Defeating Obesity

While nutrient-rich food choices are among the elements key to achieving a healthy weight, the world continues to face an obesity problem. Learn how a new Northwestern center proposes to address this 21st century epidemic. 14
Dean’s Message

This academic year, 2008-09, Northwestern University’s Feinberg School of Medicine celebrates its sesquicentennial. Kicking off a yearlong observation of 150 years of excellence in medical education at Founders’ Day, we will be looking back at our illustrious history through a variety of special upcoming events. Understanding our history can only help us better appreciate our present and give us the foundation for advancing our future.

In this issue of Ward Rounds, we begin our historical journey by revealing some of the factors that led seven idealistic physicians to buck the “establishment” and create a medical school of which they and future graduates could be proud. In the feature “Then & Now” we provide some information about our medical school 150 years ago that we hope gives you a sense of where we’ve been, where we are today, and where we plan to be moving forward.

Covered in our news section, an article about the Founders’ Day convocation features a keynote address that links the medical school’s founding with one of the biggest sociopolitical events of the time: the Lincoln-Douglas debates. This is quite an interesting coincidence given our country has just undergone a highly charged and history-making presidential election.

And finally, we encourage you to mark your calendar for Alumni Weekend 2009. This April’s reunion event will feature exceptional sesquicentennial programming and events that you surely will not want to miss. Look for more details in the coming new year.

Best regards,

J. Larry Jameson, MD, PhD

Vice President for Medical Affairs and
Lewis Landsberg Dean
Reforming health care

Thank you for your article on health care reform [“America Uncovered”] that appeared in the summer 2008 Ward Rounds. I agree that doctors are in the best position, as both providers and patients, to be considered “the most knowledgeable elements in the equation.”

I graduated from Northwestern in 1977 and have been practicing child and adolescent psychiatry in western Massachusetts for 25 years. Managed care came early and hard to our state, which led me to become more politically active in health care reform. I’ve been living through the Massachusetts mandated health insurance law implemented two years ago and do not see it as a cure for what ails our system. The goal of the Massachusetts legislation has been to expand coverage, but it has not contained costs, for either the individual or the state. Aside from the fact that there aren’t enough primary care doctors to treat all the newly insured, the law offers no relief to doctors struggling with their administrative burdens. Meanwhile, the health insurance companies continue to profit, as the cost of insurance keeps going up for businesses and the self-employed.

Like Dr. Quentin Young, I support a national health care plan, administered by the government with the elimination of private health insurance. This would affect only the financing of health care. Health care delivery would remain private: this is not socialized medicine. A poll in Massachusetts showed that 64 percent of doctors in our state support a national health care program as well.

We need physicians to be more active in expressing their viewpoints, based on their intimate experience with the health care system and the vagaries of private health insurance.

Susanne L. King, MD ’77
Lenox, Massachusetts

As an emergency physician in Augusta, Georgia, I wish to echo the concerns regarding access to health care raised in the summer 2008 Ward Rounds. Too many patients tell heart-rending stories of getting tangled in America’s health care web. They encounter hassles finding a doctor, often receive a rushed physician visit, and are then left to deal with their insurance company, or if uninsured, face an expensive bill. As a nation, we seem to be spending more and more for health care but receiving less and less.

Sixty years ago, health care costs equaled 3.5 percent of the gross domestic product (GDP). This year it is 17 percent and, if the trend continues, health care will total 29 percent of GDP by 2030. Yet, the Institute of Medicine estimates that some 20,000 Americans die each year because of limited access to health care, and the United States has one of the highest death rates from treatable illness among industrialized countries. We cannot afford to sit back and wait for the future of health care to unfold.

Paul H. Bonucci, MD ’96
Martinez, Georgia

It is important that doctors—especially those in organized medicine—take a stand and provide leadership for the country in improving our health care system. I think we need an entire overhaul of the system. The cornerstone of my revised system would be the development of univer-
sal health savings accounts to reinforce the physician/patient relationship and possibly restore a free market. The associated universal high deductible health insurance should be administered by a single government payer (Medicare) with management by an independent federal agency having separate income tax authority and a permanently independent account. Physicians would make up at least one-third of the managing board of the agency.

Individuals would pay deductibles of $2,000 to $3,000 and families, $4,000 to $5,000, for anyone earning equal to or more than the national average income. Individuals or families earning less than one-third of the national average would pay zero deductibles with gradations between. Any costs above the deductible would be covered by Medicare at present fee-for-service rates (with the same fee-for-service rates imposed, during the deductible period at least temporarily). This system would cover the entire health-related industry, including physicians, facilities, pharmaceuticals, and device manufacturers. To help minimize overhead expenses and make practice management easier, every person would possess an electronic health care record card that would include automatic billing for services.

I also recommend revising the malpractice litigation process so that business and legal sectors come under government price controls, as physicians are. My new system requires no-fault arbitration.

Robert E. Bunata, MD ’65, GME ’70
Fort Worth, Texas

Hospitalists involved with patients, hospital?
My compliments on the article “House Docs” in the spring 2008 Ward Rounds. As a retired community-based physician who practiced primary and specialty care in the office and hospital and was active in academics, I particularly appreciate the article’s mention of the importance of “communication between primary care physicians and hospital medicine specialists.” As I recall Dr. Mark Williams [chief, hospital medicine] saying some years ago, the “purposeful discontinuity of care” from outpatient to inpatient should not result in a decrease in quality. Unfortunately, quality has suffered in some hospitalist programs because of lack of communication.

I would like to ask Drs. Williams and Kevin O’Leary [associate chief, hospital medicine] two questions. First, the article makes no mention of in-hospital continuity of care by hospitalists, i.e., the same hospitalist caring for the same patient over time. I have been witness to a schedule of hospitalist coverage that is oriented to the convenience of the hospitalists, resulting in as many as three, four, or more hospitalists caring for a particular patient in a seven- to 10-day period and thus decreasing the quality of care. Does the Northwestern program emphasize in-hospital continuity of care by hospitalists? Second, do you see hospitalists participating in the “life” of the hospital, serving on committees such as medical records or bylaws?

Maynard D. Poland, MD ’61
Fort Myers, Florida

Drs. Williams and O’Leary respond:
Thank you, Dr. Poland, for your insightful comments on the article. We agree with you that continuity is a priority. Our hospitalists work for seven consecutive days when on the direct care (nonteaching) hospital medicine service. Using a seven-day rotation cycle maximizes continuity of care while preventing physician fatigue. We also make every attempt to have hospitalists take over the care of their prior patients when coming back on service. Though this is not always possible, this method is especially helpful for complicated patients who have prolonged hospital stays.

Do hospitalists participate in the “life” of the hospital? As you suspected, our hospitalists actively collaborate with Northwestern Memorial Hospital and the Feinberg School’s Department of Medicine. Hospitalists are naturally suited for quality improvement efforts and have played important roles in implementing the Rapid Response Team, revising the medication reconciliation process, and improving the quality of care for specific conditions such as heart failure, community-acquired pneumonia, and prevention of pressure ulcers.

Currently, our hospitalists are leading initiatives to implement a teamwork approach to hospital care, improve the hospital discharge transition process, and implement highly reliable venous thromboembolism prophylaxis. Our hospitalists also participate on and/or lead many institutional committees, including the department’s Quality Management, Clinical Informatics, Utilization Review, Pharmacy and Therapeutics, and Patient Care committees.
Facing
The medical school lecture halls of yesteryear are a far cry from the high-tech environment of today’s classrooms, where laptop computers are as common as pen and paper. Waiting patiently for a class to begin, however, hasn’t changed as evidenced by this photo of members of the Class of 1944. Dr. Seymour E. Wheelock snapped this shot while he and his classmates waited for Dr. Sumner L. Koch, a noted surgeon, to enter the amphitheatre for a surgery lecture.
As Northwestern University’s medical school approaches the 150th anniversary of its founding in 2009, Ward Rounds readers may find it both educational and eye-opening to compare various factors from then and now. “Then” is defined broadly as the early years of the medical school, not just 1859 when it opened, and “now” is not strictly confined to this year. The historical information comes from Leslie B. Arey’s Northwestern University Medical School 1859–1979 and documents found in the Galter Health Sciences Library’s Special Collections and University Archives.

By Ellen Soo Hoo

LEFT: THIS 1930 PHOTO SHOWS THE MONTGOMERY WARD MEMORIAL BUILDING (LEFT) AND PASSAVANT MEMORIAL HOSPITAL STANDING ALONE ON THE HORIZON. RIGHT: SEVENTY-FIVE YEARS LATER, THE ROBERT H. LURIE MEDICAL RESEARCH CENTER OF NORTHWESTERN UNIVERSITY OPENS ON THE PASSAVANT SITE.
THE NATIONAL SCENE

THEN: In the 19th century the United States saw the creation of more than 400 medical colleges, some just diploma mills and only one in four affiliated with academic institutions. Illinois had 39 medical colleges.

NOW: The nation has 130 accredited medical schools, all affiliated with universities. Illinois’ medical schools include Loyola University, Northwestern, Rosalind Franklin University of Medicine and Science, Rush Medical College, Southern Illinois University, University of Chicago, and University of Illinois. With 7 medical schools, Illinois is tied with Pennsylvania. Both trail New York, which has the most (12) medical schools of the 50 states as well as California and Texas, which have 8 medical schools apiece.

WHAT’S IN A NAME?

THEN: The articles of incorporation signed on March 24, 1859, by a group of disaffected faculty members from Rush Medical College (founded 16 years earlier) established the Medical Department of Lind University. The main campus of Lind University was located in Lake Forest, Illinois. The medical school’s original founders were Drs. Edmund Andrews, William H. Byford, Nathan S. Davis, John H. Hollister, Ralph N. Isham, Hosmer A. Johnson, and David Rutter. The first academic year began on October 9, 1859.

When Lind University became Lake Forest College in 1863, its medical department was renamed Chicago Medical College (CMC) because the medical school leaders wanted to preserve their autonomy. In 1870 CMC became the Medical Department of Northwestern University. However, CMC was not fully integrated into the University until 1906 when it surrendered its charter and became Northwestern University Medical School.

NOW: Northwestern University Medical School was renamed Northwestern University’s Feinberg School of Medicine in 2002.

HOW MUCH DOES IT COST?

THEN: According to the announcement for the first year that ran from October 1859 to March 1860, fees for the junior course were $60 and the senior course, $61 plus a $20 graduation fee. The announcement also mentioned that room and board could be obtained in Chicago for $3–3.50 per week (approximately $95 for the school year).

NOW: The annual tuition for the 2008–09 academic year is $41,926. First-year medical students can expect to pay $3,200 for equipment, books, and supplies and $12,375 for room and board. Tuition and fees may be defrayed by scholarships and loans.

MOVING AROUND

THEN: For the first four years, the medical school occupied rented rooms in the Lind Block, located at Market (now Wacker Drive) and Randolph Streets in Chicago. In 1863 the school relocated to a new building at State and 22nd Streets (built at a cost of $6,000, which equals $94,865 in 2005 dollars) that contained a lecture room, chemical laboratory, library, dispensary room, anatomical and surgical amphitheatre, museum (containing anatomical specimens), and anatomy rooms. The school’s next home was a new structure built in 1870 at Prairie and 26th Street adjacent to Mercy Hospital. When the medical school outgrew that facility, Northwestern purchased land at 25th and Dearborn Streets (first used in 1893–94). Wesley Hospital built a facility on the south half of the block in 1901.

NOW: Home for the medical school since 1926 has been Northwestern University’s 20-acre Chicago campus. The Montgomery Ward Memorial Building opened that year to house the University’s medical and dental schools. The medical school now occupies all or part of 11 buildings on or adjacent to the Chicago campus; its newest building is the Robert H. Lurie Medical Research Center of Northwestern University, completed in 2005 at a cost of $218 million and containing research laboratories and educational space.

Located right on campus are two clinical affiliates: Northwestern Memorial Hospital and Rehabilitation Institute of Chicago. The Jesse Brown VA Medical Center’s Lakeside Community-Based Outpatient Center is located a block and a half off campus on Ontario Street. Children’s Memorial Hospital will move from the Lincoln Park area to the Chicago campus in 2012 with the opening of the Ann & Robert H. Lurie Children’s Hospital of Chicago.
The medical school’s first affiliate was Mercy Hospital, located in 1859 on Wabash Avenue near Van Buren Street, which had 60 beds. The school’s affiliation with Mercy continued for six decades until it was suddenly severed in 1920. Mercy then became an affiliate of the newly reconstituted medical school of Loyola University.

With more than 2,400 beds, the teaching hospitals affiliated with the medical school are Children’s Memorial Hospital, the former Evanston Northwestern Healthcare (now NorthShore University HealthSystem, affiliation to end in 2009), Northwestern Memorial Hospital, Rehabilitation Institute of Chicago, and Jesse Brown VA Medical Center.

The first medical library contained 400–500 volumes. The Galter Health Sciences Library has become a one-stop source for information access, thanks to an extensive electronic collection of 8,000 journals, 800 books, and more than 400 databases, all accessible from any Internet connection. The print collections number more than 280,000 volumes.

Enrollment at Northwestern’s medical school includes 680 medical students, 1,118 residents, 160 graduate students, and more than 300 students enrolled in various master’s degree, doctoral degree, and certificate programs including physical therapy, public health, genetic counseling, clinical investigation, and clinical psychology.

This year’s entering medical students number 169 (95 men, 74 women). They are a diverse group, representing the various racial and ethnic backgrounds that make up the nation’s population; members of the class converse in a variety of languages heard around the world. Fourteen have entered the Medical Scientist Training Program in which they earn both MD and PhD degrees, typically in seven years.

The first class consisted of 33 men—19 juniors and 14 seniors—who had attended other medical colleges before matriculating. By the second year 54 students were enrolled and by the third, 63.

Having a liberal arts education was not a prerequisite for admission in the early years. As late as the 1903–04 academic year, only 138 (24 percent) of 587 students held college degrees. According to the Northwestern University President’s Report for that year, 159 students listed their church affiliation with Methodist being the largest number (42), not surprising since the University’s founders came from that denomination.

