors are often contributing for very personal reasons. “It’s much more rewarding because you really do see a difference.”

Under her guidance, 48 named scholarships were created (including one that bears her name), 23 endowed professorships were established, and the Robert H. Lurie Medical Research Center was dedicated. In 2011, Kurtz oversaw development of the enhanced Nathan Smith Davis Recognition Program for alumni giving and volunteerism. In addition, fundraising metrics established during her tenure are considered a best practice and are being implemented across the University.

“Katherine’s ability to foster relationships and command a remarkable team has aided the school in its efforts to become a top academic medical center,” says Eric G. Neilson, MD, Lewis Landsberg dean of the Feinberg School of Medicine. “Building upon our base of strong philanthropic support, she helped facilitate the advancement of Northwestern Medicine and enhanced our commitment to incomparable education and groundbreaking research.”

Before Kurtz joined Northwestern, the Michigan native spent 22 years at the University of Michigan. When she left Ann Arbor, she was associate vice president of development, but she didn’t begin her career in fundraising. Rather, she fell into it by necessity.

“I held a number of positions at Michigan, primarily in the arts and sciences, but there was never enough money for the programs to do what they wanted,” she explains. “As a result, we started reaching out to potential funding sources.”

Although Kurtz brings her time at Feinberg to a close, she is satisfied knowing that her collaborative work with the dean and his executive team on the medical school’s overall strategic plan has had a significant impact, especially as Northwestern plans to construct a new research building in Chicago.

“It’s very rewarding to know that I and my team have been involved with bringing to the table some of the initial donors to the new facility,” she says as she prepares to return to Michigan. “I hope when I come back to Chicago, I’ll see the new building going up in a few years.”

Katherine’s ability to foster relationships and command a remarkable team has aided the school in its efforts to become a top academic medical center.
Quest to Assess the Health of Chicago Communities

For some local neighborhoods, it’s not exactly “Sweet Home Chicago,” especially in communities that are plagued by violence, lack fresh and healthy food choices, offer insufficient health care resources, have limited access to recreational activities, or suffer from compromised air and water quality. That’s important information for doctors to have when treating patients.

In early fall, 166 first-year medical students from Northwestern University Feinberg School of Medicine converged on 21 of Chicago’s 77 communities in search of a better understanding about these challenges. Working in groups of seven or eight, each student researched different elements that may affect the health and well-being of the people who live and work there.

Each team met with a community representative such as a police officer, cleric, or social worker to learn more before exploring the area on foot, gathering information on local grocery stores, bars, and restaurants, and evaluating the state of schools, community centers, churches, and parks. They also gathered details from online resources to create a “wiki page” — or digital database — with crime, education, population, and other statistics from U.S. census data, as well as information about prominent health conditions.

“I now know it takes a lot of energy to learn about someone’s health, and having an understanding about the state of the patient’s community, environment, and family life can add a broader perspective about their health issues,” says medical student Sam Harvey. “For example, there used to be coal-fired energy plants in South Lawndale, and as physicians we should think about how that might factor into the quality of health in that area.”

Part of the Foundations segment of the new MD curriculum, the Community Health Assessment Project aims to build a health resource database for all Northwestern medical students, which may one day be made available to all Northwestern Medicine physicians. Over the next few years, students will continue to populate the database with information from all 77 Chicago communities.

Rebecca Wurtz, MD, MPH, associate professor in preventive medicine, developed and oversaw the community assessment project, which required the student groups to meet two hours a week for seven weeks with a faculty mentor. Coupled with the community assessments were a variety of discussions, including how difficult it can be to set personal health goals and stay motivated enough to change behavior.

“I’ve learned so much about the different communities by working on this project,” says Wurtz, director of the Master’s in Public Health Program. “You can literally ‘stroll around the city’ by going through the wiki pages. It’s really important for our students to understand what things pose obstacles and how difficult it can be to modify behavior, especially without access to the proper resources.”
International Experiences Become a Reality for Physical Therapy Students

As Fernando Quiroga Dubournais, dean of health science at Universidad San Sebastian in Concepción, Chile, introduced himself to the Feinberg community, his passion for education came through with every smile.

For the Northwestern University Feinberg School of Medicine Department of Physical Therapy and Human Movement Sciences (DPTHMS), his September visit resulted in a future now filled with multiple global health endeavors. As Quiroga Dubournais completed a formal institutional agreement by signing his name alongside Jules Dewald, PT, PhD, chair of PTHMS, a pair of students prepared to embark on the department’s first international learning experience.

First Global PT Pilot

In December, third-year DPT students Erin Murray and Jeffrey Martini took part in a three-week pilot program at Hillside Health Care International in Belize. Through Feinberg’s Center for Global Health, Hillside already provides an international health care experience for medical students. The PT duo worked with an American-trained physical therapist at the rural community clinic.

“I have always wanted to volunteer abroad, and I am very happy to have the opportunity to practice my physical therapy skills, promote disability awareness, and learn more about the international healthcare system,” Murray says. “I am also very excited to be able to pilot this program, so future Northwestern PT students have the opportunity to participate in an international health experience.”

After years of expressed interest, the establishment of two global health opportunities in the department was more fortuitous than planned.

In April 2010, Nora Francis, PT, DHS, assistant professor in PTHMS, attended a presentation about the work of the Northwestern University Alliance for International Development (NU-AID), and decided to explore student interest in a PT global health opportunity.

“I was so impressed that NU-AID was a medical student-driven organization whose mission is to provide primary medical care to rural populations in Latin America and Jamaica. In the fall trimester, Antoinette Sander, DPT, associate professor emeritus in PTHMS, and I proposed a Class of 2013 project on the development of global health opportunities,” Francis says.

“There was enthusiastic support; six students led the project, which I believe was the key to success.”

Destination Chile

Quiroga Dubournais and Dr. Dewald met in California nearly three decades ago and have maintained a friendship throughout careers that have led to academic medicine. The student exchange between institutions is something the pair had been discussing for years.

“We started looking into a number of opportunities with Dan Young at the Center for Global Health, who explored existing connections, like the one in Belize, and helped develop our opportunity in Chile,” says Dr. Dewald. “In South America and elsewhere, respiratory therapy is done by respiratory and physical therapists, so it gives our students exposure to opportunities they would not have had here.”

The clinical rotation in Chile is expected to be in place by the start of 2013 and will enable a short-term medical exchange program of one to three months involving classroom and simulation training as well as clinical experiences.

“Having talked about this for many years, it’s a dream,” says Quiroga Dubournais. “It’s very important for Universidad San Sebastian to have this agreement with Northwestern because the university brings with it international prestige. I am particularly confident because I can feel the enthusiasm of the leadership, the professors, the researchers, and the students at Feinberg. I return to Chile very happy and enthusiastic!”
Faculty Awards and Honors

Nora Hansen, MD, associate professor of surgery, was chosen to lead the new Division of Breast Surgery (launched September 1), which will offer excellent clinical care and further breast cancer research. “I am truly honored to be named the chief of the new Division of Breast Surgery,” Hansen says. “Because there are so many women diagnosed with breast cancer each year, and countless more who have benign issues, it is important for our medical students and residents to understand how to manage these complex situations.”

Because there are so many women diagnosed with breast cancer each year, and countless more who have benign issues, it is important for our medical students and residents to understand how to manage these complex situations.

Ongoing breast cancer research efforts in prevention, early diagnosis, treatment strategies, and new nanotechnological approaches to diagnosis and treatment will take place in the labs of Jacqueline Jeruss, MD, PhD, assistant professor in surgery, and Seema Khan, MD, Bluhm Family Professor of Cancer Research. Karl Bilimoria, MD, assistant professor in surgery and medical social sciences, will investigate outcome data in breast disease patients.

Dr. Hansen, director of the Lynn Sage Comprehensive Breast Center, is a national leader in breast cancer research and treatment.

Jonathan Licht, MD, professor and chief, in the Division of Hematology/Oncology at Northwestern University Feinberg School of Medicine, leads one of four research teams recently awarded a generous grant through the Leukemia & Lymphoma Society’s prestigious Marshall A. Lichtman Specialized Center of Research (SCOR) research initiative. The teams will each receive $1.25 million a year for five years. SCOR funds research teams from different disciplines that are engaged in collaborative efforts to discover new approaches to treat patients with hematological malignancies.