Northwestern had its own Woman’s Medical College beginning in 1892 but closed it in 1902 due to dwindling enrollment as other medical schools became coed. It was another quarter of a century (1926) before four women were admitted to Northwestern’s medical school. Since it was not considered proper to have mixed dissection groups, the women formed their own group. Perhaps not all that coincidental, four was the optimum number for a gross anatomy dissection group.

Annually the Admissions Office distributes about 3,000 copies of a viewbook, which is taken on recruiting trips to undergraduate schools and mailed to premed advisers and individuals who request information. Recruitment is aided by a national application system (AMCAS) administered by the Association of American Medical Colleges that allows applicants to apply to several schools simultaneously. Potential applicants also learn about Northwestern and MD course offerings through the school’s web site.
**Faculty Growth**

**Then:** The Medical Department of Lind University began in 1859 with 11 professors each teaching a separate discipline (Anatomy, Physiology and Histology, Inorganic Chemistry, Materia Medica and General Therapeutics, General Pathology and General Hygiene, Surgical Anatomy and the Operations of Surgery, Organic Chemistry and Toxicology, Principles and Practice of Surgery, Principles and Practice of Medicine, Midwifery and the Diseases of Women and Children, and Medical Jurisprudence). With the addition of Clinical Medicine and Clinical Surgery, 13 subjects were taught. By 1891, the faculty had grown to 31 members.

**Now:** A four-year course for the MD degree is the norm today. Graduates typically enter residency training as well as fellowships that add three to seven years before beginning practice.

**Then:** Before the founding of the Medical Department of Lind University, a student could enter almost any medical school he desired and earn a degree by sitting through two sets of identical lectures, presenting a thesis, and passing an oral examination.

The founders initially offered a two-year course, which in 1875 was expanded to three years. The added time plus more rigorous educational standards caused a dip in enrollment and graduation rates. Upon graduation, the physicians immediately could begin practice, usually as an apprentice to an established physician.

**Now:** A four-year course for the MD degree is the norm today. Graduates typically enter residency training as well as fellowships that add three to seven years before beginning practice.

**Then:** The medical school faculty comprises 4,275 members, of which 1,743 are full time, 198 part time, and 1,430 contributed service. More than 300 are research faculty members. Women faculty members total 1,655, or 39 percent, compared with the early days when no women were found on the medical school faculty.

The hospitals where faculty members care for patients (and the number at each) are Children’s Memorial Hospital, 690; Evanston Northwestern Healthcare (until June 2009), 780; Jesse Brown VA Medical Center, 209; Northwestern Memorial Hospital, 1,542; and Rehabilitation Institute of Chicago, 118.

Northwestern’s medical school now has 25 departments and more than two dozen programs, centers, and institutes.
Practicing medicine requires skill but what about creativity? The new chair of medicine, Douglas E. Vaughan, MD, believes much room exists for ingenuity and imagination in his chosen profession where opportunities for discovery have no limits. He shares that passion with medical students and residents. “I want each and every one of them to feel excited about getting up in the morning, thinking of a new hypothesis, and then being able to test it,” he remarks. “How great is that?”

Dr. Vaughan, the Irving S. Cutter Professor of Medicine, joins Northwestern University’s Feinberg School of Medicine after 15 years at Vanderbilt University in Nashville, Tennessee. While at Vanderbilt he served as the chief of cardiovascular medicine and physician-in-chief of the Vanderbilt Heart and Vascular Institute. And after all these years in medicine, Dr. Vaughan is still exhilarated about the possibilities that lie ahead. Says David M. Bader, PhD, Gladys P. Stahlman Professor of Cardiovascular Research at Vanderbilt, “Doug has everything you want in a leader. He’s honest, hard working, forthright, and highly intelligent. But Doug also has qualities that make him a perfect fit for leadership in academic medicine and research. He is curious about everything.

“I could walk into Doug’s office to discuss a broken centrifuge and walk out knowing every detail on some bug from Tanzania or the latest book on John Adams,” he adds. “He is hardwired for discovery. You guys got one of my best friends!”

The sense of what could be and what more is to come is reflected in Dr. Vaughan’s vision for the department. “I would like the department to become even more integrated, collaborative, and cooperative,” he says. “We will push forward in a positive way.” Dr. Vaughan stresses the importance of partnering across the disciplines and working together with the medical school’s affiliated hospital members and others in the Northwestern community to provide exceptional patient care. He will build upon the momentum already present at the Feinberg School to create a new model for an outstanding academic medicine department. He intends to achieve this by growing the department’s research portfolio, refining and expanding clinical programs, and nurturing the training of residents. “I see that my job is like spinning plates,” remarks Dr. Vaughan. “Every part is important, but, at times, one plate will need more attention than the others. But, we will still be recognized as great in all three areas.”

Northwestern is well aware that in Dr. Vaughan the institution has gained an exceptional colleague. Anthony J. Schaeffer, MD ’68, Herman L. Kretschmer Professor and chair of urology, who headed the medical school’s search committee, saw immediately what an asset Dr. Vaughan would be. “Among an outstanding field of candidates, Douglas Vaughan stood out,” says Dr. Schaeffer. “His record of achievements at Vanderbilt was exemplary. His vision and proven ability to implement change will be instrumental in his role as chair of the Department of Medicine.” Dr. Vaughan joined the faculty on June 1. In October the medical school held an investiture ceremony in his honor.

In 1980 Dr. Vaughan graduated from the University of Texas Southwestern Medical School at Dallas. He then went on to an internship in internal medicine at Parkland Memorial Hospital—where President John F. Kennedy was taken shortly after he was shot by Lee Harvey Oswald on November 22, 1963—and the Dallas VA Medical Center. Dr. Vaughan completed a fellowship in cardiology and a clinical fellowship in interventional cardiology at Brigham and Women’s Hospital in Boston and a research fellowship in medicine at Harvard. In 1988 after receiving a career development award from the American Heart Association, he went to work with Désiré Collen, MD, PhD, at the Center for Thrombosis and Vascular Research at the Katholieke University in Leuven, Belgium.

“At the time I was working on tPA [tissue plasminogen activator], the first recombinant ‘clot buster,’” he says. “Dr. Collen’s lab was the best in the world so I went there to learn what I could.” Dr. Vaughan credits his experience in Belgium as the defining point in his life. “Dr. Collen suggested that I look into PAI-1 [plasminogen activator inhibitor-1]. My research has focused on
the complex biology of PAI-1 since I started my own independent laboratory. It is an enduring stimulus for our investigative curiosity and effort.” The mammalian fibrinolytic system works to dissolve clots or, as Dr. Vaughan describes it, the system is an important “housekeeper.” PAI-1 inhibits plasminogen activators and regulates the generation of the active enzyme plasmin. The latter functions to remove blood clots as well as influence extracellular matrix remodeling. Dr. Vaughan and his colleagues have shown that an elevation of PAI-1 presents an increased risk of cerebrovascular events as well as results in a variety of diseases, including Alzheimer’s, diabetes, or the fibrosis found in many organs.

“To study the role of PAI-1 in cardiovascular disease, we have engineered and generated transgenic mouse lines that over express either wild-type or various mutant forms of human PAI-1,” explains Mesut Eren, PhD, research assistant professor of medicine in the Division of Cardiology. “Some of these transgenic mice display a number of complex phenotypic abnormalities due to the expression pattern of mouse lines that over express either wild-type or various mutant forms of human PAI-1,” explains Mesut Eren, PhD, research assistant professor of medicine in the Division of Cardiology. “Some of these transgenic mice display a number of complex phenotypic abnormalities due to the expression pattern of PAI-1 since I started my own independent laboratory. It is an enduring stimulus for our investigative curiosity and effort.” The mammalian fibrinolytic system works to dissolve clots or, as Dr. Vaughan describes it, the system is an important “housekeeper.” PAI-1 inhibits plasminogen activators and regulates the generation of the active enzyme plasmin. The latter functions to remove blood clots as well as influence extracellular matrix remodeling. Dr. Vaughan and his colleagues have shown that an elevation of PAI-1 presents an increased risk of cerebrovascular events as well as results in a variety of diseases, including Alzheimer’s, diabetes, or the fibrosis found in many organs.

“To study the role of PAI-1 in cardiovascular disease, we have engineered and generated transgenic

human PAI-1, including spontaneous formation of blood clots in coronary arteries, hair loss, amyloid deposition, and polycystic ovarian syndrome.”

Increased body mass index (BMI) correlates with an increase of PAI-1: a discovery that Dr. Vaughan and his associates have explored in the course of their work. In a world where BMI numbers—a person with a BMI of 30 or more is considered obese, while a person with a BMI equal to or more than 25 is over-

weight—have climbed to epidemic proportions, this connection is disturbing. And heart disease as a consequence of this growing medical crisis will likely only get worse. The World Health Organization projects that by 2015 2.3 billion adults globally will be overweight and more than 700 million will be obese.

Dr. Eren began his collaboration with Dr. Vaughan at Vanderbilt in 1997 and came to Northwestern to continue their work together. Asish Ghosh, PhD, research associate professor of medicine in the Division of Cardiology at the Feinberg School, also decided to collaborate with Dr. Vaughan and pursue their joint research venture on tissue fibrosis. Says Dr. Ghosh, “Doug is an excellent researcher in the field of cardiovascular diseases, obesity, and tissue fibrosis. I am fortunate to have the opportunity to collaborate with him on such a challenging project. As our mission is to dissect the cellular and molecular basis of fibrosis, I believe that our research on cardiac fibrosis will be very productive.”

Dr. Vaughan’s team also includes his longtime lab manager, Joseph Covington. After 14 years with Dr. Vaughan, Covington considers him not only a boss but also a friend. The new chair encouraged Covington to continue working in research.

“Years ago, I was ready to call it quits and go into construction, start a business, work at Wal-Mart, or anything else,” shares Covington. “A few days prior to leaving my job, I ran into a friend of Doug’s. He knew that Doug was looking for a lab manager and set up a meeting for me. I can’t believe Doug hired me as I had basically told him this whole research thing wasn’t for me. Well, I walked out of his office with not only a new job offer, but also a different feeling about my life and where I might be headed. He has that effect on people. Coming to Chicago was an easy decision.”
tasis does not exist for Dr. Vaughan. While some may view bringing research results from the bench to bedside as a linear process, he sees it as a game of table tennis between basic science and clinical practice. He attends morning report to encourage residents to broaden their problem-solving skills. “I want the chief residents to include genetics and pathophysiology in their instructions. The students and trainees need to gain confidence with genetics, not just the nuts and bolts of a disease,” he remarks. “As they continue on into practice, they will see that there is a genetic component to disease and disease processes.”

Dr. Vaughan has high expectations of residents and stresses that they need to use each new experience to continue to improve. He contributes to the education of all who come to his department to learn, even meeting with third-year medical students to discuss a disease or two and “give them a sense from leadership of the potential to do something great.” As far as his clinical interests, Dr. Vaughan uses his expertise to see patients with problems associated with arterial thrombosis and unexplained coronary diseases.

Never satisfied with finding the answers to just one scientific question, Dr. Vaughan the clinician, scientist, and educator always raises another and digs deeper for more information at all levels: molecular, cellular, animal, and human, according to John A. Schoenhard, MD, PhD, now a cardiovascular medicine fellow at Vanderbilt. “In basic research, Doug challenged his team to focus on topics of clinical relevance and go beyond heart and blood vessel biology, for example, to look at the origins of diabetes, obesity, and circadian rhythms,” recalls Dr. Schoenhard. “In clinical research, Doug has not been satisfied to generalize from one patient population to another. After identifying differences in cardiovascular risk between black and white Americans, for example, he went to the source with genetic studies in Africa and the Netherlands to seek more information. He has focused other studies on women and even the blind.”

Former student L. Harris Smith, PhD, who worked with Dr. Vaughan as a graduate student, a postdoctoral fellow, and an instructor at Vanderbilt, agrees that his mentor’s curiosity is insatiable and his passion for nurturing the next generation of physician-scientists knows no bounds. “He always gave me enough rope to hang myself,” jokes Dr. Smith, “but he also allowed me to pursue new hypotheses and novel findings that were not necessarily the main focus of the lab. It was a good balance. We were always going toward new discoveries, new data, and ending with goals or results that influenced clinical practice.”

Dr. Smith shares that after the devastation of Hurricane Katrina in New Orleans, Dr. Vaughan arranged for some displaced cardiovascular medical fellows to come to Vanderbilt. Although there were many at Vanderbilt and around the country who helped those affected by the natural disaster, Dr. Vaughan took an active role in ensuring the continued education of these fellows, according to Dr. Smith, now associate director, pharmacology, and assistant professor at the Burnham Institute for Medical Research in Orlando, Florida. He continues to collaborate with Dr. Vaughan on the apelin system and its role in cardiovascular function.

Collaboration plays a role in Dr. Vaughan’s private life as well. Wife Sukie and children Emily and James will remain in Nashville until his son graduates from high school. It was a shared decision. Dr. Vaughan says, “My kids basically said, ‘We are very proud of you, but we want to graduate from our high school.’”

Emily, a senior, runs on the cross-country team and enjoys science. A junior, James excels at golf. He also loves music, so much so that as soon as his father moved to Chicago he arranged a visit to attend the Lollapalooza music festival and brought his friends to stay at his dad’s new abode. Sukie, despite keeping busy with the children and her fund-raising efforts, manages to find time to visit Chicago whenever she can. Says Dr. Vaughan, “We have gotten to know the Southwest Airlines schedule between Chicago and Nashville.” Good fortune for the Feinberg School as well!
Modern man has evolved to “hunt, gather, survive, and reproduce” so well that, ironically, this over-achievement eventually may lead to his—and her—downfall as a species. About two-thirds of American adults fall into the overweight category and almost one-third are obese, according to the National Institutes of Health (NIH). The Office of the Surgeon General reports that more than 12.5 million children and adolescents in this country are overweight, with 70 percent of the teens likely to mature into overweight or obese adults. Triggering a cascade of health problems, obesity has become public health enemy number one, and experts believe this epidemic surely will curtail the lifespan of the next generation.
“In most of our evolutionary past, our ancestors were concerned about preserving calories rather than worrying about excess. Metabolic efficiency during times of limited food availability actually seems to be central to our physiology,” explains biological anthropologist William R. Leonard, PhD, professor and chair of anthropology at Northwestern. “In the modern world we have made food more abundant and reduced the amount of work associated with procuring it. These factors and others have tipped the energy balance scale in favor of storing more energy and weight and essentially making people bigger.”

Yet bigger is not better when it comes to an excessive body mass index (BMI). Developed to determine healthy weight relative to height (check out the NIH’s online BMI calculator at www.nhlbisupport.com/bmi/ for more information), BMI numbers 25 and greater indicate an overweight individual. A BMI of 30 or more red-flags an obese person. In either case, the growing heftiness of Americans has reached epidemic proportions, causing sharp increases in the incidences of heart disease, diabetes, and hypertension and higher rates of mortality due to these diseases. Government estimates for the annual cost of overweight and obesity in the United States hover around $123 billion. Roughly half of these dollars goes to direct health care costs, and the other half relates to the indirect costs of lost work productivity as a result of illnesses and/or disability as well as the value of future earnings caused by premature death.

These shocking statistics have prompted the medical school to take the lead in creating a multidisciplinary approach to a multifaceted problem. The brainchild of Dean Emeritus Lewis Landsberg, MD, the Northwestern University Comprehensive Center on Obesity (NCCO) celebrated its official launch November 13. The NCCO intends to aggressively address the root causes—biological, evolutionary, psychological, sociological, economic, political—of this 21st century disease through interdisciplinary programs in clinical care, research, education, and public policy.

“I commend Dr. Landsberg for applying his scientific interest and commitment to improving health in the development of this center,” remarks Linda V. Van Horn, PhD, RD, professor and acting chair of preventive medicine. “It will bring together multidisciplinary expertise from so many different areas, which is the epitome of effective weaponry in our fight against obesity.”

This clinical nutrition epidemiologist has spent her career investigating the benefits of a diet high in fruits and vegetables as well as lean protein and whole grain fiber to help people reduce their risks of developing heart disease, cancers, and other chronic ailments. Involved in large, multicenter collaborative trials such as the Coronary Artery Risk Development in Young Adults (CARDIA) study, Dr. Van Horn has witnessed a disturbing trend during the past 20 years. She has watched how the diets and lifestyles of the study’s 18- to 30-year-old participants have put them at risk for cardiovascular disease.

“Right before our eyes, this entire group of young people has become heavier,” she says. “There are no data to suggest that being overweight is good for you. People are now developing risk factors for chronic diseases that don’t even occur unless one gains excessive weight.”

The administrative hub of the NCCO sits nine floors above Chicago’s scenic Lake Shore Drive in the Rubloff Building. Northwestern Memorial Hospital (NMH) houses NCCO’s Northwestern Medical Faculty Foundation patient care office known as the Center for Lifestyle Medicine. The new center’s research efforts exist in the numerous laboratories and offices of researcher and clinician members of the Northwestern community who are located on the Chicago and Evanston campuses as well as at Children’s Memorial Hospital. The Windy City—dubbed the “fattest” urban area in Men’s Fitness magazine’s 2006 unscientific survey of U.S. cities—with its diverse population also provides a rich resource for the programs and services the NCCO intends to offer.

After eight years as dean of Northwestern University’s Feinberg School, Dr. Landsberg stepped down from his leadership position in July 2007. Since then he has lost no time in assembling an interdisciplinary team of key faculty members, including Drs. Leonard and Van Horn, to help transform the new obesity center into a reality.

“By pulling together the many programs at Northwestern that impact obesity, we hope to create an intellectual home for high-level clinical services and basic research. Only by understanding the fundamental causes of obesity can we begin to effectively treat it,” says this center director and Irving S. Cutter Professor Emeritus of Medicine. “We are very excited about the possibilities. Already on the clinical side we’ve delineated several important areas that we plan to address such as obesity’s affect on minority populations, sleep disorders, and polycystic ovarian syndrome, and the implications for obesity in pregnant women and their offspring.”
by Dr. Landsberg’s clinical side in the obesity fight stands Robert F. Kushner, MD, professor of medicine. Recently elected president of The Obesity Society, the premier national organization concerned with the understanding, prevention, and treatment of obesity, Dr. Kushner heads the NCCO’s clinical care initiatives. They include providing center patients with clinical evaluation and comprehensive weight loss treatment; fostering healthy lifestyles incorporating physical activity; working in tandem with bariatric surgery specialists; and employing novel therapies.

“Through the center, we are bringing our collective heads together in a very intellectual and practical way to help people,” says Dr. Kushner, coauthor of the recently published book for health care professionals Counseling Overweight Adults (American Dietetic Association, September 2008). “The more people you have sitting around the table, the more successful you will be.”

In fact one newcomer to the NCCO’s “obesity” table, Alan Peaceman, MD, chief of the Division of Maternal-Fetal Medicine, has quickly found value in cross talk and collaboration. In a year’s time, this professor of obstetrics and gynecology, Dr. Kushner, and endocrinologist Boyd E. Metzger, MD, Tom D. Spies Professor of Nutrition and Metabolism, have developed a new clinical program to help obese women avoid excessive weight gain during pregnancy for both their health and that of their unborn child.

“The literature shows that these patients have a higher risk of adverse pregnancy outcomes such as hypertension, gestational diabetes, and overweight babies,” explains Dr. Peaceman. “Excessive weight gain during pregnancy has been associated with increased long-term risks for the baby’s future health in terms of developing childhood obesity and diabetes. Some of what we see prenatally puts people at risk for heart disease and hypertension in old age. The intrauterine environment is getting more attention for its importance in determining later adult health. Interventions have to start early, and that’s what we are trying to do.”

Launched this fall, the clinical service “Healthy for You, Healthy for 2” is offered to participants who plan on delivering at NMH’s Prentice Women’s Hospital. It includes individual nutritional guidance for optimal weight gain, strategies on incorporating daily physical activity, and other methods for a healthy lifestyle during pregnancy and after. Thought to be one of the only programs of its kind in the country, the new service has the center to thank for its existence. Remarks Dr. Peaceman, “The idea for this program came out of our first discussion a year ago. Dr. Landsberg got the right people in the room, and we started throwing out ideas.”

In addition to new clinical programs, the center will strengthen existing ones. For example, surgeons in Northwestern Memorial’s bariatric surgery program have long worked closely with weight loss expert Dr. Kushner. “He has served as an ‘entry point’ for patients who might be suitable candidates for weight reduction surgery as well as been involved in the preoperative and postoperative care of our patients,” explains Alexander P. Nagle, MD, GME ’03, director of bariatric surgery and assistant professor of surgery. “We, in turn, refer to him individuals who are not ideal candidates for bariatric surgery but who might benefit from modifying their diets and lifestyles to lose weight and improve their health.”

Dr. Nagle anticipates that the NCCO’s multidisciplinary approach will bring him and his surgical colleagues into contact with other investigators interested in research and helping the obese and morbidly obese—people with BMIs of 40 or greater. He sees much potential for advancing obesity studies by developing relationships with other clinicians and basic scientists. “There are many unanswered questions in the field of obesity and bariatric surgery,” he explains. “We have the opportunity to collaborate with other departments and enroll hundreds of morbidly obese patients per year into clinical research protocols. For example, there are great opportunities to study how changes in gut hormones influence diabetes.”

Men and women differ in their propensity for gaining weight. For a variety of reasons, among them biological and evolutionary, women exhibit higher rates of obesity than their male counterparts. Reproductive hormones and their modification can predispose people to pack on excess weight, with women often bearing the brunt of hormone fluctuations, especially during pregnancy and menopause.

Interested in the role gender plays in the regulation of energy metabolism, Franck Mauvais-Jarvis, MD, PhD, associate professor of medicine, and his lab seek to better understand the mechanisms by which sex hormones influence obesity as well as diabetes. One of perhaps many in the Northwestern community studying energy homeostasis, Dr. Mauvais-Jarvis has been studying diabetes and obesity from the molecular standpoint to the

Physical activity helps reduce the risk of many diseases including obesity. Emphasizing the importance of exercise, the U.S. Department of Health and Human Services released in October the new Physical Activity Guidelines for Americans—describing them as the most comprehensive of their kind.
population level throughout his career. His interests, in many ways, make him ideally suited to the charge of developing the NCCO’s research program as its director. Says this endocrinology specialist, “Our objective is to consolidate existing strength and stimulate high-impact research from established or new investigators in the area of obesity.”

To this end, he will be heading the center’s efforts to establish a rodent metabolic phenotyping core as well as a metabolic hormone core to study metabolic disorders using state-of-the-art techniques in rodent models. Dr. Mauvais-Jarvis also intends to expand the activity of existing human metabolism projects to characterize insulin sensitivity, energy expenditure, and hormone secretion, to name a few areas. Encouraging obesity research through the funding of pilot and feasibility studies via competitive awards, the NCCO will be sponsoring a series of monthly obesity seminars with renowned investigators in the field and hosting an annual retreat. The center held its first seminar in November.

“Through these various avenues,” explains Dr. Mauvais-Jarvis, “we hope to create a collaborative research community in the field of energy metabolism that will evolve to national prominence and successfully compete for National Institutes of Health support as a nutrition research center.”

The NCCO has a wealth of knowledge to draw upon at the University for existing obesity research. Investigators such as Evanston–campus-based Joe Bass, MD, PhD, assistant professor of medicine and neurobiology and physiology, have made discoveries at the genetic and molecular levels that relate to changes in behavioral and physiological pathways. In November 2007, for example, Dr. Bass and his colleagues published in the journal Cell Metabolism results from their study showing for the first time that overeating alters the core mechanism of the body clock. Disrupting the body’s 24-hour circadian clock can upset the timing of internal signals, including appetite control as well as other metabolic functions. Animals fed a high-fat diet not only gained weight but also suddenly started eating extra calories at times of the day when they would be normally resting or sleeping. This type of groundbreaking research serves as a springboard for future NCCO studies.

“We provide a platform that is already in place for developing experimental models that provide insight into the basic workings of appetite centers in the brain and peripheral metabolism,” says Dr. Bass about his lab’s role in the new center. “These kinds of studies are integral to the efforts to advance our knowledge of what causes diseases like obesity in humans.”

From fast food to sedentary lifestyles, multiple factors have Americans gaining excessive weight. With this in mind, the new obesity center will take a wide-ranging approach in its fight against this major public health challenge.
As an internal medicine resident at Hong Kong’s Queen Mary Hospital in 1953, Hau C. Kwaan, MD, PhD, conducted prothrombin time tests on a set of plasma samples. With a stopwatch in one hand, he added a drop of a chemical to the test tube in front of him, simultaneously starting the stopwatch. A clot formed, and he clicked the stopwatch: 12 seconds. “Then the clot disappeared right before my eyes,” he recalls. “Although I didn’t know it then, I had just observed fibrinolysis. My mentor guided me through the research to show me what it was.”

The plasma samples came from patients with cirrhosis of the liver who had experienced massive bleeding during surgery. Alexander J.S. McFadzean, MD, chair of medicine at Queen Mary and dean of the Faculty of Medicine at the University of Hong Kong, assigned Dr. Kwaan to find out why. “We learned that our blood vessels provide factors that prevent blood from clotting in our circulation,” explains Dr. Kwaan. Their 1956 paper in *Lancet* describing spontaneous, rapid fibrinolysis led to others in 1957–59 showing different circumstances in which abnormal fibrinolysis occurred. These observations were acclaimed as major contributions to the field of benign hematology, the study and treatment of bleeding and coagulation disorders.

Blood clotting, or thrombosis, and fibrinolysis form two sides of a fundamental system in the body. When a blood vessel is injured, exposed collagen promotes the aggregation of platelets in the wound. The platelets and damaged tissue release clotting factors that transform fibrinogen into fibrin threads that lash down the platelets to form a clot. Bleeding stops while tissue heals. Fibrinolysis follows later, as the endothelial cells that line blood vessels secrete factors such as tissue plasminogen activator (tPA) and urokinase, which convert plasminogen into the enzyme plasmin. Through mediating factors, plasmin cleaves the fibrin threads into fragments that are cleared from the bloodstream via proteolysis. When these processes fail, life-threatening thrombosis can result.

This research laid the foundation for advances in the understanding of thrombotic disorders such as thrombotic thrombocytopenic purpura (TTP) and the development of “clot-busting” drugs used to treat deep vein thrombosis, myocardial infarction, and pulmonary embolism, among other conditions.

Dr. Kwaan, the Dr. Marjorie C. Barnett Professor of Hematology/Oncology at Northwestern University’s Feinberg School of Medicine, earned his medical degree (1952) and research doctorate (1958) at the University of Hong Kong. From 1957–58, he studied at the University of Edinburgh in Scotland, while seeing patients at the affiliated Royal Infirmary in Glasgow, and at the University of London, where he received training in cardiology and neurology at affiliated hospitals. In 1958–59 he was a China Medical Board of New York Research Fellow in the Department of Pharmacology at Columbia University College of Physicians and Surgeons. His research on the release of the pituitary hormone corticotropin involved collaboration with a Nobel Prize winner. Recalls Dr. Kwaan, “My professor in Hong Kong thought it would be good for me to look at another aspect of research.”

However, an invitation to an international meeting on thrombosis at Princeton University in 1960 set the course of his career as a clinician-scientist. “All the pioneers in the field were there,” says Dr. Kwaan. “I was deeply inspired by talking to the people who had first described the clotting, fibrinolytic, and platelet systems.”
One such pioneer, Danish physiological chemist Tage Astrup, DSc, asked Dr. Kwaan to join his group at the new James F. Mitchell Foundation Institute for Medical Research in Washington, D.C. As Dr. Kwaan wrote in a memorial tribute to Dr. Astrup in the June 2007 issue of *Seminars in Thrombosis and Hemostasis*, “When the rest of the world was still concentrating on the hemostatic and antithrombotic action of the fibrinolytic enzymes, he had already completed mapping the distribution of plasminogen activators within every major organ of the body, leading him to the realization that the fibrinolytic system is endowed with a much larger role in the body’s function.” Joining Dr. Astrup was a fantastic opportunity for Dr. Kwaan.

But U.S. immigration laws nearly prevented him from staying in this country. Explains Dr. Kwaan, “Although I held a British passport, I was still considered a Chinese national.” U.S. laws limited the number of immigrants from various countries, including China. At the height of the Cold War, certain areas of scientific expertise were in high demand. So a number of scientists, including several from the Princeton meeting, supported a bill sponsored in Congress. This “private law” waived the immigration requirements. It was enacted under President John F. Kennedy’s signature in January 1962, which brought Dr. Kwaan and his wife and daughter to the United States. They became naturalized citizens in 1969.