Dr. Licht works with a distinguished group of co-investigators at Rockefeller University, Weill Cornell Medical College, Memorial Sloan Kettering Cancer Center, and the University of Michigan to study aberrant epigenetic regulation in leukemia, lymphoma, and myeloma. Together they hope to discover how mutant epigenetic proteins cause blood cancers, develop animal models of these processes, solve the detailed atomic structure of the proteins, and begin to develop therapies to reverse the abnormalities. Over the past five years the group published numerous joint papers on the underlying mechanism of leukemia in the highest quality scientific journals. This group is also involved in the study of drugs that can reverse abnormal gene regulation in leukemia.

D. James Surmeier, PhD, chair of the Department of Physiology, has been awarded one of four new Blueprint for Neuroscience Research grants by the National Institutes of Health (NIH).

The awards, made to investigators across the United States, will fund an ambitious set of projects seeking to develop new drugs for disorders of the nervous system. Surmeier will be the first Blueprint researcher to focus on Parkinson’s disease (PD).

Through the Blueprint grant, the NIH can spend in excess of $1 million per year through funding of pharmaceutical company partners to push the drug forward. The NIH is also paying the Surmeier lab approximately $125,000 a year to do in vivo testing with compounds they developed.
“My mother had Alzheimer’s, and it’s very gratifying to me that my research will perhaps help advance a treatment for this devastating disorder.”

Robert Vassar, PhD, professor in cell and molecular biology, Zenith Fellows Award recipient from the Alzheimer’s Association

Robert Vassar, PhD, professor in cell and molecular biology, was one of four researchers to receive the extremely competitive Zenith Fellows Award from the Alzheimer’s Association.

He will use the nearly half-million dollar prize to perform innovative research on the BACE1 enzyme, which he discovered more than a decade ago. The BACE1 enzyme is required for the production of a toxic protein called beta-amyloid that builds up in the brains of Alzheimer’s patients and kills brain cells.

“BACE1 is also likely to perform beneficial functions in the brain and body, so blocking it with a drug may cause side effects,” Vassar says. “In broad terms, my Zenith Award research will focus on gaining new knowledge about the normal physiological functions of BACE1 so that we can predict the potential side effects of inhibitor drugs and suggest ways to avoid them.”

He continues, “This award is only given to a handful of individuals each year, so I feel extremely honored to receive it.”

“What we want to do is really grease the wheel in terms of working with basic scientists, clinical scientists, and health policy makers to bring new treatments rapidly from the bench to the bedside.”

Katherine Wisner, MD, MS, pictured here with former first lady Rosalynn Carter, was named director of the Asher Center for Research and Treatment of Depressive Disorders in July. She arrived at Northwestern University Feinberg School of Medicine with a specific charge—to create a prominent center of cutting-edge research, and translate findings to alleviate the suffering of patients with mood disorders.

“What we want to do is really grease the wheel in terms of working with basic scientists, clinical scientists, and health policy makers to bring new treatments rapidly from the bench to the bedside,” Wisner says. “We will have an accessible database of patients and have their biological samples to study hypotheses, test those novel treatments, and then to more broadly disseminate them.”

Before joining Northwestern this year, Dr. Wisner was the director of Women’s Behavioral HealthCARE and a professor of psychiatry, and of obstetrics, gynecology, and reproductive sciences at the University of Pittsburgh School of Medicine since 2002.

Her area of specialty is reproductive psychiatry, and her work studying the impact of exposure to major depression and treatment options during pregnancy has resulted in more than 165 publications.

In 2011, she was the recipient of the American Medical Women’s Association’s Women in Science Award.
In an early-stage breakthrough, a team of Northwestern University scientists has developed a family of compounds that could slow the progression of Parkinson’s disease, which causes tremors, rigidity, and difficulty moving.

The new compounds were developed by Richard B. Silverman, the John Evans Professor of Chemistry at the Weinberg College of Arts and Sciences and inventor of the well-known drug Lyrica, and D. James Surmeier, PhD, chair of physiology at the Feinberg School of Medicine. Their research was published in the Oct. 23 *Nature Communications*.

The compounds target and shut down a relatively rare membrane protein that allows calcium to flood into dopamine neurons. Surmeier’s previously published research showed that calcium entry through this protein, which he identified as the Cav1.3 channel, stresses dopamine neurons, potentially leading to premature aging and death.

“By shutting down the channel, we should be able to slow the progression of the disease or significantly reduce the risk that anyone would get Parkinson’s disease if they take this drug early enough,” Surmeier says.

Silverman’s challenge was to design new compounds that specifically targeted this rare Cav1.3 channel. He and his colleagues tested 60,000 existing compounds before testing additional compounds he had developed in his lab for other neurodegenerative diseases. After Silverman identified one that had promise, it took nine months to refine the molecules until they were effective at shutting down only this channel.

Surmeier’s lab tested the new compounds, which did precisely what they were designed to do, without obvious side effects. The Northwestern team has to improve the pharmacology of the compounds to make them suitable for human use, test them on animals, and move to a Phase 1 clinical trial.

*The research was supported by the Michael J. Fox Foundation and the RJG Foundation.*
New Genetic Clues for Type 2 Diabetes Identified

An international team of scientists identified 38 new genetic regions that are associated with glucose and blood insulin levels. Many of these regions also have an impact on the risk of type 2 diabetes. Laura J. Rasmussen-Torvik, PhD, Northwestern University Feinberg School of Medicine assistant professor of preventive medicine, contributed to the study in *Nature Genetics.*

“This study builds on previous GWAS (genome-wide association study) analyses,” says Rasmussen-Torvik. “We included more individuals and focused on gene variations thought most likely to be associated with diabetes and diabetes-related traits.” The study brings the total number of genetic regions associated with glucose and insulin levels to 53, more than half of which are associated with type 2 diabetes.

Researchers used a powerful technology, Metabochip, a cost-effective way to find and map genomic regions for a range of cardiovascular and metabolic characteristics, investigating up to 200,000 DNA sequence variations at once. The team hoped to find new variants influencing blood glucose and insulin traits and to identify pathways involved in the regulation of insulin and glucose levels.

This project was partly supported by the Atherosclerosis Risk in Communities study. ARIC is carried out as a collaborative study supported by National Heart, Lung, and Blood Institute contracts N01-HC-55015, N01-HC-55016, N01-HC-55018, N01-HC-55019, N01-HC-55020, N01-HC-55021, N01-HC-55022, R01HL087641, R01HL59367 and R01HL086694; National Human Genome Research Institute contract U01HG004402; and U.S. NIH contract HHSN268200625226C.

Secrets of SuperAger Brains

Northwestern Medicine researcher Emily Rogalski wondered what goes right in the brains of the elderly who still have terrific memories — call them cognitive SuperAgers.

Her new study, published in the *Journal of the International Neuropsychological Society,* has identified an elite group of elderly people age 80 and older whose memories are as sharp as people 20 to 30 years younger.

On 3-D MRI scans, the size of the SuperAgers’ cortex closely resembled those of participants ages 50 to 65. By measuring cortex thickness, Rogalski has a sense of how many brain cells are left.

“These findings are remarkable given the fact that grey matter or brain cell loss is a common part of normal aging,” says Rogalski, assistant research professor at the Cognitive Neurology and Alzheimer’s Disease Center at the Feinberg School of Medicine.

“By looking at a really healthy older brain, we can start to deduce how SuperAgers are able to maintain their good memory,” she explains. “Maybe we can ultimately help Alzheimer’s patients.”

This project was supported by a grant from The Davee Foundation and grants AG13854, P30 299 AG010129 and K01 AG030514 from the National Institute on Aging of the National Institutes of Health.

Go online to read about a toolbox of tests developed by Richard Gershon, PhD, that provides common measurements for neurological, behavioral health.
Chicago Marathon serves as proving ground for months of planning by medical director

Hours before the sun comes up and any runner arrives at the start line for the Bank of America Chicago Marathon, George Chiampas, DO, assistant professor of emergency medicine, has already covered the 26.2-mile course. The medical director’s race day begins at 3 a.m. when he does a final check of medical supplies and the 21 aid stations along the event route.

“I have a massive responsibility to try to anticipate any possible scenario and ensure that all the resources are in place; it’s a humbling experience,” says Chiampas, who began volunteering in sports medicine while an emergency medicine resident at John H. Stroger, Jr., Hospital of Cook County and later completed a fellowship in the field at Resurrection Health Care.

“I’m also preparing to welcome the medical volunteers. It’s my job to stir up excitement and show appreciation for the 12-hour day they will put in so that the runners have a safe and memorable marathon.”

This year’s race on October 7 marked the sixth with Chiampas as head of medical services. He oversees the provision of care...
for the 45,000 racers and 1.7 million spectators who may need it, and is in charge of as many as 1,400 physicians, nurses, physical therapists, medical students, and other healthcare volunteers.