“This was a major turning point in my career,” says Dr. Kwaan. “I felt I had to do as much as I could as a researcher here.”

And that he has, actively disseminating the collective knowledge in his field. Author of more than 330 papers and book chapters, Dr. Kwaan also co-edited two textbooks, *Thrombosis* (W.B. Saunders Company, 1982), and *Clinical Thrombosis* (CRC Press, 1989). Since the early 1970s, he has written about 50 review articles, either as sole author or as coauthor with a Northwestern colleague or another of his collaborators from around the world. Recently he served as co-editor of a book, *Coagulation in Cancer*, with Feinberg School colleague and hematologist David Green, MD, PhD, professor emeritus of medicine. Dr. Kwaan also has served as a guest editor on many issues of the journals *Seminars in Thrombosis and Hemostasis* and *Seminars in Hematology*.

“When I came to Northwestern in 1969, Dr. Kwaan was chief of hematology at the affiliated VA Lakeside Medical Center,” recalls Dr. Green. “He already was established as an expert in fibrinolysis. I wanted to link up with him right away, and he was very welcoming. Dr. Kwaan is a superb investigator, and it has been my privilege to work with him over the years.

“His clinical judgment is unparalleled as well. Any time I have a difficult case, I call him in as a consultant, and 99 percent of the time his recommendation is exactly the best course of action. He is truly the hematologist’s hematologist.”

David P. Earle, MD, chair of medicine at Northwestern from 1965–73, recruited Dr. Kwaan in 1966. “Northwestern was a private medical school that was very good at teaching clinical medicine and taking care of patients,” says Dr. Kwaan. “Dr. Earle recognized that research would lead to better patient care. He encouraged more studies and recruited people who were most interested in conducting research.”

Dr. Earle, a renowned kidney researcher, invited Dr. Kwaan to his regularly scheduled research conferences. There Dr. Kwaan learned that nephrologist Maria B. Bernik, MD, associate professor emeritus of medicine, was culturing kidney cells in
During his 42 years at Northwestern, Dr. Kwaan has served as a research mentor for numerous international research fellows and Northwestern graduate students, fellows, and residents, such as Dr. Joshua Ruch, a second-year internal medicine resident.

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The lab. “These cells secreted an enzyme of the fibrinolytic system called urokinase,” explains Dr. Kwaan. “Urokinase and tPA had been isolated and applied clinically to dissolve clots in patients. Making urokinase for clinical use involved collecting and processing tremendous amounts of urine.”

Dr. Kwaan and a scientist from Abbott Laboratories, the company that produced urokinase in the United States, calculated that a single dose of urokinase required “1,000 man-urine days,” assuming two liters of urine per man per day. “Abbott asked me to help them produce urokinase from kidney cell cultures,” says Dr. Kwaan. “For many years the urokinase sold in this country was produced using the technique that Dr. Bernik and I discovered.”

However, it never occurred to them to patent the process. “You see how times have changed,” says Dr. Kwaan. “We could have had the process patented under of the auspices of the University as intellectual property, resulting in millions of dollars in royalties.”

Yet, the reward for Dr. Kwaan was still tangible. “I saw some of our work converted into practical use to benefit patients,” he says. “The term ‘translational science’ was not used then, but that’s what it was.”

His first clinical encounter at Northwestern was far less encouraging. “I was consulted for a patient, who came in complaining of headaches and was severely anemic,” recalls Dr. Kwaan. “She had TTP and died only a few days later. In the mid-1960s, more than 90 percent of these patients died.”

Using slides on his computer, Dr. Kwaan points out to a visitor the clinical features in the specimens he personally collected and examined under the microscope. In various tissues of his deceased patient’s body, tiny rust-colored clumps are distributed among the red blood cells. “You can see these microthrombi in the heart, lungs, kidneys, brain, liver, skin, lymph nodes, adrenal cortex—everywhere,” he says. “These are platelets clumping together in the bloodstream. That is what killed the patient.”

The international research efforts that followed often were based on Dr. Kwaan’s observations and publications on TTP during the next 10 years. They suggested that TTP might be an autoimmune-mediated disease, which pointed to plasma exchange as a potential treatment. “You remove all the patient’s plasma and infuse new donor plasma,” explains Dr. Kwaan. “This takes away the harmful antibodies. This treatment raised the survival rate to 80 percent. That’s a very satisfying advance, but we still have work to do.”

Using modern molecular biology techniques, researchers identified in the mid-1990s how plasmapheresis worked in TTP. “These patients have an antibody to ADAMTS-13, a component of the plasma,” says Dr. Kwaan. “This consumes all their ADAMTS-13, and by giving them new plasma, you’re supplying fresh ADAMTS-13, and the platelets will not clump.”

Notes Dr. Green, “Dr. Kwaan continues to study ADAMTS-13 today. He’s been in the forefront of disseminating information on TTP and teaching people how to treat it.”

Outside of the United States, hematology is an independent discipline, and most practitioners deal with thrombosis in cancer patients, a connection first noted by the Frenchman Armand Trousseau in 1865. Here the specialty merged with oncology as radiation and chemotherapy developed as cancer treatments.

“Both treatments came with hematologic side effects, so hematologists got involved,” explains Dr. Kwaan. He achieved board certification in oncology in 1979, and treats malignant blood diseases such as lymphomas and leukemias as well as the benign hematologic conditions.

In the early 1990s, he and Dr. Green collaborated on a clinical research project led by Martin S. Tallman, MD, professor of medicine, who joined their division in 1988. The multicenter clinical trial, launched by the Eastern Cooperative Oncology Group, compared chemotherapy versus chemotherapy plus all trans retinoic acid for treatment of acute promyelocytic leukemia (APL). The study showed that the addition of the vitamin A derivative helped the leukemic cells mature into normal blood cells. These findings helped establish this as the standard treatment for APL.
A major cause of death in APL had been brain hemorrhages. “As a side project, we were trying to shed some light on this bleeding disorder,” says Dr. Tallman. “Dr. Kwaan did laboratory work using serum and cellular material from the patients in this trial. Because he’s an international figure in coagulation, I wanted to exploit his expertise.”

Previous studies speculated excessive bleeding in the brain resulted from disseminated intravascular coagulation. “Dr. Kwaan found that those with APL produced far more fibrinolytic activity in the brain than people without leukemia,” recalls Dr. Green. “That was a major discovery that has been verified by other people, but he was among the first to pick up on it.”

Explains Dr. Kwaan, “The bleeding was related to a fibrinolytic factor called ANNEXIN II, which accounts for why some parts of the body bleed more than other parts in certain diseases, including APL.”

Today Dr. Kwaan’s research continues to examine several factors involved in the fibrinolytic system, including urokinase, ANNEXIN II, ADAMTS-13, and plasminogen activator inhibitor-1 (PAI-1). Deciphering the signal transduction pathways that mediate their actions may lead to new therapeutic targets to restore normal functioning of the system in a variety of pathologic conditions. “We know now that this system is involved in wound healing, cell movement, cancer metastasis, and inflammation,” says Dr. Kwaan. He notes that cardiologist Douglas E. Vaughan, MD, who became the new Irving S. Cutter Professor and chair of medicine in June, has a keen interest in thrombosis and fibrinolysis, particularly the influence of PAI-1 on atherosclerosis in obese patients.

“We need more researchers and practitioners in benign hematology,” says Dr. Kwaan. “In this country, people starting their careers tend to choose the malignant aspects. Granted, we’ve made great advances in those areas, but I believe advances in the benign aspects show a bit more promise for rapid improvements in patient care.”

Throughout his career, Dr. Kwaan has been a dedicated teacher. “Virtually every year, he’s given two or three major lectures to our students, residents, and fellows that have been universally highly regarded,” says Dr. Green, who has directed the hematology unit of the second-year course Scientific Basis of Medicine for many years. “He broaches new topics and explains them in great detail.” In 2006 Dr. Kwaan garnered the Excellence in Teaching Award from the Department of Medicine, and the department created in 2002 the Green-Kwaan Teaching Award, which recognizes the top teacher among Northwestern hematology fellows. “Dr. Kwaan is as enthusiastic about medicine and science today as he was when I first met him 20 years ago,” says Dr. Tallman. “He always has residents, fellows, and graduate students learning in the lab with him. He’s a regular attendee at our weekly hematology conferences, making incisive comments on key teaching points. He’s really in a class by himself.”

Whether teaching in the lab or on the wards, “I encourage people to broaden their interests,” explains Dr. Kwaan. “You want to be the best you can be in your chosen specialty, but it is also good to develop different perspectives.” For example, he studies rheology, an engineering field devoted to describing how materials deform and flow. “It makes a difference in the body if your blood is thick or thin,” he notes.

“I firmly believe good clinicians should look at specimens from their patients whenever possible, whether with the naked eye or under the microscope,” continues Dr. Kwaan. “In patient care, the pathologist is your best friend. You can learn something new from the pathologist’s reading that will make you a better clinician when you see the next patient with a similar problem. Opportunity doesn’t just come once, it comes all the time. You just have to notice it.”

Just like he did as a 21-year-old resident in Hong Kong.

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Leslie May-O’Brien of Chicago, a patient of Dr. Kwaan’s for 33 years, survived three different cancers under his care. He guided her through the world-class treatments provided by his fellow members of the Robert H. Lurie Comprehensive Cancer Center.
Know Those Nodes

For 10 years, oncology experts have recommended a minimum of 12 lymph nodes be examined to determine whether colon cancer has metastasized and accurately diagnose its stage. That affects whether a patient receives chemotherapy, which improves survival after colon cancer has spread.

A study from Northwestern University’s Feinberg School of Medicine and the American College of Surgeons found that more than 60 percent of nearly 1,300 institutions in the United States failed to comply with the recommendation. The study was published in the September 9 online issue of the Journal of the National Cancer Institute.

Said Karl Y. Bilimoria, MD, lead author and a surgery resident at the Feinberg School, “Every surgeon has a story about a colon cancer patient where the pathology report showed only a few lymph nodes and no cancer was found. Then the pathologist looks for several more nodes, and one of those turns out to be positive for cancer. Frequently, that completely changes the postoperative chemotherapy plan.”

Dr. Bilimoria, who is also a research fellow at the American College of Surgeons, found National Cancer Institute-designated comprehensive cancer centers were more likely to comply with the 12-node measure than other academic hospitals, Veterans Administration hospitals, and community hospitals. All hospitals have improved, but not enough. In 1996–97, 15 percent were checking at least 12 nodes compared with 38 percent in 2004–05.

Patients can protect themselves by asking their surgeons about this issue and requesting the postoperative pathology report to see how many nodes were examined, according to Dr. Bilimoria. He urges hospitals to strive for better education and cooperative efforts between pathologists and surgeons. He recommends they set up cancer committees to address compliance with such quality measures.

Confusion in the ER

More than three-quarters of patients fail to fully comprehend the treatment they receive during an emergency department visit or recall instructions for their care after they leave. And 80 percent of these individuals are completely unaware of the gap in their knowledge.

A study published in the July online issue of the Annals of Emergency Medicine assessed 138 patients and two caretakers from Ann Arbor, Michigan, in four categories of comprehension: diagnosis and cause; emergency department care; post-emergency department care; and return instructions. About half (51 percent) did not understand fully what they were told in two or more categories. More than one-third (34 percent) of the comprehension deficiencies involved patients’ understanding of post-emergency department care, while 15 percent involved diagnosis and cause. Of those confused patients, only 20 percent realized their understanding was deficient.

“Patients who fail to follow discharge instructions may have a greater likelihood of complications after leaving the emergency department,” said Kirsten G. Engel, MD, instructor in clinical emergency medicine at Northwestern and lead author of the study. “It is critical that emergency patients understand their diagnosis, care, and, perhaps most important, discharge instructions.”

Dr. Engel strongly suggested developing better strategies for identifying patients who are having difficulty understanding their care and instructions in the emergency department—an often chaotic place for patients and health care workers alike. And she encourages patients to help themselves by asking emergency department staff to repeat or clarify points.

“When you are in the emergency department, be honest and don’t be afraid to ask questions,” advised Dr. Engel. “If you don’t understand what the doctor has told you, keep asking questions until you do.”

Heart Charge Tags Risks

Hospitalized heart failure patients with a longer than normal QRS duration have a higher risk of death or rehospitalization, concludes an international research team led by cardiologist Mihai Gheorghiade, MD, professor of medicine. QRS duration, measured via electrocardiogram (ECG), represents the flow of electricity to the muscles of the left ventricle, which pumps blood to the body.

The study, a retrospective, post hoc analysis from the EVEREST (Efficacy of Vasopressin Antagonism in Heart Failure Outcome Study with Tolvaptan) program, appeared in the June 11 issue of the Journal of the American Medical Association. The researchers analyzed data from 2,962 patients hospitalized for heart failure whose left ventricular ejection fraction—a measure of pumping power—was 40 percent or less. Of those patients, 1,641 had a normal QRS duration (shorter than 120 milliseconds) and 1,321 had a prolonged QRS duration (120 milliseconds or longer).

During nearly 10 months of follow-up, 678 of the patients died, including 307 patients with normal QRS duration and 371 patients with prolonged QRS duration. Rates of cardiovascular death or rehospitalization for heart failure were 32.4 percent for patients with normal QRS duration and 41.6 percent for those with prolonged QRS duration.

The investigators concluded that patients with prolonged QRS duration were 24 percent more likely to die and 28 percent more likely to suffer cardiovascular-related death or rehospitalization than those with normal QRS duration. This high morbidity and mortality rate persisted even though patients received standard medical therapy, including beta-blockers and angiotensin-converting enzyme inhibitors or angiotensin II receptor blockers.

They also noted that measuring QRS duration on an ECG is relatively inexpensive, simple to perform, and yields an instant result. “Perhaps most important,” the researchers wrote, “a prolonged QRS duration becomes a potential target for intervention, which may improve post-discharge mortality and morbidity.”
Dopamine Drives Addiction?

Parkinson’s patients don’t have enough of it; drug addicts get too much of it.

Research by D. James Surmeier, PhD, Nathan Smith Davis Professor and chair of physiology at Northwestern, reveals how dopamine controls the two primary circuits in the brain that control human behavior. Too much dopamine can lead to compulsive, addictive behavior, and too little can leave Parkinson’s patients motionless.

The study, published in the August 8 issue of Science, shows “how dopamine shapes the two main circuits of the brain that control how we choose to act and what happens when dopamine is lost in Parkinson’s disease,” said Dr. Surmeier. Located in the striatum, the region of the brain that translates thoughts into actions, one circuit is a “stop” circuit that prevents you from acting, and the other is a “go” circuit that enables you to act.

The researchers examined the strength of synapses connecting the cerebral cortex—which is involved in perceptions, feelings, and thought—to the striatum. They electrically activated the cortical fibers to simulate movement commands and boosted the natural level of dopamine. The cortical synapses connecting to the “go” circuit became stronger. Simultaneously, dopamine weakened “stop” circuit cortical connections.

“This could be a key step in addiction,” said Dr. Surmeier. “Dopamine released by drugs leads to abnormal strengthening of the cortical synapses driving the striatal ‘go’ circuits, while weakening synapses at opposing ‘stop’ circuits. As a result, when events associated with drug-taking occur, it becomes very difficult to suppress drug-seeking behavior.”

The scientists created an animal model of Parkinson’s disease by killing dopamine neurons and simulated cortical commands to move. The result: “stop” circuit connections were strengthened, and the “go” circuit connections were weakened.

Said Dr. Surmeier, “The study illuminates why Parkinson’s patients have trouble performing everyday tasks like reaching across a table to pick up a glass of water when they are thirsty.”

Hyperglycemia Complicates Pregnancy

Maternal hyperglycemia may be associated with risks for pregnancy complications, according to an international study that appeared in the May 8 issue of the New England Journal of Medicine.

A total of 23,316 pregnant women from 15 centers in nine countries completed the Hyperglycemia and Adverse Pregnancy Outcomes (HAPO) study, led by principal investigator Boyd Metzger, MD, Tom D. Spies Professor of Nutrition and Metabolism at the medical school. Primary outcomes were birth weight above the 90th percentile for gestational age, primary cesarean delivery, clinical diagnosis of neonatal hypoglycemia, and umbilical cord blood serum C-peptide level above the 90th percentile. Secondary outcomes were delivery before 37 weeks of gestation, shoulder dysphasia or birth injury, need for intensive neonatal care, hyperbilirubinemia, and preeclampsia.

The results of the HAPO study and other data currently are being considered by an international panel of experts with the objective of developing new strategies and criteria for the detection, diagnosis, and classification of hyperglycemia during pregnancy.
Founders’ Day kicks off 150th academic year

Never has Founders’ Day held such special meaning as it did this year. Not only did the August 29 event officially open the 2008–09 academic year by welcoming the Class of 2012 but it also launched the beginning of what will be a yearlong observation of the medical school’s sesquicentennial or 150th anniversary. The medical school’s founders would be proud!

In 1859 Northwestern University’s Feinberg School of Medicine got its start as the new medical department of Lind University in Chicago. Thanks to seven forward-thinking physicians who believed in more exacting standards for medical education 150 years ago, 33 students looked forward—just like this year’s 169 entering class members did in late August—to their inaugural year of medical school. Fittingly, Northwestern has made sure each year to share the achievements of the Feinberg School’s original founders with all students and their families and friends at Founders’ Day.

“This Founders’ Day Convocation is the first of several formal celebrations of the accomplishments of our students and faculty,” said J. Larry Jameson, MD, PhD, vice president for medical affairs and Lewis Landsberg Dean. “I thank you for coming today to be a part of the celebration and to welcome a talented group of new students who will help to write the story of the Feinberg School of Medicine for the next century and beyond.”

Following his welcoming remarks, Dean Jameson introduced key faculty and administrative leaders who the entering students will come to know during their four years at Northwestern. Raymond H. Curry, MD, GME ’85, dean for education, presented several teaching awards to medical educators recognized by the medical school’s leadership as well as by medical students. The Dean’s Award for Teaching Excellence went to Walter G. Barr, MD, professor of medicine; Kimbra A. Bell, MD, assistant professor of clinical medicine; John E. Butter, MD ’91, assistant professor of medicine; Marian Dagosto, PhD, professor of cell and molecular biology; and Nancy Schindler, MD, GME ’98, associate professor of surgery.

Student votes from the first- and second-year classes highlighted extraordinary instructors and their skillful ability to teach basic science and the Patient, Physician & Society (PPS) course. Known as the George H. Joost Outstanding Teacher Awards, these honors for the 2007–08 academic year went to George R. Flouret, PhD, professor of physiology, for basic science teaching, and Gordon J. Siegel, MD, GME ’82, assistant professor of clinical otolaryngology—head and neck surgery, for PPS instruction. Katherine L. Watson, JD, assistant professor of clinical medical humanities and bioethics, received the 2008 American Medical Women’s Association/Gender Equity Award and Elizabeth R. Ryan, EdD, assistant professor of family medicine, accepted the Michael M. Ravitch Outstanding Teacher Award at the convocation.

Keynote speaker Jeffrey Glassroth, MD, vice dean, chief academic officer, and professor of medicine, welcomed the Class of 2012 to the world of medicine and “one of the most invigorating, expanding, and fulfilling experiences that you will likely ever have.” Learning how the human body functions in health and fails when disease strikes, these medical students will have the privilege during their careers as physicians to share in some of their patients’ greatest as well as most devastating moments, according to Dr. Glassroth.

Presenting his talk entitled “Feinberg School of Medicine at 150 Years: Looking Back and Moving Forward,” Dr. Glassroth began by describing the sociopolitical milieu in which the medical school came into being. He noted that, coincidentally, the school was founded shortly after the now-famous Lincoln-Douglas debates that took place during a heated political contest in 1858.

“Those debates focused on the issue of slavery and foreshadowed the coming civil
“We have never had the ability to do so much good.”

— Jeffrey Glassroth, MD

war that would shape our country and, in many ways the world,” remarked Dr. Glassroth. “At the same time, a debate was ongoing among medical educators that would shape medicine in this country and, to a certain extent, the world. Nowhere was the discourse more passionate than in Chicago, and it was out of this passion that our medical school was founded.”

A century and a half ago, Americans could expect an average life expectancy of 50 years. The state of medical education was abysmal, according to Dr. Glassroth. More than 400 institutions around the nation “educated” physicians—Illinois alone had 39 medical schools. Today the United States has fewer than 130 allopathic medical schools. “In 1859 there was little in the way of what we would term quality control of medical education,” he said. “In fact, there was no standardization of any aspect of the medical education process. It was in this environment that a group of idealistic medical educators led by Nathan Smith Davis introduced such innovations as pre-matriculation requirements for admission, a prescribed sequence of courses with grades, and rigorous standards for graduation. These elements had been omitted from medical education as they were believed to create a disadvantage for programs competing for students in a sea of schools existing at the time.”

Since its founding, the medical school has gone beyond its model of excellence in medical education to be defined by the accomplishments of its people. Dr. Glassroth lauded the contributions of the faculty and alumni—from school founder Dr. Davis, often dubbed the “father” of the American Medical Association, to astronaut and alumnus Michael R. Barratt, MD ’85, GME ’89—who have helped shaped Northwestern into the outstanding medical school it is today.

“As we initiate the sesquicentennial celebration, I submit to you that there never has been a better or more challenging time to be a physician and/or biomedical scientist,” said Dr. Glassroth. He urged the entering students to push the boundaries of science and technology as they move forward but to never forget the art and power of their relationships with patients “both to help them and to derive maximum satisfaction from your profession.”

At the conclusion of the convocation, Lindsay Kuo, president of the medical school’s student senate and a member of the Class of 2010, presented the new M2 Student Senate Service Awards. Recognizing individuals who have gone beyond their medical school studies to positively influence their Northwestern environment and community, the student award recipients were Juan Bautista, Rebecca Cantone, Ashley Keyes, Katie Kinner, and Janet Lee.

Then it was time for the white coat ceremony. With a rip of plastic bags, the medical school’s newest students pulled out their sparkling white coats and donned them with the experienced assistance of the Class of 2011. Properly attired for their first year of medical school, the entering class members filed out of Thorne Auditorium ready to find their place in creating and expanding Northwestern’s history.

Cheryl SooHoo

Left: Lindsay Kuo, president of the student senate, led the Class of 2012 in the Oath of Professional Conduct. Left Center: Second-year students Selma Siddiqui, Amelia Watkins, Shivani Patel, Eric Chan, Vanessa Arguello, and Judy Chang enjoy the post-Founders’ Day reception. Right Center: Keynote speaker Dr. Jeffrey Glassroth, vice dean and chief academic officer, describes the significance of the medical school’s founding and how it helped advance medical education in this country. Right: Dr. John Kessler, chair of neurology, welcomes his daughter and first-year student Allison to Northwestern.
Medical students act to cure blindness in the developing world

If something works well, why not copy it? With that in mind, several globally-minded medical students believe that borrowing a health care solution that works in one area of the world and applying it to others may help cure blindness in the developing world. Forming the nonprofit organization CatarACT, these Northwestern students intend to combat the vision-robbing ravages of untreated cataracts by using a model of care that is worth repeating.

“Cataracts are the leading cause of blindness in the world, affecting 20 million people,” says Yuna Rapoport, a second-year MD/MPH student at the Feinberg School. “Unfortunately the backlog of untreated cataracts is increasing, even though the cure is a quick, relatively inexpensive, and effective surgery. However, hospitals in India have developed a sustainable model for delivering high-quality, low-cost cataract surgeries to large numbers of patients.”

Cataracts occur when the eye’s natural lens begins to cloud over due to the often age-related clumping of proteins in the lens. Other risk factors include long-term exposure to UV light and diabetes.

Working on the premise that the developing world faces unique challenges best solved by solutions conceived in the developing world, Rapoport and Prajwal Ciryam, a Medical Scientist Training Program (MD/PhD) student, embarked on a research project in summer 2007. They first visited Arasan Eye Hospital in Erode, India, to learn all they could about this hospital’s ability to provide some 10,000 free cataract surgeries a year. (Ophthalmology fellows, in part, help provide some of the gratis surgeries to needy patients.) They studied the financial, logistical, and clinical conditions there before traveling to two hospitals in Ghana to see how the Indian model of cataract care might work in West Africa.

The two students interviewed patients, met with hospital administrators, collected clinical data, assembled financial records, and observed surgeries. “Our project has been a combination of everything a student could possibly hope for in a global health experience,” shares Rapoport. “We saw the provision of care in various settings; interacted with doctors, nurses, and others; asked and answered important questions about health care in the developing world; and prepared ourselves to continue the endeavor, conceiving of ways to give back to the communities that so warmly welcomed us.”

CatarACT International was born from the “eye-opening” experience of Rapoport and Ciryam upon their return to the States. Run by a small core group of individuals, the organization includes second-year medical student Amar Vira as well as Northwestern undergraduates and students from other universities such as the University of Chicago and Columbia. The group’s long-term goal is help health care workers in Ghana to launch sustainable, high-volume cataract surgery clinics.

To achieve its vision of empowering developing countries to fight blindness, CatarACT works closely with V. Panneer Selvam, MD, founder and director of Arasan Eye Hospital, and Michael Gyasi, MD, a well-respected ophthalmologist in Ghana. In fact, CatarACT presented a Healthcare Pioneers Week in Chicago in April and hosted a visit from the two physicians to raise awareness about their work.

Drs. Selvam and Gyasi also met with the group to discuss some of its initiatives, including the development of a Global Visionaries Program to enhance the training of West African eye care professionals in performing effective cataract surgical techniques. The hope is that these individuals then will go on to support future CatarACT network hospitals in their homeland. A second CatarACT project currently in the works focuses on creating a computerized method of keeping records on cataract procedures and outcomes. In January CatarACT will partner with the American Medical Student Association for a week of global health lunchtime talks sponsored by the Department of Family Medicine at the medical school.

“We are also putting together group, or ‘fireside,’ talks to be held at Ghanaian churches and Indian temples in the suburbs to increase our outreach to the local Chicago community,” says Rapoport. “We hope to share our developing vision, one of moving away from paternalism in global health and empowering actors on the ground to act on their own behalf. In that regard we are moving forward to create an actual program through which Ghanaian ophthalmologists will train at Arasan and take the invaluable surgical skills they learn while in India home to their respective clinics in Ghana.”

For more information about CatarACT, visit the group’s web site at www.catar-act.org.

Cheryl SooHoo
People in Ghana, West Africa (upper left), may have a better chance at avoiding blindness thanks to the work of CatarACT, a group launched in 2007 by Northwestern medical students. Their interest in transferring one developing country’s model of care to another took them to Erode, India, where they interviewed patients (center and right) and talked with health care providers at a well-known eye hospital that provides pro bono eye surgeries.

‘Modern’ cardiology pioneer delivers 2008 Feinberg lecture

It’s not every day that junior investigators in the Feinberg Cardiovascular Research Institute rub shoulders with “icons of cardiology” but thanks to the continued support of the Feinberg family that day came on September 19. Invited to speak at the Frances Feinberg Memorial Lecture, renowned cardiovascular physician and scientist Joseph Loscalzo, MD, PhD, generously shared his time and expertise with members of the Northwestern community.

“Today Joe spent the morning listening to students and fellows of the Feinberg Institute present their work in progress, and, as I knew he would, he offered incisive and helpful comments,” relayed Douglas W. Losordo, MD, Eileen M. Foell Professor of Heart Research and director of the institute, in his introduction of Dr. Loscalzo, chair of medicine at Harvard Medical School. “Afterwards one of the fellows pulled me aside and asked, ‘Is there anything he doesn’t know?’ I replied that after 20 years of observation, I still haven’t figure out what that might be!”

Recognized for his contributions to the advancement of modern cardiology, Dr. Loscalzo has for a quarter of a century received numerous grants from the National Institutes of Health and industry to support his research in vascular biology, thrombosis, and atherosclerosis. In his Feinberg lecture entitled, “Oxidative Enzymopathies and Cardiovascular Disease,” this Hersey Professor of Theory and Practice of Medicine at Harvard and physician-in-chief at Brigham and Women’s Hospital presented some examples of his groundbreaking work in the area of oxidative stress and the mechanisms that promote the development of cardiovascular disease at the molecular and cellular levels.