“We’re proud of the work that Dr. Chiampas has done in his six years as the Bank of America Chicago Marathon medical director,” says Carey Pinkowski, executive race director. “He has recruited a team of medical volunteers that is second to none and the organization and structure that he has helped develop is a model for other marathons and running events world-wide.”

On average, the medical staff treats more than 1,000 individuals every year. Common conditions include dehydration, disorientation, heat-related injuries, and issues related to pre-existing health problems such as diabetes. With cooler than normal temperatures on race day this year, volunteers also saw several cases of hypothermia and patients with flu-like symptoms.

The majority of extremely ill runners get treated near the finish line. Sanjeev Malik MD, GME ’07, assistant professor of emergency medicine, serves as team captain for the Intensive Care Unit stationed at the end. He and a group of about 50 volunteers typically see more than 40 individuals, mostly within a two-and-a-half-hour timeframe.

While most sports medicine doctors begin in family and community medicine, internal medicine, or pediatrics, Malik says the emergency medicine background he and Dr. Chiampas share is a boon in this environment.

“If there’s any medical setting that the marathon most relates to, it’s the ER,” he explains. “The ability to screen patients very quickly and treat life-threatening issues up front is a natural part of training for an emergency room doctor.”
“What's really gratifying,” he adds, “is that the people you're treating have a life-threatening problem that in almost all cases is 100 percent reversible.”

PREPARING FOR POSSIBILITIES
Of course, more serious issues do arise. According to a report published in the May 4 issue of the American Journal of Sports Medicine, between 2000 and 2009, 28 people (six women, 22 men) died during or within 24 hours of completing a marathon. A January 12 issue of the New England Journal of Medicine, co-written by Chiampas, reported that from January 2000 to May 2010, 59 marathon or half-marathon participants suffered cardiac arrest, with 42 resulting in fatalities.

While these occurrences are rare, Dr. Chiampas has prepared the Chicago Marathon to handle them. The event employs advanced life support (ALS) bike and golf cart teams, basic and advanced life support foot teams, and a fleet of 100 ALS ambulances. It exceeds community standards for the number of automated external defibrillators (AED) on a 26.2-mile course — having one for each aid station, ambulance, and bike team. For more advanced care, the main medical tents have cardiac monitors that allow medical volunteers to assess cardiac rhythm and core body temperatures.

“I think this is one area we have definitely led in the area of marathon medicine,” says Chiampas, past president and current advisory board member of the World Road Race Medical Society. “I know that the ability to start CPR and have access to an AED is the difference maker, and I ensure that our medical teams have what they need, where they need it, to respond to the worst possible situations. We’ve set best practices here that other races around the world have followed, which has saved lives.”

Taking it one step further, the head team physician for Northwestern University athletics worked with the Northwestern Simulation Technology and Immersive Learning group to develop two videos, one for medical volunteers on how to treat sports-related conditions and the other for 12,000 non-medical volunteers on chest compressions and how to use an AED.

“There should never be a situation where a person collapses from sudden cardiac arrest, the leading cause of death in the U.S., and someone or a group just watches and waits for an ambulance,” says Chiampas.

IMPROVING MASS EVENT SAFETY
Such thorough preparation and commitment to education stems in part from lessons learned in 2007, Chiampas’ inaugural year.
as medical director. That October day, temperatures steadily climbed from the 70s to the upper 80s, causing more medical issues than normal. As the heat and humidity took their toll, race organizers made the unprecedented decision to cancel the event mid-race. Challenged to communicate this news, event organizers used police helicopters and more than 800 police officers stationed along the course to inform participants.

“Retrospectively, the critics now agree that we did the right thing,” Chiampas says. “Our event and city agencies were pushed to handle a mass situation and, overwhelmingly, we did a tremendous job. I feel what and how Chicago dealt with it at the time, and also what we’ve put in place since, has transformed not only race medicine, but also large-scale events in general.”

Today, the marathon employs a flag system to signal course conditions, and runners receive regular e-mails on race safety and training before the event. A new electronic patient tracking system allows volunteers to offer better information for families looking for participants receiving medical attention. Additionally, event officials and leads from the medical team, city, and police and fire departments meet throughout the year to discuss emergency action planning, ensuring a unified front if called into action.

These changes have made the Chicago Marathon one of the safest mass sporting events in the world, Chiampas says, adding that he shares safety insights with the medical directors for the World Marathon Majors — Berlin, Boston, Chicago, London, New York, and the newest addition, Tokyo — who meet regularly to discuss best practices, most recently at the 2012 Summer Olympics in London.

Dr. Chiampas has also written about how the safety and emergency response systems used at the marathon can help government officials design their community disaster response programs. In a 2011 report for the American Medical Association’s *Journal of Disaster Preparedness*, he contends that major mass sporting events provide an opportunity to test and develop best practices for such occurrences.

“In reality the marathon is a planned disaster,” the ER doctor explains. “With 45,000 runners, we know a two percent minimum will require some medical care in a span of five to seven hours. Our work shields the EMS and hospitals from being overwhelmed, and helps protect a city which still has to function. It tests the hospitals, EMS, and preparedness for communication, for weather, and, unfortunately, for terrorists. It is very difficult to practice this or even try to simulate these events; the marathon provides a perfect opportunity to learn.”

In fact, the City of Chicago has used these lessons to prepare for the 2012 NATO summit, Barack Obama’s election night, and Lollapalooza, a huge, annual three-day concert.

A Chicagoan born and raised, Dr. Chiampas feels a sense of pride in having had such a positive impact on the city he loves. Reflecting on the marathon, he shares these final thoughts: “For me, our volunteers and their commitment to the well-being of runners and spectators define the human spirit of the marathon. Sometimes I think of the lives we touch and just feel grateful that I get to be a part of it.”
AT YOUR SERVICE
Preventive Medicine Chair Donald Lloyd-Jones, MD, has a head for wearing different “hats”: farmer, minister, and, most recently and importantly for Northwestern University Feinberg School of Medicine, top research concierge.

The agricultural hat comes from serving as president of Lloyd-Jones Farms, Inc., a 440-acre corn and soybean farm in Warren, Indiana, founded by his great-great-great-grandfather in 1836. The clergy hat arrived when he completed a five-minute online credentialing course with the Universal Life Church so he could officiate at his college roommate’s wedding ceremony several years ago. Last June, Dr. Lloyd-Jones donned the concierge hat when he became the new director of the Northwestern University Clinical and Translational Sciences (NUCATS) Institute. He replaces NUCATS founder Philip Greenland, MD, Harry W. Dingman Professor of Cardiology, who launched the institute in 2007 with a $30 million Clinical and Translational Science Award (CTSA) grant from NIH. Dr. Lloyd-Jones, also named senior associate dean for clinical and translational research this summer, plans to take the institute into its next phase — “NUCATS 2.0,” as he calls it.

“Now possessing the capacity built by Dr. Greenland and his team, NUCATS is ready to provide full-service support to investigators across the entire spectrum of biomedical research — from very early discoveries to implementation in
clinical and population settings,” says the professor of preventive medicine and of medicine. “This version will focus on ‘concierging’ interactions with researchers so they can more effectively take advantage of NUCATS. We have all the tools at Northwestern to help investigators accelerate their science but people don’t always know how to find or use them.”

Dr. Lloyd-Jones has enlisted Justin Starren, MD, PhD, chief of the Division of Health and Biomedical Informatics and director of the Northwestern University Biomedical Informatics Center (NUBIC), as deputy director of NUCATS. Together, they will heavily market the institute’s services and expertise, including centers focusing on clinical research, education and career development, translational innovation, research team support and development, community-engaged research, NUBIC, and evaluation and tracking. The integrated academic home for a variety of resources, the institute involves the collaborative efforts of faculty from six Northwestern schools and four clinical affiliates.

Among the strategies going forward to help researchers find what they need at NUCATS will be deployment of personal managers. “We intend to introduce research navigators, an exciting new concept for Northwestern,” shares Dr. Lloyd-Jones. “A lot but not everything can be found via electronic means such as a common Web portal. Personal managers will be able to help researchers at any stage of the clinical research pipeline.” While existing staff will further boost the institute’s consultative service orientation, additional hands-on resources will be added as NUCATS grows, according to Dr. Lloyd-Jones.