“We believe oxidative stress is involved in the pathogenesis of many vascular diseases,” said Dr. Loscalzo, author and/or co-author of more than 500 scientific publications, author and/or editor of 23 books, and holder of 27 patents for work in the field of nitric oxide, “and probably mediates the adverse consequences of inflammation, which underlies many different cardiovascular disorders.”

Aimed at ultimately improving the prevention and treatment of cardiovascular disease, Dr. Loscalzo’s research is fueled by translational relevance. Said Dr. Loscalzo, “The ideas either began with clinical observation and moved to the basic laboratory or were worked through the laboratory and then further explored in the clinical setting.”

The annual Feinberg lecture honors the memory of the late Frances E. Feinberg, a Chicago-area philanthropist, by bringing distinguished speakers to the medical school. The lecture is open to Northwestern students, faculty, and staff as well as to the general public.
Under the best of circumstances, clinical researchers face daily challenges—from intellectual to technical. Mix in foreign lands, languages, and governing bodies and the research endeavor becomes a tad more complicated as Brock F. Daniels, a fourth-year medical student, has quickly discovered as a National Institutes of Health (NIH)/Fogarty International Clinical Research Scholar.

“Conducting research outside the United States requires a great deal more flexibility and patience,” says Daniels, who left this summer for Thailand where he is spending his fellowship year at Chiang Mai University, in partnership with Johns Hopkins University Fogarty AIDS International Training & Research Program. “For example, the surveyor training I am helping conduct on the Burmese border was delayed a week. The surveyors couldn’t make it to the border because of security and transportation issues. Obstacles like these are common, and good researchers, who work in resource-limited settings, know how to adapt to these situations. This is exactly the kind of training I hope to gain during my fellowship.”

This academic year Daniels joined a select group of 33 U.S. fellows and 33 “twin” international scholars who are experiencing clinical research training in developing countries around the world. Keenly interested in HIV/AIDS research, Daniels has an expert mentor in Chris Beyrer, MD, a faculty member at Hopkins known for his work in HIV/AIDS in Asia and Africa as well as health and human rights in Burma. The Fogarty fellowship will build on Daniels’ growing human immunodeficiency virus knowledge base. In fact, two summers ago Daniels traveled to southern Africa, where he and other Northwestern students from the medical, business, and engineering schools assessed new technologies in HIV diagnostics.

“This area of research fascinates me because of the scale of the pandemic—which is not just an African problem—as well as HIV’s widespread implications in the social, political, economic, and ethical aspects of life,” says Daniels, who holds an MPH degree in epidemiology and bioethics from Boston University. “Everyone, whether they know it or not, knows or has met someone with HIV. A profound and 100 percent preventable disease, it is one that I would like to see eradicated.”
As a Fogarty scholar abroad, Daniels currently is involved in several community-based trials targeted at improving HIV prevention, testing, or treatment. One of the projects, for example, examines the impact of community-organized structural changes on reducing the prevalence of methamphetamine use and sexually transmitted diseases, according to Daniels. He also devotes his time to connecting the dots between human rights violations and their affect on health care in Burma, a nation with a high mortality rate due to AIDS.

On May 2 Cyclone Nargis hit southwestern Burma, killing some 80,000 to 140,000 people and becoming the country’s most devastating natural disaster. While many countries such as the United States offered aid, Burma’s government was slow to accept assistance. “The specific project we are working on deals with human rights violations committed by the military junta in the months following the cyclone,” explains Daniels. “We are investigating emerging threats in Burma related to the neglect of the Burmese people by the ruling dictatorship. The connection between human rights and health is often overlooked but several poignant examples of disastrous health consequences can be found in Burma.”

Daniels relays that incidences of malaria, for example, along the western border between Burma and Thailand is out of control. This is due to too few funds spent by the government on malaria control or prevention and the persecution of Burmese “dissidents” who seek refuge in Thailand.

Working with small grassroots-based organizations along the border, Daniels has had the opportunity to give talks to health-worker teams on such subjects as HIV testing and counseling—helping to educate these teams as they improve the care of their communities. “With these groups I have been able to have a larger role and, I feel, an important one,” says Daniels. “Projects such as the one I am working on help to quantify the relationship between human rights violations—forced relocation, forced labor, discrimination—and poor health outcomes.”

While Daniels hopes to incorporate HIV research throughout his professional career, his clinical interests lean toward emergency medicine. He says, “Ideally I see my research and academic career focused on access to health care, with a special interest in programs devoted to improving access to HIV prevention, testing, and treatment.”

Like many of today’s medical students, Daniels believes his global experience can only help him as a future physician to better appreciate the larger context in which he will practice and the “interconnectedness of our collective health.” He already plans to give some informal talks about his experience when he returns to Northwestern next year to inspire his fellow students and faculty members about international health.

“While I may be the first Feinberg School student to receive this award,” says Daniels, “I hope by sharing my experience, I won’t be the last.”

Cheryl SooHoo

Fall investiture ceremonies honor named professorships of Drs. Muller and Laimins

Fall proved to be a season full of accolades as Northwestern bestowed upon two faculty members the highest honor a medical school can bestow: endowed professorships. William A. Muller, MD, PhD, was named the Magerstadt Professor of Pathology at an investiture ceremony held September 17, and Laimonis A. Laimins, PhD, was named the Guy and Anne Youmans Professor of Microbiology–Immunology on September 24.

Dr. Muller joined the Feinberg School in July 2007 as chair of the Department of Pathology. Formerly a faculty member at Weill Cornell Medical College, he was an attending pathologist at New York Presbyterian Hospital. His research focuses on the cellular and molecular basis of inflammation and, in particular, the interactions of leukocytes and endothelial cells in the inflammatory response.

In 1994 the Department of Microbiology–Immunology welcomed Dr. Laimins as an associate professor. He served two years as acting chair of the department before being selected as chair in 2006. Dr. Laimins holds a PhD degree in biophysics and theoretical biology from the University of Chicago, where he studied the regulation of potassium transport in bacteria. His current research centers on human papillomaviruses, the causative agents of cervical cancer.

Drs. William Muller (left) and Leonidas Platanias (center) were among the faculty, family, and friends who celebrated Dr. Laimonis Laimins’ investiture ceremony in September.
Of the more than 42,200 individuals who applied to U.S. medical schools for the 2008–09 academic year to fulfill their dreams of becoming physicians, approximately one of every five applied to Northwestern University’s Feinberg School of Medicine. From an impressive applicant pool, the medical school selected 169 to become members of the Class of 2012.

The entering class includes 95 men and 74 women, whose undergraduate majors span the spectrum from biology and biomedical engineering to economics, psychology, and history. The Feinberg School’s newest students possess a wide range of life experiences, proven leadership and team skills, and, collectively, speak 29 different languages.

The undergraduate grade point average (GPA) for the Class of 2012 is 3.79 overall and 3.76 in the sciences. Average scores on the Medical College Admission Test (MCAT) for the class are 12.2 in the biological sciences, 12.0 in the physical sciences, and 10.9 in verbal skills. On a nationwide basis, applicants to medical school this year were among the most academically qualified in history, according to the Association of American Medical Colleges (AAMC). Data from the AAMC show an increase in the average undergraduate GPA to 3.50 and average MCAT scores to 28.1.

Our newcomers described themselves as representing the following racial and ethnic groups: African and African American (1 percent); Asian (42 percent); Hispanic (6 percent); Native American or Native Hawaiian/Pacific Islander (.6 percent); and white (42 percent). Twelve chose not to self describe.

In the class are 24 (14 percent) nontraditional students — those who have taken off two or more years between their undergraduate studies and medical school. They and the traditional students range in age from 20 to 31, claim 54 institutions as their undergraduate alma maters, and hail from 30 states and 10 foreign countries.

Forty-five students entered via the Honors Program in Medical Education and five via the Northwestern Undergraduate Premedical Scholars Program.

Nine members of the 2012 class have earned advanced degrees, including three PhD degrees — one in chemical and biomedical engineering and two in biomedical engineering — and six master’s degrees in science. Entering class members possess extensive research experience: 91 percent engaged in research on the undergraduate or graduate level. Forty-six percent are authors on research publications or presentations. The Class of 2012 boasts Howard Hughes Medical Institute, Biomedical Engineering Society, National Merit Scholar, and National Institutes of Health research awardees, among others. Our students are also Freeman-ASIA, Phi Beta Kappa, and Golden Key International honorees.

Students’ volunteer experience includes Doctors without Borders, Habitat for Humanity, the Baltimore Rescue Mission, and Teach for America. Additionally, our entering class members have volunteered as emergency medical technicians, in hospices, at local soup kitchens, at boys and girls clubs, and more.

Members of the 2012 class have participated in Relay for Life, as rowing/crew coaches, and as varsity football, ice hockey, fencing, basketball, and rugby players. The class includes a National Collegiate Champion Triathlon competitor, a U.S. archery champion, and a black belt in Tae Kwon Do.

Class members have won awards as humanitarians, hospice volunteers, writers, and print-makers. The class includes ballet, modern, and marathon dancers, as well as an orchestral bassoonist, several pianists and violinists, and a Chinese pipa player.
Residents ‘simulated’ to learn real-life skills

Cosmo is having chest pains and trouble breathing after an operation. The anesthesiology residents leap into action. As an organized team, they listen to his breathing, monitor his falling blood pressure, send labs, and give him oxygen. Cosmo is slipping into unconsciousness. They shock his heart out of an unstable rhythm and intubate him.

Not to worry. Cosmo is a computer-operated mannequin lying in an operating room and adjoining classroom tucked off the patient waiting area on the fifth floor of Northwestern Memorial Hospital’s Galter Pavilion. Christine S. Park, MD, assistant professor of anesthesiology and medical director for the Patient Safety Simulation Center, is watching the intense drill on the other side of the one-way glass and studying six monitors that zoom in on the students’ work.

She and the staff have chosen a series of scenarios to train the residents to react to different critical care situations. Cosmo tells residents what his symptoms are, and if they are getting worse. Eye controls, breathing sounds, and pulse are all programmed into the mannequin. By the end of the drill, Cosmo is breathing easier. Still, just to be on the safe side, he’s heading to the intensive care unit.

The videotape of the simulation exercise can be played to the entire class of residents and the results dissected, a task critical to the process of observing and correcting clinical behaviors, says Dr. Park. The hospital’s nurses also are tested in the center as part of their annual review. Residents from other specialties and fourth-year critical care students also learn via high-fidelity simulation.

The simulation lab adds an especially important component to the training of anesthesia residents. Spending a year interning in either internal medicine or surgery, they often get little exposure to an operating room or real experience providing an anesthetic. This type of course gives them the troubleshooting skills they need when they go from intense supervision by the attending physician to acting semi-independently. The simulation scenarios are designed to prepare and then access residents’ competence and safety when treating patients who experience low-oxygen saturations or low blood pressure.

A study conducted by Dr. Park, recipient of the Augusta Webster Grants for Educational Innovation at the medical school, shows the simulation class is reaping positive results. Her research, presented at the October American Society of Anesthesiologists annual meeting in Orlando, Florida, studied 21 first-year anesthesia residents as they were tested on simulation scenarios at the beginning and end of their six weeks of training. All the residents improved their performance in treating the mechanical patient’s oxygen and blood pressure events. “The results show that the residents improved their competence in safe practice earlier than what was achieved by clinical exposure alone,” says Dr. Park. “It’s really all about patient safety. With the help of simulation, we can correct any learned action before the resident interacts with real patients.”

“We see a marked improvement, and the students feel strongly about the benefits of practicing in the safety of a simulation environment,” adds Dr. Park. “It helps them gain not only skills, but also confidence—and now we have the data to back up that perception.”

Peers recognize Dr. Pearce

Northwestern’s Medical Faculty Senate Council named William H. Pearce, MD, Violet R. and Charles A. Baldwin Professor and chief of vascular surgery, the first “Faculty Mentor of the Year” at a reception held September 12. The new award recognizes outstanding faculty who have demonstrated a commitment to fostering the professional growth and development of their junior colleagues. The honor also highlights peer-to-peer acknowledgment of excellence in mentoring.
Faculty rack up more national honors

In May the Rehabilitation Institute of Chicago (RIC) named Gail L. Gamble, MD, assistant professor of physical medicine and rehabilitation, medical director of the RIC’s Cancer Rehabilitation Program.

Philip M. Iannaccone, MD, PhD, George M. Eisenberg Professor of Pediatrics, has been appointed to the advisory board of the journal Environmental Health Perspectives.

H. Hunt Batjer, MD, Michael J. Marchese Professor and chair of neurological surgery, was appointed to the Accreditation Council for Graduate Medical Education’s Residency Review Committee for Neurological Surgery.

The National Association of Community Health Centers (NACHC) awarded Bechara N. Choucair, MD, assistant professor of clinical family medicine, with the NACHC Health Professions Education and Training Award on September 16 at its annual convention in New Orleans.

Antoun H. Koht, MD, professor of anesthesiology, was elected to the board of directors of the Society of Neurosurgical Anesthesia and Critical Care.

The International Society for Anaesthetic Pharmacology has elected Tom C. Krejcie, MD, professor of anesthesiology, to its board of directors.

The Association of Pain Program Directors recently named David R. Walega, MD, GME ’98, assistant professor of anesthesiology, to its board of directors.

This summer David M. Mahvi, MD, joined Northwestern as chief of surgical oncology and James R. Hines, MD, Professor of Surgery. Dr. Mahvi was previously chief of surgical oncology at the University of Wisconsin Comprehensive Cancer Center.

Jonathan P. Leis, PhD, professor of microbiology–immunology, stepped down from his senior associate dean for research position in the dean’s office September 1 to devote himself full time to his research in the area of HIV and avian sarcoma virus replication.

Edward A. Yaghmour, MD ’95, GME ’00, assistant professor of anesthesiology, recently was elected to the National Arab American Medical Association’s board of directors.

Mary J.C. Hendrix, PhD, professor, Lurie Cancer Center, and president and scientific director of the Children’s Memorial Research Center, has been elected treasurer for Research!America, a research education and public advocacy alliance that promotes support for the nation’s medical and health research enterprise.