**PROMOTING CARDIOVASCULAR HEALTH**

A salad or an apple with Manchego cheese and a Diet Coke often makes for an appetizing and relatively healthy lunch on-the-go for Dr. Lloyd-Jones. While he admits to caving in to an occasional Twizzlers or two, this specialist in general and preventive cardiology adheres to an active lifestyle and balanced diet. In essence, he practices what he preaches for maintaining good cardiovascular health. An emphasis on improving heart health rather than solely reducing the impact of heart disease earned him the task of retooling the American Heart Association’s (AHA) strategic goals for 2020. This novel tactic radically turned around the group’s traditional approach; former AHA goals used to focus only on helping people already suffering from, or at high risk for, heart disease. For his efforts, the AHA awarded Dr. Lloyd-Jones the organization’s Chairman’s Award in 2010.

Attracted to cardiology in medical school at Columbia University, Dr. Lloyd-Jones went to Harvard for his residency and specialty training. He completed a medicine residency in
1994 and then served a year as chief resident. Honing his skills in cardiovascular epidemiology, he stayed on at Massachusetts General Hospital as a research fellow with the National Heart, Lung, and Blood Institute’s Framingham Heart Study and then joined the Harvard faculty as an instructor in 1999. He earned a master’s degree in epidemiology from Harvard’s School of Public Health in 2001. Then Dr. Greenland and Robert O. Bonow, MD, Max and Lilly Goldberg Distinguished Professor of Cardiology and vice chair of medicine, convinced this New York native to come to Northwestern in 2004.

“...It was a huge leap for me and my wife; I had no ties to the Midwest but, when Phil Greenland and Bob Bonow call with a good job, you take that call!” says Dr. Lloyd-Jones, whose spouse, Kathleen M. McKibbin, MD, currently works part time at the Northwestern University Health Service in Evanston. Residing in Winnetka, the couple has three children. “It was perfect timing. I was finishing up a research award and entering a new phase of my professional life. I needed wonderful mentors like Drs. Greenland and Bonow.”

Named chair of preventive medicine in 2009, Dr. Lloyd-Jones balances his administrative leadership duties with his research as well as teaching endeavors. His work has resulted in more than 180 publications, including the recent publication of a New England Journal of Medicine article on the “Lifetime Risks of Cardiovascular Disease.” Sponsored by the National Heart, Lung, and Blood Institute, the study is the first to examine the lifetime risk of heart disease in black and white women and men; most studies have been predominantly conducted with white males.

APPLYING RESEARCH TO POLICY, PATIENTS

Dr. Lloyd-Jones’ cardiovascular research falls into two broad categories of epidemiology studies: translational and mechanistic. The first area takes observations from studying large populations and turns them into clinically useful interventions and/or supportive evidence for effective public policy changes. The second examines large populations at the cellular and molecular levels via imaging, biomarkers, genomics, and other high-tech means. Looking at cell physiology and systemic biology to better understand disease risk factors in groups of people through metabolomics, in particular, excites Dr. Lloyd-Jones. He sees metabolomics as a way to provide truly personalized medicine for each and every patient.

“Mechanistic epidemiology can also help close the loop between clinical and basic science by feeding back observations from large populations into the research pipeline,” he adds. “As recently as 10 to 15 years ago, conversations between epidemiologists and basic scientists never happened. They just didn’t have a lot to say to each other. Now they do.”

This type of epidemiological research and the findings it generates fits nicely with the sharing of scientific data and knowledge encouraged and made possible by NUCATS, according to Dr. Lloyd-Jones. Although, in the opinion of the new director of the institute, NUCATS has something to offer to just about any and all conducting clinical and translational research at Northwestern.

“We think of NUCATS as the core of support for investigators,” he says. “Really, any type of researcher should have contact with us.”
Over the past three years, U. S. medical students have demonstrated a heightened interest in global health opportunities. According to the Association of American Medical Colleges, that trend is even more pronounced at Northwestern University Feinberg School of Medicine, where 44.9 percent of graduates (vs. 30.4 percent nationally) were involved in international activities in 2012.

As trainees across the country look toward the match into residency programs, that interest, while not quite as intense, still remains. As a result, more than one in five graduating pediatric residents listed global health opportunities as a key factor in their match selections, according to a national study published in the journal *Pediatrics* in 2011.

The report cites a number of important benefits of international training, including: enhanced medical knowledge and clinical diagnostic skills, cultural sensitivity, awareness of the social determinants of health, and a better understanding of cost-effective care. It also mentions a direct correlation to a growing interest in primary care.

Not all institutions offer these valuable growth experiences for residents but, for those that do, “it becomes an important recruitment tool and offers residents unique training opportunities, especially in resource-limited settings,” says Dan Young, associate director of the Global Health Center at Northwestern University Feinberg School of Medicine.
Here we share details about four residency training programs under the McGaw Medical Center of Northwestern University umbrella that have made this commitment.

**PEDIATRICS RESIDENCY PROGRAM**

Mike Pitt, MD, GME ’10, never imagined his career path would be forever altered by an elective rotation.

In 2009, the third-year pediatric resident went to Mwanza, Tanzania, for a four-week global health rotation at Bugando Medical Center (BMC). While there, he improved his physical exam skills, built his confidence, and adjusted to working with limited resources.

“You go over there thinking you’re going to change the world but the real benefit is that you end up changing yourself,” explains Pitt, now a pediatric hospitalist at Ann & Robert H. Lurie Children’s Hospital of Chicago.

Today, he also directs the pediatric residency program’s global health elective in Tanzania, which began in 2007, with the help of then-resident Sabrina Wagner. Eight or nine times a year, Pitt makes arrangements for and prepares two or three residents before they embark on a month-long clinical training experience in a country with 18 million children under age 14 and less than 100 trained pediatricians. Each year, more than half of the McGaw pediatric trainees in their final year choose to participate in this rotation abroad.

“The program is special,” says residency program director Sharon Unti, MD, “because our residents have an ongoing presence there. Mike has helped pave the way for a robust international health experience, developing relationships, organizing trips, advising trainees on cultural integration, and making it bi-directional, with Tanzanian residents also coming to the U.S.”

Focused on education with tangible results and long-term impact, Dr. Pitt trains his residents how to lead simulation cases and debrief with Tanzanian medical students and Advanced Medical Officers using an inflatable mannequin and accessible supplies. “I want it to be a sustainable education initiative to ensure that we are making a lasting contribution,” he explains.

Likewise, when two or three BMC residents visit the U.S. each year in May, they participate in morning rounds and

**LEFT: DR. ADIANEZ ALBELO CONDUCTS OBSTETRICS TRAINING SESSIONS WITH RESIDENTS AND INTERNS IN ETHIOPIA.**

**MIDDLE: PATIENTS IN BOLIVIA WAIT OUTSIDE DR. MARK MOLITCH’S FREE CLINIC, CENTRO MEDICO HUMBERTO PARRA.**

**RIGHT: 18 MILLION CHILDREN UNDER AGE 14 IN TANZANIA ARE TREATED BY LESS THAN 100 TRAINED PEDIATRICIANS.**
shadowing activities in different clinical settings, attend conferences, and learn how to do research.

“We also teach them how to improve medical communication and work as a team,” explains Pitt. “Culture plays such a huge role in how we all practice, and our Tanzanian colleagues will be the first to tell you their culture is more quiet and restrained than ours. Answering a question wrong in medical school there is looked at much more negatively than in the U.S. and they certainly take notice of our willingness to work through medical problems out loud as a team.”

To determine if lasting effects are occurring from these experiences, Pitt has gathered preliminary survey data from BMC participants for the past five years. Every resident attributed positive changes in the way they attempted to answer clinical questions when they returned to Africa and nearly 80 percent gave examples of how they changed their decision-making or patient care.

In the past, most McGaw Medical Center residency programs have been funding these important international health rotations from their own coffers or, in the case of Lurie Children’s, from the hospital’s foundation; however, today’s graduate medical education budgets are tighter than ever due to shrinking government reimbursements for health care.

With this in mind, Chicago Lake Shore Medical Associates (CLSMA), a private physician practice affiliated with Northwestern University Feinberg School of Medicine, has begun funding global health travel expenses for residents of McGaw programs that support the practice’s mission to promote careers in primary care. Since 2008, through its Global Health Initiative, CLSMA has successfully raised nearly $3 million for international trips, sending more than

Their U.S. visits also help to fuel the engagement of Lurie Children’s residents. Overall, global health interest has been so marked that Dr. Pitt, with leadership support, has recently started developing a curriculum for all residents, recognizing their need for tools to practice medicine in a multicultural world. It currently consists of a journal club and lectures on topics such as cultural sensitivity and tropical medicine.

“There’s no doubt that the elective rotation attracts interest in our residency program,” says Thomas P. Green, MD, chair of pediatrics at Lurie Children’s. “It broadens our residents’ experience and is a wonderful complement to the training they receive here in the city.”

Alanna Higgins, MD, GME ’12, now a hospitalist at Lurie Children’s, admits it was one of the reasons she chose McGaw over other residency programs. She wanted to be in a hospital and experience Africa, and her trip to Tanzania was not short on valuable lessons.

“The medical experiences were diverse and interesting, including HIV, tuberculosis, malaria, and a variety of conditions related to malnutrition,” Dr. Higgins says. “It was particularly interesting that malnutrition was less often related directly to food shortage, and more to chronic illness. Also, children and families were much more tolerant of medical procedures than we are in the U.S.”

INTERNAL MEDICINE RESIDENCY PROGRAM
Approximately 4,400 miles from Chicago and in the heart of a rain
forest, a pair of third-year internal medicine residents from Northwestern arrive at Centro Medico Humberto Parra, a free clinic located outside of Palacios, Bolivia. During a month-long international health rotation, they will communicate almost entirely in Spanish while volunteering at the rural clinic that serves approximately 35,000 residents from 12 local villages.

Mark Molitch, MD, Martha Leland Sherwin Professor in the Division of Endocrinology, Metabolism, and Molecular Medicine at Northwestern University Feinberg School of Medicine, and his wife, Susan Hou, MD, professor of medicine in the Division of Nephrology and Hypertension at Loyola University-Chicago, opened the rural clinic in 2001 which has since been responsible for approximately 29,000 patient visits.

Open four days a week, the clinic enlists the help of U.S. residents and medical student volunteers, many of whom come from Northwestern and Loyola universities, to help care for this indigent population under the supervision of volunteer American and Bolivian physicians. Centro Medico provides free primary healthcare, medication, health education, and other services to those in need.

Since 2004, Northwestern has been offering internal medicine residents a structured global health elective at the clinic. The rotation, developed by Drs. Molitch and Hou, includes clinical experiences in rural and urban locations as well as weekly formal lectures and case discussions. Residents help treat patients with tropical diseases such as Chagas’ disease, malaria, Dengue fever, snake bites, anthrax, and yellow fever, as well as more common diseases like diabetes, hypertension, and arthritis.

“The residents and students learn how to manage these tropical and common diseases using the limited resources and medications available at Centro Medico,” says Dr. Molitch. “They also learn cultural differences with regard to these patients’ lives and how they relate to illness. Overall, the experience that

300 Northwestern medical students and residents around the globe.

“When the medical school recently asked us about funding resident global health experiences, we thought it would be a wonderful complement to what we’ve been doing,” says Cynthia Horvath Garbutt, JD, executive director of The Global Health Initiative at Chicago Lake Shore Medical Associates. “There is no question about the value of these experiences for medical students. But there’s an added value of sending a resident, who enhances and increases that impact as a more knowledgeable caregiver. It is life changing for all involved.”

Garbutt continues, “We started with one idea and it’s really prospered. The doctors at CLSMA are committed to the idea of aiding in the professional development of Northwestern medical students and residents. This is an uncommon, innovative program that benefits many here and in underserved regions worldwide.”
medical students and residents get during this rotation is invaluable in how it enlightens them to the medical needs of poor people around the world and how to address such needs.”

Aashish Didwania, MD, GME ’06, assistant professor in medicine-general internal medicine and geriatrics, directs the Northwestern internal medicine residency program. “Students in general are really interested in global health but it is challenging to incorporate into residency training when one considers the time dedicated to core rotations and research interests. Despite these challenges, residents have a strong desire to learn from and impact communities throughout the world. As a result, we have been able to send approximately six residents a year to Bolivia.”

Travel preparations include going through a checklist and communicating with Dr. Molitch about what they can expect in-country. They receive documents with details about many facets of the experience, along with a list of suggested readings to help them prepare.

“Dr. Molitch has done a great deal to make this rotation sustainable,” explains Didwania. “Our residents are learning how health care can be delivered through education, community involvement, and the longitudinal relationship that Centro Medico Humberto Parra provides Palacios.”

OPHTHALMOLOGY RESIDENCY PROGRAM

“In rural India, it’s expected when you grow old that you will be blind,” says Dmitry Pyatetsky, MD ’01, GME ’05, McGaw ophthalmology residency director.

Working with Dr. Gagandeep Brar, a well-respected physician at the Grewal Eye Institute, a private eye clinic in Chandigarh, India, McGaw residents are trying to help combat that reality. Multiple times a year, the Institute conducts rural cataract screening camps, identifying elderly patients who are partially or completely blind and cannot afford health care, and offering them free eye surgery at their clinic.

Five years ago, because of resident interest, Ann Bidwell, MD, former ophthalmology residency program director, developed the relationship with the Grewal Institute. Two times a year two residents travel to India to assist during the Institute’s “boot camps,” performing large numbers of cataract surgeries over two weeks.

“The Grewal Institute, which has a high reputation for quality, is helping all these people without means while training doctors all over the world,” says Dr. Pyatetsky. “They perform a more thorough workup in their clinic before doing surgery.”

Prior to leaving for this elective rotation in India, McGaw ophthalmology residents in their second year of training have successfully performed multiple cataract, eye muscle, and plastic surgeries using a surgical simulator called EyeSi, in addition to completing these procedures in the wet lab and working on live cases in the operating room.

“This rotation is very intense for our residents,” explains the residency director. “Six days a week, for two weeks, each trainee does eye surgeries—50 total. Together with all the prior experience they’ve had in the States, they become more skilled and confident and are well on their way to becoming surgeons.”

Co-chief ophthalmology resident Rajen Desai, MD, who chose to do the international rotation in 2011 and was responsible for recruiting participants to assist the Grewal Institute this year, agrees that this training is extremely valuable but also very meaningful.

“It was an incredibly fulfilling experience at multiple levels,” he explains. “For one, this is a private practice that donates its resources to provide free surgeries for the impoverished surrounding communities. They also provide transportation and all follow-up care for these patients. I have not seen ‘charity service’ at this level in non-academic settings in the U.S.

"At another level, we were providing much-needed care. Many of our patients had such poor vision from cataracts that they needed help navigating the exam room. They could not even see our faces before we operated on them. It was incredibly endearing when they gave us a beaming smile after surgery.

“And finally, the educational experience was second to none,” continues Dr. Desai. “Our instructor, Dr. Gagandeep Brar, is incredibly gifted. The experience was intense, but in a matter of a few weeks, he taught us his techniques to safely, efficiently, and successfully perform cataract surgery.”

FAMILY AND COMMUNITY MEDICINE RESIDENCY PROGRAM

Jeff Panzer, MD, spent a year in Ethiopia as a medical director at a district hospital and health center, so he understands the challenges involved in providing health care in a third-world country. Now a core faculty member for Northwestern’s Family
and Community Medicine residency, he believes these experiences are so important for trainees that he is working to develop the program’s global health component.

Despite his prior connection to Ethiopia, Dr. Panzer admits it is difficult to get established in sub-Saharan Africa. “Hopefully, our clinical presence there will help foster closer relationships,” he says.

Because Family and Community Medicine is a young program (it launched in 2010), there have been a small number of residents who have reached their third year of training and could take advantage of a global health experience. By the end of January, five out of eight eligible trainees will have participated in rotations abroad, including experiences in Ethiopia, Guatemala, Zambia, and Ecuador.

Dr. Adianez Albelo learned so much from her Ethiopian adventure in May that she decided to return in October. Earlier in the year, the resident helped deliver babies.

Although not speaking the language was a barrier, she went back in October to help teach an Advanced Life Support in Obstetrics (ALSO) course at Jimma University, one of the bigger medical schools in Ethiopia. The three-day train-the-trainer sessions were for family medicine residents and interns.

“Besides the language, the most difficult thing was not being able to save every baby,” she says. “I most enjoyed the freedom of being in a place where people are so welcoming and loving and where life is simple and food is delicious. As a doctor, I think it is hard to be in a place like this and not be touched every day.”

As for the future of international rotations in family medicine, Dr. Panzer believes they are still in the discovery process.

“It’s fair to say that we are putting out feelers to see where it makes the most sense to focus our efforts in a sustainable way. We also have leads in Malawi and Peru.

“It’s easy to do this poorly and much harder to do it well,” Panzer explains. “We want to do it well.”