Barbara M. Scavone, MD, assistant professor of anesthesiology, was elected to the board of directors of the Society for Obstetric Anesthesia and Perinatology.

Kevin T. McVary, MD, GME ’89, professor of urology, was elected to the American Association of Genito-Urinary Surgeons in June.

Effective October 1 John A. Vozelnik III, MD, GME ’00, assistant professor of emergency medicine, became director of simulation technology and immersive learning. He was most recently director of the Northwestern McGaw Simulation Network.

Corrections

In the summer 2008 issue of Ward Rounds, it was reported on page 34 in the article “Medical school conducts leadership searches” that Linda V. Van Horn, PhD, RD, professor of preventive medicine, “stepped into the role” of interim chair of preventive medicine when former department head Philip Greenland, MD, moved to a new position. In fact, Rowland Chang, MD, MPH, professor of preventive medicine, served as interim chair from 2005 to 2007 shortly after Dr. Greenland assumed his new duties as executive associate dean for clinical and translational research. In 2007 Dr. Van Horn succeeded Dr. Chang in this position.

In this same issue of the magazine, an error occurred in the article that appeared on page 35 featuring the new chair of medicine, Douglas E. Vaughan, MD. Dr. Vaughan’s name was misspelled.

Ward Rounds regrets these errors.
President’s Message

This issue of *Ward Rounds* offers readers an opportunity to learn about the medical school’s efforts to attack the ongoing issue of obesity in our society through the newly launched Northwestern University Comprehensive Center on Obesity. While the challenge of overcoming obesity has been everlasting, the magnitude and prevalence of this crisis continue to confound physicians. And the shortage of primary care physicians this country faces will only compound the problem.

As a practicing pediatrician I face, many times a day, patients who are obese and suffer from the comorbidities of obesity. Dealing with this issue involves multispecialty medical expertise and supportive services from nutrition, psychological, and fitness professionals, plus the involvement of city planners to offer more outdoor and fitness opportunities. It has been stated that the implications of the obesity epidemic will overtake the financial resources of health care if it continues. I applaud Dr. Landsberg and the efforts of the Northwestern community for championing this issue and offering innovative programs for the Chicago area.

Please remember your alma mater in your holiday giving and be proud of all that the medical school has accomplished. Your ongoing support for scholarships and keen interest in the educational programs at Northwestern will continue to help advance our goals to graduate outstanding young physicians for now and the future.

Sincerely,

Bonnie L. Typlin, MD ‘74

*President, Alumni Association*
Olympic two-peat for Schroeder family

Beijing, China, and Wilmette, Illinois, don’t have much in common for most people, except maybe for James L. Schroeder, MD, GME ’81, MBA ’87; his wife Carol; and their four children. While they do have close relatives living in China, familial relations wasn’t all that brought them together this August in that nation’s second largest city. This year the ties that bind this president and CEO of the Northwestern Medical Faculty Foundation (NMFF) and his family to Beijing took the shape of the five colorful rings of the games of the 29th Olympiad.

Competing in his second consecutive summer Olympic Games, Dr. Schroeder’s oldest son, Jamie, jumped at the chance to compete again for the United States in rowing as well as visit familiar haunts. “Our four children look at Beijing as their second hometown,” says Dr. Schroeder, associate professor of clinical medicine at the medical school. “Three have spent at least a year of high school in China, and all four speak Mandarin. When it was announced that the Olympic Games would take place in Beijing, it was another reason Jamie became interested in making another run for the gold.”

In Beijing Jamie and his team gave it their all in the men’s quadruple sculls event, but the United States placed fifth, with Poland winning the gold. Now back at his PhD studies at Oxford and the National Institutes of Health and then heading to medical school next fall at Johns Hopkins University, Jamie looks forward to becoming a physician like his father.

A native of Akron, Ohio, Dr. Schroeder decided to combine his love of scientific inquiry and desire to impact people’s lives by entering medical school at the University of Virginia. In 1978 he and his spouse came to Northwestern to begin his internal medicine residency training. They arrived just in time to experience one of Chicago’s most infamous winter seasons remembered for its frigid temps and heavy snowfall that incapacitated the Windy City. Dr. Schroeder went on to a fellowship in rheumatology at Washington University in St. Louis before joining the faculty at Northwestern and starting his career with NMFF in 1983.

Dr. Schroeder first served as the HMO medical director and then director of managed care for the medical school’s faculty practice plan. His increasing interest in influencing patient care on a larger scale led him to complete an MBA degree at Northwestern’s Kellogg School of Management in 1987. Over time his role as an NMFF administrator and leader grew from vice president for clinical development/assessment (1993–99) to his current position heading an organization of close to 700 physicians and 1,700 employees. Among the top faculty practices in the country, NMFF has annual operating revenues of some $417 million and provides approximately 575,000 patient encounters per year.

A clinician who sees his role in medical management as a way to influence the lives of many more individuals than he could on his own, he continues to see patients once a week. Although the operation of NMFF in a challenging environment of third-party payer consolidations, Medicare woes, and competition for the best and brightest talent keeps him on his toes, Dr. Schroeder definitely did not miss out on rooting for his son in person at this summer’s Olympic Games. He recently shared with Ward Rounds some of his Olympic experience.

How were the Beijing Olympics?

It was a fabulous experience. The Chinese did a spectacular job putting on the Olympics. Given the type of government structure that exists in China, they do crowd control and eminent domain really well. The people were friendly and hospitable and genuinely proud of what they had achieved. Those qualities you can’t mandate.

At the various sports venues, you could feel a wonderful spirit of international cooperation and respect. Yes, there was national pride, but there was also true sportsmanship. People would cheer for teams that were not representing their countries. The theme of the Games was “One World One Dream.” It was a magical time in Beijing.

How have you influenced your son Jamie’s athleticism? Are you an accomplished athlete?

No one would ever mistake me for an athlete! I enjoy fitness and exercise regularly. But I am not a rower and we knew nothing about the sport before Jamie joined the rowing team during his sophomore year at Northwestern. [Jamie soon transferred to Stanford University where he could spend more time on the water.] My wife, Carol, played varsity tennis at Yale. So I think athletic genes and, of course, the mitochondria are inherited from the mother. Interestingly all of our children have been varsity rowers. Our son, Griffin, who currently works in Hong Kong, was in the first varsity lightweight boat at Harvard. Our daughter, Janet, rowed at Middlebury College, where she is finishing her senior year. And Chip, our youngest son, is a freshman rower at Stanford.
Fitness rather than a focus on athletics has always been important to our family. We’ve given our children the encouragement to pursue their passions. Following interests with a degree of discipline, seriousness, and focus is a core Schroeder family value.

Is there a rowing gene in the Schroeder family tree? Jamie’s siblings figured if he could row, they could row, too. In high school Jamie was not athletic at all. His passions were math, science, and music until he started growing into his body [Jamie is a strapping 6’8” and the tallest in the extended Schroeder family] and became interested in physical fitness. Before he was drafted into rowing, his biggest athletic endeavor at Northwestern was playing the sousaphone in the marching band! He came to rowing relatively late. This served to inspire his brothers and sister into believing that it was not too late for them to start.

If the summer 2016 Olympic Games should come to Chicago, will you be cheering for your son? Jamie has announced his retirement. Although he’s at the median age right now for a rower, those games are still eight years away. However, Chip has identified 2016 as his target. He would be the right age. Does he have a shot? He’s been rowing for the last four years and he’s accomplished, but it’s a long way to go from being a freshman rower to becoming an Olympian. Yet I’ve learned not to doubt the ambitions of my children.

After being at the Beijing Olympics, you realize what a massive investment it was for China and how much of a major undertaking it was for the country to create an infrastructure that could support the games. It would be like hosting three World Series at one time. I think it would be exciting for Chicago to host the Olympics. I am cheering for this city.

Cheryl SooHoo

Providing ‘Golden Arches’ Leadership

In August Mary Ann Malloy, MD ’67, of Oak Brook, Ill., spoke to more than 800 women who work in management for McDonald’s in the United States and abroad at the 2008 McDonald’s Women’s Leadership Network Conference in Schaumburg, Ill. Dr. Malloy, a cardiologist, gave the keynote address entitled “Saving Your Heart.” President of the Nathan Smith Davis Club, Dr. Malloy is an NBC-5 Chicago TV health reporter and lecturer in medicine at Northwestern.
George B. Sachs, MD ’69, has spent a lifetime being one happy camper. For 56 years, Dr. Sachs has summered at Camp Ojibwa for Boys in north central Wisconsin, first as an eight year old who rose in the ranks to become a counselor, camp manager, program manager, and, years later, as the camp’s in-residence volunteer medical director.

Dr. Sachs figures he has treated tens of thousands of 8- to 16-year-old boys at the sports-themed camp for everything from sprains, cuts, colds, and asthma to an occasional appendicitis attack, and even a nasty head lice infestation a few years back. “We had physicians, nurses, and directors all shampooing, nit-picking, and checking the campers’ heads for about two weeks,” he recalls. “It seems comical now, but we weren’t laughing at the time.”

The camp has a tremendous family tradition. It’s common for young campers to attend every summer for eight years and then go on to work at the camp as a counselor. Not much about the camp has changed over the years. Sitting on the shores of Catfish Lake, Camp Ojibwa looks like it has been transformed to a movie set from the 1950s, complete with 14 frame cabins and three mammoth diving board platforms jutting out where the water allows for jumping in feet first.

“I’ve been all over the world, and there’s no place I’d rather be,” says Dr. Sachs, 64. After completing his residency in otolaryngology — head and neck surgery at the University of Southern California in 1974, he served as a major in the Army. Then in North San Diego County he went into private practice, subspecializing in allergy. Dr. Sachs retired from clinical practice but still assists in head and neck surgeries the five months a year he’s in California.

Dr. Sachs always spends his summers in Wisconsin at the 55-acre Camp Ojibwa, which was named in 1928 after an Indian tribe. He met his wife, Karen, when she worked as a sailing director at a nearby girls’ camp. They married in 1967 and even honeymooned at Dr. Sachs’ home away from home. “For the first two months of our married life, we had no expenses,” Dr. Sachs recalls with a laugh. His wife now serves as sailing director at the camp, so they are able to spend many hours sailing, golfing, and biking while at Camp Ojibwa.

The medical director’s job can be demanding, but not overly so. “Besides emergencies, we have ‘sick call’ hours after every meal and before the campers go to bed,” explains Dr. Sachs. “We have a treatment room, a waiting room, and room enough for six kids to sleep or be observed.” Ojibwa is one of the few camps in the nation with a full-time medical director who stays all summer. The infirmary is accredited by the American Camp Association, akin to the Joint Commission in the world of medical safety for summer camps, according to this proud camper.

A typical day will find Dr. Sachs, and usually one or two visiting doctors and three nurses, treating about 40 kids. He also treats the camp’s counselors and kitchen and maintenance staff, so the numbers in his care swell to about 350 during the course of a summer session — there are two throughout the season. A hospital is only three miles away from Camp Ojibwa.

“Mostly, it’s triage here. Even for sutures, we call the parents first to make sure they want us to do it,” details Dr. Sachs. “Sometimes, they prefer a plastic surgeon, and we will refer to specialists we work with nearby.”

Still, a routine day of treating bee stings and pink eye is just fine with him. “I find it absolutely delightful,” says Dr. Sachs. “I have a good time talking with the kids, and I’ve been here so long that I’m caring for the grandchildren of men who were with me as a boy in camp. It has come full circle, and there are generations of families that we see.”

Camp Director Dennis Rosen says Dr. Sachs has an uncanny way of calming injured, ill, or homesick children, as well as their far-away, nervous parents. “When a young boy is homesick or hurt, George has a hand puppet called ‘Dr. Jocko’ that comes out to help distract and reduce any anxiety.”

The Sachs’ two sons were campers and staffers at Ojibwa, and their grandson, Jonah, already is enrolled for Cabin #1 in the summer of 2010, the year he turns eight. Dr. Sachs has every intention of being the camp’s doctor when his grandson arrives. “I’ll do this until I can’t do it anymore. It’s just a special place.”

Eileen Norris

Dr. George Sachs and his hand puppet, “Dr. Jocko,” help take care of the bumps and bruises of their young charges at Camp Ojibwa. Dr. Sachs relies on his trusty sidekick to calm and bring a smile to the patients who come through the camp’s on-site treatment facility.
Economy takes center stage at board meeting

Dean Larry Jameson told members of the medical school’s Alumni Association National Board on October 18 that the national economic downturn makes this the time for aggressive planning for the future of medical education, translational research, reimbursement systems, and national health care trends. Such planning will make Northwestern a leader that will attract faculty from across the country, he added.

The University’s $7.3 billion endowment has been growing thanks to strong investments, a tight spending rule of 3.5 to 5 percent annually, and the windfall from patent royalties from the drug Lyrica. Starting in fiscal year 2010, however, the University expects to experience some belt-tightening resulting in decreased program growth, hiring, and building construction, said the dean. He based his remarks on an e-mail message sent by University President Henry Bienen to all faculty and staff on October 16 concerning the effects of the national economy on the University. (Visit www.feinberg.northwestern.edu/giving/index.html to read the president’s message.)

Given the strained economic times, “students will want more financial support,” said the dean, noting that the only way to bring this about is to lower tuition, lower class size, or raise more money, which is the preferable solution. Existing support from Northwestern Memorial Hospital (NMH), Northwestern Medical Faculty Foundation, and philanthropy will become even more important in the future. Expanded financial support for students also would open admission to qualified individuals who can’t afford the tuition.

In an update on the medical school’s affiliates, the dean spoke about Northwestern’s disaffiliation with Evanston Northwestern Healthcare (ENH), explaining that ENH’s desire for a greater level of autonomy prompted the split. He noted too that competition for patients between ENH and NMH also strained the relationship.

The national economic downturn makes this the time for aggressive planning for the future of medical education, translational research, reimbursement systems, and national health care trends.

“We have a strong alliance with Northwestern Memorial,” said the dean, noting the hospital’s $40 million donation in 2007, which increased to $70 million in fiscal year 2008.