FROM TOP: THE CENTRO MEDICO HUMBERTO PARRA CLINIC IS OPEN TO ABOUT 35,000 RURAL RESIDENTS OF BOLIVIA FOUR DAYS A WEEK; OPHTHALMOLOGY RESIDENTS HELP PERFORM CATARACT SURGERIES AT THE GREWAL INSTITUTE IN INDIA; PEDIATRIC RESIDENTS VOLUNTEER FOR A FOUR-WEEK ROTATION AT BUGANDO MEDICAL CENTER IN TANZANIA; AMONG THE FAMOUS SIGHTS FOR RESIDENTS TO SEE IN INDIA IS THE TAJ MAHAL.
When the Chicago Bulls basketball team first came on the scene in 1966, alumnus David Bachman, MD ’62, GME ’67, could not afford to attend games because he was earning only $250 a month as an orthopaedic resident at Northwestern University Medical School. But that quickly changed when he became the Bulls’ team physician during the second season. “Basically, the pay was four season tickets and a nominal stipend,” Dr. Bachman says.

The Bulls had gone through its first year without a team physician. “The NBA told them to get a doc,” recalls Dr. Bachman, now 78, who played softball and baseball growing up. After completing his residency in 1967, he was appointed to the medical school faculty and joined an established private orthopaedic practice at Passavant Hospital in Chicago.
At that time, the general manager of the Bulls was Dick Klein, who had been a Northwestern undergraduate classmate of Harold Method, MD, a general surgeon at Northwestern. Klein asked Dr. Method if he would assume the role of team physician, which he did for a few months. “However, Dr. Method, who I knew from Passavant, had limited interest in attending Bulls’ games, which was one of the requirements,” says Bachman. Hence, Dr. Method approached Dr. Bachman about taking the position, which he enthusiastically accepted.

Dr. Bachman’s duties included conducting preseason physicals for the 12 players on the roster and treating significant injuries (either conservatively or surgically). As an orthopaedic surgeon, he performed fewer than a dozen surgeries, primarily knee, during his 13 years as team physician.

Players included Artis Gilmore, Chester “Chet” Walker, and Jerry Sloan (later head coach for the Utah Jazz). And for most of those years, the Bulls made the playoffs, but not a single league championship.

“Many of the players and coaching staff back then were real gentlemen — educated and deeply involved in the community,” observes Dr. Bachman.

A LIFE OF SPORTS
Around 1976, Dr. Bachman cofounded and served as director of the Center for Sports Medicine at Northwestern.

“At the time, my colleagues and I were seeing high school, college, and professional athletes,” he says. “We learned that one of the problems faced by high school athletes was a lack of adequate medical care. There were no athletic trainers. The coaches were responsible for determining whether a player was seriously injured and for rehabilitation after an injury. But this really wasn’t appropriate, so we instituted a successful program to train high school teachers to become athletic trainers.”

In the late 1970s, Dr. Bachman chaired a committee for the governor’s commission on sports medicine in Illinois, which had the same goal as the Center for Sports Medicine: attempting to improve medical care for high school athletes.

LURED BY MOUNTAINS
Dr. Bachman left his position with the Bulls in 1980 to move to southwestern Colorado, after several years of vacationing in the mountains with his wife. There, Dr. Bachman developed a small horse ranch.

“I was also able to go down the valley to play golf on Wednesdays and up the mountain to ski at Telluride on Sundays,” he says. In addition, he was elected county coroner for 13 years. He also acted as medical director for the Ouray Mountain Rescue Team for nearly all his years in Colorado.

Upon retiring from private practice as an orthopaedic surgeon in 1993, Dr. Bachman and his wife relocated to Denver, where both their children and grandchildren had resettled.

Two years later, Dr. Bachman started medical consulting for the Western Areas of the U.S. Postal Service, which in 1997 turned into senior area medical director position for the Western Area. Later, the Pacific Area was added, which expanded in 2006 to national medical administrator for the Postal Service. In that role, he supervised a team of approximately 50 physicians and 150 nurses across the country that implemented a medical case management program that significantly slowed the escalating costs of workers’ compensation and returned employees back to work more quickly.

Reflecting on his years in sports medicine, Dr. Bachman believes that today’s athletes are much savvier about preventing injury. Furthermore, less invasive arthroscopy now generally allows people to recover faster and return to daily activities.
With an area slightly more than 3.5 times the size of Washington, D.C., and a population of about 5 million, Singapore is one of the smallest nations in the world. But a commitment to pouring major investments into research and development has led many young U.S. researchers to seek opportunities in this high-tech, wealthy city-state in southeast Asia.

Following this trend, Kimberly Kline, MPH ’04, PhD ’05, recently accepted her first faculty position at Nanyang Technological University, a research-intensive public university in Singapore with more than 33,000 undergraduate and post-graduate students.

“I had some really attractive offers in the U.S., so it was a hard decision to make in some ways,” explains the native of Bismarck, N.D. “Ultimately, the resources and opportunities for doing science in Singapore right now convinced me that it was a good time to try someplace new. From a personal standpoint, the chance to live abroad again and in a part of the world I didn’t know much about, was also appealing. When my husband got a good job in Singapore, too, that made the decision pretty easy.”

The university, which is considered one of the top technological schools in Asia Pacific, chose Kline as one of 11 foreign scientists out of 174 applicants worldwide to build a lab at their facility. She will receive $3 million over five years to support her work. Her recruitment represents an effort by the Singapore government to lure talent to conduct cutting-edge research.

**SETTING UP SHOP**

After arriving in Singapore, Kline set up her lab, which studies the bacterium *Enterococcus faecalis*, an important hospital-associated pathogen that can cause life-threatening infections ranging from endocarditis to urinary tract infections to meningitis. This round bug secretes and attaches certain disease-associated molecules to the bacterial surface at just one or two spots on the cell.
Scientific research, specifically microbiology, has been an interest of Kline’s since her undergraduate education in biology at St. Olaf College in Minnesota when she started working in her advisor’s laboratory. “That experience clicked with me and I knew that research was something I wanted to pursue. From there, graduate school was the obvious next step, so I came to Northwestern.” There she worked in the lab of Hank Seifert, PhD, John Edward Porter Professor of Biomedical Research, studying the bacterium *Neisseria gonorrhoeae*.

During her time at Feinberg, Kline recalls her training as invaluable. “I obtained great scientific training from my PhD advisor,” she says. “Dr. Seifert’s expectations were high and he pushed us to think critically and independently from day one. He demanded carefully thought out and controlled experiments, coupled with clear and precise communication about research.”

As she continued on her career as a researcher, she spent part of her post-doctoral fellowship working at Washington University in St. Louis and the rest in Stockholm, Sweden. Her post-doc advisor at Washington University, Scott Hultgren, PhD ’88, taught her how to manage a lab effectively and mentor trainees in a rigorous and supportive way.

Now, with a tenure-track position, Kline says she has every resource she needs to pursue her research. “For the time being, I’m quite content. But, who knows about the future? There are many universities and cities in the U.S. and elsewhere that appeal to me, and would be great and exciting places to live and work.”

“I like to use the analogy of a navel on an orange — many fundamental molecular processes that are critical for this bacterium to cause disease happen at just one or two little navels, or foci,” she says. “My lab is interested in how and why these foci form, and whether they might be useful antimicrobial targets. In addition, some of the surface structures that are assembled at foci are critical for disease, so we also study the role of some of these molecules during infections.”

While Kline spends most of her time in the lab with three researchers, one post-doctoral fellow, three doctoral and two undergraduate students, she also gives a few microbiology lectures to undergraduate and graduate students each term. Since arriving in Singapore in November 2011, she has built a number of collaborations with microbiologists at her own and other universities on the island, as well as with groups in Israel, Germany, Denmark, Sweden, and the U.S.

**ISLAND OF DIVERSITY**

In addition to the diversity of Kline’s research collaborations, her colleagues in Singapore also come from a variety of backgrounds. “I’m surrounded by Singaporeans, Australians, Indians, Swedes, Danes, Brits, Italians, Dutch and...you get the idea,” she says. “One of the fantastic things about Singapore is that it is a small place, so it’s easy to meet and interact with like-minded scientists.”

And, she says the transition to life in Singapore hasn’t been difficult since most people speak English and research is a universal language. “Science is such an international discipline and operates similarly wherever you go,” she explains. “When you are in the lab here, it feels, looks, and operates the same as the labs in which I’ve worked in Chicago, St. Louis, and Stockholm.”

**CHOOSING A RESEARCH PATH**

Kline works at Nanyang Technological University in Singapore, her lab is located in the School of Biological Sciences.

Dr. Kline (third from right), with her lab staff, says it’s easy to collaborate in Singapore because of its relatively small size.
President’s Message

We all know homecoming is an annual tradition in the United States where many universities, colleges, and high schools welcome back their alumni. It is usually built around a central event, such as a football game. Northwestern University’s homecoming weekend October 26 and 27 gave some medical school alumni a chance to connect with each other and with current students. On that Friday and Saturday, the National Alumni Board had its semi-annual meeting, and the Education Advisory Forum, made up of medical school alumni under Dr. Ray Curry, vice dean for education, also met.

During the meetings, we were introduced to Alan M. Krensky, MD, the newly appointed vice dean for development and alumni affairs. He spoke about some of his vision for the future of the medical school and Northwestern Medicine, which were very positive despite the current challenges in healthcare economics.

The weekend also offered enjoyable opportunities for alumni to meet and interact with medical students. As part of the Advisory Forum, three students participated in a panel, giving their perspectives on the new MD curriculum, which they have enjoyed with minimal transition problems. And on Saturday, 22 students rode the bus to Evanston with at least 40 alumni to attend the football game against Iowa.

Special thanks go to Drs. Bruce Scharschmidt and his wife Peggy Crawford who have graciously provided medical students’ with game-day tickets for the past two homecomings. Both alumni and students had a great time! The medical students appreciate the opportunity to go to the game and interact with alumni from different specialties and geographic areas. (By the way, Northwestern is 2-0 when alumni take students to the game.)

To continue to foster relationships with students, the board approved a proposal to ask alumni to contribute either the full or some portion of the ticket price for a medical student to attend the Alumni Weekend Reunion Ball in April 2013. The medical students want more interaction with alumni and would like to attend the event. So now we alumni can make it happen.

I hope to see everyone at the next Northwestern University medical school reunion April 19-20, 2013. I encourage all alumni to take advantage of any opportunity to mentor Feinberg students and interact with other graduates.

Have a fantastic holiday season.

Carpe diem,
Jimmy Hill, BA ’71, MD ’74, GME ’79
President, Alumni Association
j-hill2@northwestern.edu

Paul BottoNE, President of the Class of 2013, wasn’t afraid to show his Northwestern spirit at the game with this Go Cats! banner.

Alumni Bruce Scharschmidt, MD ’70, and his wife, Peggy Crawford, MD ’73, pose with Wildcat Willie. Due to their generosity, 22 medical student leaders were able to attend the homecoming football game with alumni in October.

Alumnus Julie Melchior, MD ’91, with medical student Ashima Singal, an M3 class senator.
For the past year, Marlene Goodfriend, MD '69, has been working for Medecins Sans Frontieres as a mental health advisor for field programs and is based in the operational center office in Amsterdam. Dr. Goodfriend writes, “There is periodic travel to the field. It’s an interesting job with a wonderful medical humanitarian organization.”

After completing three years at Good Samaritan Hospital in Lebanon, Pa., as a gastroenterologist, Trent Nichols, MD '69, GME '76, ’78, had his research paper, “Mitochondria of Mice and Men: Moderate Magnetic Fields in Obesity and Fatty Liver” published in Medical Hypothesis. He also has a chapter on nutrients in viral hepatitis and fatty liver in Ingrid Kohlstadt’s textbook, Advancing Medicine with Food and Nutrients, second edition (2012). In addition, he served as a faculty expert for the Probiotic Symposium 2012.”

Although Joseph Motto, MD ’65, GME ’69, of Eau Claire, Wis., retired from GI practice in 2002, he has continued to do limited gastroenterology work, primarily endoscopy, at Mayo Scottsdale for nine of the last ten years, including 2012. Dr. Motto writes, “However, I believe I am finally fully retired as I have lost credibility with friends and family on an annual basis. Future travel will be purely for pleasure, such as our trip to Midway Atoll this past March for nature photography and brushing up on military history.”

Although John Finley, MD ‘72, a cardiologist with the Alaska Heart Institute in Anchorage, actively practices general cardiology with a subspecialty in echocardiology and cardiac CT angiography.

Robert Kloner, PhD ’74, MD ’75, is professor of medicine in the Cardiovascular Division, Keck School of Medicine, at the University of Southern California in Los Angeles. He is also director of research of the Heart Institute of Good Samaritan
Hospital in Los Angeles and attending cardiologist at Los Angeles County/University of Southern California Medical Center. Dr. Kloner has made major contributions to the understanding of such concepts as no-reflow phenomenon, stunned myocardium, limitation of myocardial infarct size, post-reperfusion apoptosis, reperfusion phenomena and triggers of cardiovascular events. Other major research interests include cardiac cell transplantation, the effect of toxins on the heart, preventative cardiology, hypertension, and PDE5 inhibition. He has participated in studies funded by the NIH on stunned myocardium, the healing phase of myocardial infarction, cardiac cell transplantation, doxorubicin cardiomyopathy, functional analysis of cardiac grafts, and stem cells. He has served on the NIH Cardiovascular Study Section A and has participated in a number of NIH workshops. He chaired an NIH workshop in September 2010 on cardioprotection.

David Oppenheimer, MD ‘79, GME ‘80, of Boulder, Colo., medical director of the Department of Imaging for Boulder Community Hospital, is alive and kicking 33 years later!

After 17 years on faculty at Michigan State University, Michael Kron, MD ‘80, GME ‘83, moved to Wisconsin five years ago and now works at the Medical College of Wisconsin in Milwaukee. Dr. Kron writes, “I continue my research in parasitic diseases with a laboratory in the Biotechnology and Bioengineering Center where we study the structure and function of parasite aminoacyl-tRNA synthetases, and I see patients in both outpatient clinics and inpatients on the infectious diseases consult service. With more than 25 years of international experience around the world, I maintain a faculty position at the University of the Philippines College of Medicine in Manila. I am also director of the global health education pathway (concentration area) of our medical school in Milwaukee.”

Jordan Perlow, MD ‘86, recently celebrated 20 years of maternal-fetal medicine practice in Phoenix, and was named director of the Division of Maternal-Fetal Medicine at Banner Good Samaritan Medical Center. Dr. Perlow writes, “My oldest son, David, was recently married and has been living in Jerusalem for the past four years. My daughter, Amber, also recently married in Hawaii.”

Melbourne Boynton, MD ‘87, of Rutland, Vt., attended Alumni Weekend and had a great time seeing his fellow medical school graduates. Dr. Boynton writes, “I had a wonderful time at the 25th reunion reconnecting with a bunch of classmates.

It was very inspiring to hear what all our class has accomplished. It was especially great to share the reunion with my father, Lynn W. Boynton, MD ‘62, and mother who were there celebrating his 50th reunion. It would have been the 75th reunion for my grandfather, Ben L. Boynton, MD ‘37. Class of 1987, please stay in touch and I look forward to our next reunion.”

Matthew Goren, MD ‘89, and wife, Molly, of Chicago, are empty-nesters with daughter, Maeli, at Princeton and son, Ben, recently starting at Northwestern. Dr. Goren writes, “I guess I have to start working even harder!”

John Lauris Wade, MD ‘90, of Highlands Ranch, Colo., is a partner with Radiology Associates of Bennington, Vt.

Alisa Bromberg, MD ‘93, of Pacific Palisades, Calif., is happily working in private practice as a pediatrician and a mother of two active, busy boys. Dr. Bromberg writes, “We will be coming to Chicago for my 20th med school reunion and hope to see my fellow classmates! And please come out to the Pacific Palisades to visit!”

Kieran Phelan, MD ‘91, GME ‘94, and wife Jackie, of Terrance Park, Ohio, both work as pediatricians and researchers at the Cincinnati Children’s Hospital Medical Center. Jackie was recently funded by the CDC on work to prevent suicide in adolescents and Dr. Phelan has an NIH grant to conduct a trial of child-proofing and literacy promotion in children of young mothers in the Cincinnati area. They have three sons: Kieran, 17, a junior in high school; Ben, 13, 8th grade; and Jimmy, 8, 3rd grade.

After working in Albuquerque, N.M. for eight years, Bryan Goss, MD ‘99, is now at Christus St. Vincent in Sante Fe, N.M., in the Radiation Oncology Department.

Bassam Kadry, MD ‘05, is the director of technology discovery for Stanford Medicine X. Dr. Kadry writes about a September conference held by Stanford that was designed to bring together
patients, academics, entrepreneurs, technocrats, and engineers to talk about technologies that will shape the future of medicine. "My hope is that by sharing this, more physicians, hopefully Northwestern alums, will be engaged in leading the health information technology revolution. It is a very hot topic here in Silicon Valley and one that may resonate with NU.”

Simon Kimm, MD ’05, of New York, is currently a fellow in urologic oncology at Memorial Sloan-Kettering Cancer Center. He lives in Manhattan with his wife, Jin, and their one-year-old son, Alexander.

Stephanie Hartselle, MD ’07, of Providence, R.I., completed her fellowship in child and adolescent psychiatry at Brown University and is now the director of psychiatric emergency services at Hasbro Children’s. Dr. Hartselle writes, “My husband, John, and I had our second son, Nolan Hewitt, in February.”

Bradley Gross, MD ’08, is in his PGY-5 year at Brigham and Women’s Hospital/Harvard Medical School Department of Neurosurgery. Dr. Gross is subspecializing in cerebrovascular neurosurgery and will complete fellowship training with the Barrow Neurological Institute. He has submitted more than 30 papers over the past year in cerebrovascular neurosurgery. Dr. Gross and his wife, Aviva Costello, live in Brookline, Mass.

Samir Kakodkar, MD ’11, of Oak Brook, Ill., a PGY2 at Rush University Medical Center, had his first-author abstract accepted to the Digestive Disease Week Conference. It was titled, “The Effect of the Specific Carbohydrate Diet on Gut Bacterial Fingerprints in Inflammatory Bowel Disease.”

GME PROGRAMS

William Dawson, MD, GME ’66, of Glenview, Ill., continues to combine lives in both medicine and music, although long retired from the practice of orthopaedic/hand surgery. He remains active in the Performing Arts Medicine Association as a past president, now serving as its bibliographer and associate editor of the organization’s peer-reviewed journal. Musically, he continues his other love as a symphonic bassoonist and music teacher, playing with several Chicago-area orchestras and concert bands.

Indu Partha, MD, GME ’96, headed west to Tucson, Ariz., in 2004 after her last year of internal medicine residency at Northwestern and a position as clinical assistant professor with Loyola University Health System. Dr. Partha writes, “My husband, Sai, is an associate professor at the University of Arizona College of Medicine in the Division of Pulmonary, Critical Care, and Sleep Medicine. I have been practicing outpatient internal medicine with Northwest Medical Center. We have three children: Meghana, 16; Maya, 13; and Ajay, 9. I was at Northwestern so fleetingly, but would love to hear from any of my fellow residents or interns and see how they are doing!”

Kristen Thomas, MD, GME ’96, is now the division chair of pediatric radiology at the Mayo Clinic in Rochester, Minn., and is in her second term as the radiology residency program director.

Gordon Wood, MD, GME ’07, of Glenview, Ill., joined the Midwest CareCenter Palliative Care Services at Northwestern Lake Forest Hospital. He will serve as the lead physician for the program. Dr. Wood was previously at the University of Pittsburgh Medical Center, where he served as assistant professor of medicine in the Section of Palliative Care and Medical Ethics and director for the university’s fellowship in palliative care.
Charles Blanke, MD '88, of Vancouver, vice president of Systemic Therapy and division chief at the University of British Columbia Medical Oncology, was elected chair of SWOG, formerly the Southwest Oncology Group, one of the largest oncology research networks in the world. Dr. Blanke will move to the Knight Cancer Institute in Portland, Ore., in February 2013 and will base the cooperative group’s headquarters there.

Christie Seibert, MD '92, associate dean for medical education at the University of Wisconsin School of Medicine and Public and Health, was named a fellow in the Hedwig van Ameringen Executive Leadership in Academic Medicine Program for Women, or ELAM. The ELAM fellowship prepares senior women faculty at schools of medicine, dentistry, and public health to effect sustained positive change as institutional leaders.

The American College of Emergency Physicians and HealthLeaders magazine named Sudip Bose, MD '99, one of America’s health care leaders. During a 15-month deployment to Iraq with the U.S. Army in the mid-2000s, Dr. Bose treated thousands of soldiers and Iraqis, including Saddam Hussein, and earned a Bronze Star for his service. Dr. Bose works as an emergency physician at the Medical Center Hospital in Odessa, Texas. He also serves as medical director for Odessa and the surrounding county. He has founded several medical education companies and works as an advocate for veterans. He also serves as a medical correspondent for a weekly health segment on a CBS station.

James Sipkins, MD, GME '82, FACP, was recognized with the 2012 Outstanding Volunteer Clinical Teacher Award from the American College of Physicians. The award is bestowed upon a member, fellow, or master of the College who has consistently volunteered his or her services to teach medical students and residents. Dr. Sipkins is an associate professor of clinical medicine at Northwestern University Feinberg School of Medicine and is in private practice of general internal medicine. He has devoted substantial effort to teaching medical students and residents over the years.

Jeffrey M. Rothenberg, MD, GME '96, of Indianapolis, Ind., became president of the medical staff for Indiana University Health in January. He completed a large-scale sculpture, Globes, a blown glass and steel mobile, in the lobby of the new Glick Eye Institute at the Indiana University School of Medicine.

Samuel Koide, MD '53, GME '58, of Dobbs Ferry, N.Y., was awarded the Congressional Gold Medal during a November 2011 presentation in Washington, D.C. by President Obama. Dr. Koide was recognized with other Japanese Americans who fought in World War II. In May 2012, Dr. Koide published “Anti-ACTL7a antibodies: a cause of infertility” in Fertility and Sterility. At 88 years old, Dr. Koide finished 14 New York Road Runner races from January to August 2012, running a total distance of 65.9 miles.

Kenneth Rodino, MD '79, completed his residency and fellowship in anesthesiology at the University of Chicago before taking on a faculty position at Northwestern University Feinberg School of Medicine for 10 years. In 2009, he transferred to Advocate Illinois Masonic Medical Center as its director of obstetrical anesthesiology. During each of the last three years, he has been named Teacher of the Year by graduating anesthesiology residents at Illinois Masonic. In January, he was promoted to vice chair of ACGME-RRC compliance for the anesthesiology department at Illinois Masonic.

Stephen Anderson, PT '80, of Bellevue, Wash., is in his 14th year as CEO of Therapeutics Associates and his 32nd year with the company. Therapeutics Associates is a private physical therapy company with more than 70 outpatient clinics and two major hospital contracts. Dr. Anderson received the 2012 Alumnus of the Year award from the Northwestern University Department of Physical Therapy and Human Movement Sciences.
In Memoriam

Joseph H. Baum, Unknown degree ’62, of Quitman, Ga., died July 3, 2012.

Carl B. Bean, MD ’44, GME ’45, of Maple Shade, N.J., died July 14, 2012.

Robert V. Bourdeau, MD ’45, GME ’51, ’54, MS ’53, of Seattle, died July 12, 2012.

William S. Coxe, MD, GME ’56, of St. Louis, died August 2, 2012.


Ata Kenan Erdogan, MD, GME ’05, ’09, of Chicago, died August 26, 2012.

Gael R. Frank, MD ’55, of Kansas City, Mo., died August 26, 2012.

Joseph M. Green, MD ’52, of Tucson, Ariz., died October 5, 2012.

Cyril H. Hauser, MD ’44, GME ’47, ’48, of Glenview, Ill., died June 1, 2012.

William A. Johnson, MD ’48, of Saratoga, Calif., died October 3, 2012.

Victoria Kut, MD, GME ’05, of Lake Forest, Ill., died July 15, 2012.


Lindsay E. McClenny, MD ’48, of Seattle, died July 18, 2012.


Richard G. Neidballa, MD ’61, of Wheaton, Ill., died August 5, 2012.

Paul S. Reeder, MD ’48, GME ’50, of Fort Myers, Fla., died August 15, 2012.


Don E. Sando, MD ’49, GME ’51, ’55, of Dayton, Ohio, died October 7, 2012.

Sigurd C. Sandzen, Jr., MD, GME ’61, of Vero Beach, Fla., died July 11, 2012.

Joseph D. Skokan, MD ’67, of Modesto, Calif., died August 14, 2012.

Paul D. Urnes, MD ’59, of Chicago, died September 13, 2012.


Arthur C. Watson, Jr., MD ’51, of Nacogdoches, Texas, died September 29, 2012.

Donald K. Williams, MD ’52, of Yakima, Wash., died August 21, 2012.

Upcoming Events

For more events, visit the calendar on the home page of wardroundsonline.com.
Gifts for everyone on your list...

...and for yourself, too.

Here’s the best way to shop for Northwestern medical school merchandise — just visit our online store where you’ll find the latest in T-shirts, sweatshirts, mugs, hats and more! You can add quality items to your own wardrobe and pick up some great gifts as well.

www.cafepress.com/feinbergschoolofmedicine