In other affiliate news, the dean stated that the construction of the replacement facility for Children’s Memorial Hospital, a $1 billion project, is underway and that the hospital is two-thirds of the way toward its $600 million fundraising goal. Scheduled to open in 2012, the new building will be known as the Ann & Robert H. Lurie Children’s Hospital of Chicago.

Under the direction of new President and Chief Executive Officer Joanne C. Smith, MD, MBA, the Rehabilitation Institute of Chicago—still #1 in the country for the past 13 years—continues to outdistance its competitors but is not resting on its past success. Having outgrown its physical plant, the center will build a new hospital on one-third of the lot now occupied by the VA Hospital. NMH will build on the remaining two-thirds.

Guest speaker Michael Abecassis, MD, MSc, MBA, updated the board on Northwestern’s role in the field of transplantation. The J. Roscoe Miller Distinguished Professor is associate professor of surgery and microbiology–immunology as well as chief of the Division of Organ Transplantation. He recently has taken on the additional role of dean for clinical affairs.

Dr. Abecassis told the group that Northwestern has a long history in transplantation, having been one of the first nationally to complete a successful kidney transplant in 1964. The program received national media attention in April 2008 when it conducted an eight-way “domino” kidney transplant. Today, Northwestern ranks nationally as the largest living donor (laparoscopic donor nephrectomy) program, the fifth largest kidney transplant program, the third largest pancreas transplant program, and the 10th in liver transplants.

In other business, the board approved an amendment to the bylaws of the Nathan Smith Davis Club, allowing the addition of a president-elect to the existing president position. Board member Mary Ann Malloy, MD ’67, will continue in the president’s role with Bruce F. Scharschmidt, MD ’70, as the president-elect. In his new role, Dr. Scharschmidt will help Dr. Malloy promote the club to all graduates and faculty members and present the club members’ needs and concerns to the Alumni Association National Board. He will succeed Dr. Malloy in 2009.

Julie A. Melchior, MD ’91, reported on the success of the mentoring committee’s student program at Alumni Weekend 2008 in April. Thirty students attended the event where they met in small groups with alumni who discussed their specialties. The most requested specialty groups were emergency medicine, internal medicine, orthopaedics, surgery, and obstetrics and gynecology, said Dr. Melchior. The mentoring committee plans a similar event for Alumni Weekend 2009.

Janet DeRaleau
Progress Notes

Irwin Benuck, MD ’79, PhD, of Chicago, professor of clinical pediatrics at Northwestern, has been elected to a two-year term as president of the Illinois chapter of the American Academy of Pediatrics. The organization serves more than 2,300 pediatricians in Illinois. He also welcomes his son, Russell G. Benuck, MD ’08, as a recent Northwestern alumnus. Russ is an orthopaedic surgery resident in Detroit.

Catharine M. Cadigan, MD ’90, of Bath, Maine, received the American College of Physicians (ACP) Maine Chapter 2008 Laureate Award on October 18. The award honors ACP fellows and masters who have demonstrated their commitment to excellence in medical care, education, or research and to serving their communities. Dr. Cadigan is the director of the Maine Practice Network affiliated with the Maine Medical Center, where she is the outpatient internal medicine clerkship director and on the teaching faculty. She also is a clinical instructor at the University of Vermont and at Tufts University.

Jennifer G. Goldman, MD ’98, GME ’99, of Chicago has received a National Institutes of Health (NIH) K23 career development award to study cognitive impairment in Parkinson’s disease. She is assistant professor of neurological sciences in the Section of Movement Disorders at Rush University Medical Center.

Emmet Hirsch, MD ’88, GME ’92, of Evanston, Ill., associate professor of obstetrics and gynecology at Northwestern, received on September 24 in Chicago the March of Dimes (Illinois chapter) Jonas Salk Health Leadership Award for Research.

Gerard A. Isenberg, MD ’90, of Shaker Heights, Ohio, received the 2008 Given Capsule Endoscopy Research Award from the American Society for Gastrointestinal Endoscopy. The honor is presented to a physician with the best research project in capsule endoscopy (pill camera technology). Recently promoted to associate chief of gastroenterology at Case Western Reserve University, he is completing an MBA degree in health care administration at Lake Erie College.

Jennifer J. Lee, MD ’02, of Kirkland, Wash., received the 2007–08 Outstanding Teacher Award during the University of Washington Department of Ophthalmology’s 34th annual Resident Alumni Day for her clinical instruction in eye surgery. She specializes in teaching the latest cataract surgery techniques.

R. Samuel Mayer, MD ’86, of Baltimore has been named vice chair for education at Johns Hopkins University, where he also serves as residency program director, director of medical student education, and medical director and physician adviser for inpatient rehabilitation. He is also national cochair of Project 100: Musculoskeletal Education for Medical Students for the U.S. Bone and Joint Decade.

G. Klaud Miller, MD ’75, GME ’80, of Evanston, Ill., has been appointed an associate editor of Arthroscopy: The Journal of Arthroscopy and Related Research. A clinical professor at the Feinberg School of Medicine, he is in private practice in Evanston. He shares, “My son just went over to the ‘dark side’ and graduated from the NU Law School!”

Elizabeth M. Nestor, MD ’91, of Wakefield, R.I., was recently named 2008 Rhode Island Woman Physician of the Year by the Rhode Island Medical Women’s Association.

Todd K. Rosengart, MD ’83, of Stony Brook, N.Y., has been appointed interim chair of surgery at the SUNY Stony Brook School of Medicine. He is professor and chief of cardiothoracic surgery there.

Peter K. Sand, MD ’80, GME ’84, of Wilmette, Ill., has been elected president of the International Urogynecological Association from 2008 to 2010. Currently professor of obstetrics and gynecology at Northwestern, he heads both the Division of Urogynecology and fellowship in female pelvic medicine and reconstructive surgery.

The Montana Medical Association elected Kirk L. Stoner, MD ’78, of Plentywood, Mont., president at its 130th annual meeting held September 13. A native Montanan and family practice specialist, Dr. Stoner has spent his 27-year career in private practice in his home state.
Progress Notes

1947
Ralph R. Sonnenschein, MD, PhD, of Los Angeles had a wonderful time during Alumni Weekend. "It was a great event to discuss old and more recent times with the half-dozen classmates who attended our 60th reunion," he says. After an internship at Michael Reese Hospital, he conducted research in physiology, receiving a PhD degree in 1950 at University of Illinois at Chicago. In 1951 he was appointed assistant professor of physiology at the newly founded University of California at Los Angeles School of Medicine, where he remained until retiring in 1968. His hobby is collecting portrait medals of individuals in the basic medical and natural sciences, and he now has more than 1,900. He would love to hear from colleagues who have similar interests.

1948
Arthur R. Colwell Jr., MD, GME '51, is enjoying his retirement in Sun City, Ariz. He moved there in 1979, after serving as associate professor and chief of rheumatology at Northwestern and practicing at Evanston Hospital. During his first years of practice, he received an NIH grant to study the mechanism of insulin release and published a dozen papers. After his wife, Bettie Jane, died, he remarried. Now he and wife Joyce live in a retirement village where they perform sing-a-longs for the Alzheimer’s unit. In his spare time, he plays golf and tennis and performs with his jazz quartet, The Upstarts.

1953
Simon K. Myint, MD, of Newhall, Calif., jogged and walked around Mackinac Island in Michigan with his 18-year-old grandson, Matthew Pollard, in June. In September he attended the 38th Annual World Medical Tennis Society meeting in Umag, Croatia, along with 298 participants, including 42 members of the American Medical Tennis Association from 26 countries. He won the men’s singles title in the 80-year-old age group and hopes to defend it next July in Helsinki, Finland.

1957
Clifford D. Stiles, MD, and wife Carol of Foley, Minn., recently celebrated their 50th wedding anniversary with the entire family on safari in Tanzania for two weeks in June. Most memorable was the 6 a.m. hot air balloon ride over the Serengeti.

1966
Richard G. Geier Jr., MD, GME '72, of Rochester, Minn., has retired as chairman of the MMIC Group (a private liability insurance group), as a surgeon from the Olmstead Medical Center, and as president of the Minnesota Medical Association. Wife Karen passed away in June after a long illness. Dr. Geier has completed a book on the history of the Olmstead Medical Center, due out next summer. Classmate Bill Lawton, MD, GME '70, and wife Patsy, PT '65, of Iowa City, recently paid him a visit. Dr. Lawton is semiretired from the University of Iowa College of Medicine.

Drum provides Olympic-class care

Larry A. Drum, MD '84, of Long Beach, Calif., was a physician volunteer at the summer Olympics in Beijing. He also had served as a volunteer at the Sydney Olympics in 2000 and the Athens Olympics in 2004. “A proud graduate of Northwestern,” Dr. Drum is the CEO of Memorial Sports and Internal Medicine, Inc.; medical director of USA Water Polo, Inc.; and medical director of the Long Beach State University Department of Athletics.
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1967
Stephen L. Seagren, MD, GME ’68, of San Diego recounts, “Beginning in September 1964, four classmates, doing anything to avoid another year in Abbott Hall, rented a cheap, two-bedroom, walk-up apartment with the (we thought) prestigious address 1 W. Superior. We could barely afford the $165-a-month rent. Soon it became not only our abode but also a weekend party center. The ‘living’ room had a walkout rooftop overlooking Holy Name Cathedral, the Lawson YMCA, and Rush Street. As we moved around during the clinical years, others lived there intermittently. We decided to have a 1 W. Superior reunion at my place in San Diego one weekend in August this year.” Attendees included the original four: E. Stephen “Steve” Amis Jr., MD, GME ’68 [New York], Douglas C. Hancock, MD, [San Rafael, Calif.], Thomas K. Young, MD [Gainesville, Fla.], and Dr. Seagren plus later “interlopers” Ralph W. Rucker, MD [Haskell, Okla.], Thomas A. Pavlovic, MD, GME ’73 [Winnetka, Ill.], and Keith E. Louwe-naar, MD [Sparks, Nev.]. Gerard “Gerry” M. Goshgarian, MD [Libertyville, Ill.] couldn’t make it since he had a long-scheduled trip to Italy. The gang is already making plans to meet again in a couple of years. The “humble abode” is now a 30-story apartment complex.

1982
Laura J. (Mangun) King, MD, of Atlanta is medical director of Georgia for WellCare, after serving as medical director for care coordination at Emory HealthCare. She is president of Women in Ophthalmology and immediate past-president of the Georgia Society of Ophthalmology. She serves on the Health Policy Committee of the American Academy of Ophthalmology and received the AAO Achievement Award in 2003 for distinguished service in the programs of the society. Patrick J. O’Connor, MD, GME ’85, will be leaving Tuba City, Ariz., next spring after 24 years of working there for the Indian Health Service. He will make Tucson his home while he works full time with an Indian Health Service clinical team assigned to the Afghanistan Health Initiative, a project of the Department of Health and Human Services that is helping to restore the graduate medical education infrastructure of Afghanistan.

1986
David E. McRay, MD, has relocated to Fort Worth, Texas, to join the faculty of the John Peter Smith Hospital Family Practice Residency Program, which is the same hospital where he trained. He will teach surgical obstetrics and international health. Prior to his move, he practiced for 19 years with a community health center in rural Appalachia and was honored with the Practitioner of the Year Award from the Tennessee Primary Care Association.

1988
Mark A. Johnson, MD, of Venice, Fla., proudly announces that his eldest son, Colin Michael Johnson, entered Northwestern’s Weinberg College of Arts and Sciences this fall.

1990
Nancy A. McCarthy, MD, of Long Beach, Calif., served on the University of Southern California faculty for several years before joining the California Department of Corrections and Rehabilitation as the psychiatrist for men and women inmates in the California Civil Addict program at the California Rehabilitation Center. “I loved working with addicted prisoners, but the administrative bogs became too thick,” she writes. “Almost three years ago I transferred to the Parole Division for LA County, and now I have parole clinics in Compton and the Whittier area.”

1991
Julie A. Melchior, MD, of Boulder, Colo., is pleased to announce that she and husband Stephen E. Leichty welcomed a second daughter, Allison Elizabeth, on March 7. Baby Allison joins four-year-old sister Katherine. Julie is a hand surgeon with the Colorado Permanente Medical Group, and Steve is a chemical engineer in technology marketing with Chevron.

1997
Sumaira Z. Aasi, MD, GME ’01, of New Haven, Conn., is a Mohs micrographic surgeon and assistant professor of dermatology at Yale School of Medicine.

1998
Julia Song, MD, of Long Beach, Calif., is practicing ophthalmology as a glaucoma specialist in the Los Angeles area. Her twin sister, Alice, who is an oculoplastics specialist, lives nearby. In her spare time, Dr. [Julia] Song recently took up scuba diving. She is planning a medical mission trip to Thailand in January.
1999
Sarah A. (Lacey) Pilarowski, MD, of Denver and husband David welcomed Lydia Lacy Pilarowski on June 14. She joins big brother Liam. Dr. Pilarowski practices pediatrics at Cherry Creek Pediatrics and serves as a clinical assistant professor at the University of Colorado School of Medicine. Ugne J. Skripkus, MD, GME ’00, of La Jolla, Calif., and husband Jonathan Roper, MD, welcomed their first child, daughter Kalia Ona Roper, on June 11. A practicing radiologist, Dr. Skripkus completed her residency and a breast imaging fellowship at the University of California at Los Angeles, as well as a musculoskeletal imaging fellowship at the University of California at San Diego. Jonathan is an orthopaedic surgeon specializing in spinal surgery. The couple celebrated their fifth wedding anniversary on Valentine’s Day.

2000
Apoor S. Gami, MD, of Elmhurst, Ill., is a cardiac electrophysiologist with Midwest Heart Specialists. Subhro K. Sen, MD, of Mountain View, Calif., recently completed a plastic and reconstructive surgical fellowship at the Johns Hopkins University School of Medicine. Dr. Sen now is pursuing a hand fellowship at Stanford University that he will complete in July.

2002
Liette C. Witherrite, MD, of White Salmon, Wash., is a rural family physician who practices in her hometown as well as in the town of Stevenson. She and her husband, Troy, a physician, welcomed Sage Julia Witherrite on May 5. Sage joins big sister Lila Zoe, who is 18 months old. Jashin J. Wu, MD, of Los Angeles completed his dermatology residency at the University of California at Irvine in June. He is the founding director of clinical research and will be the founding dermatology residency director at L.A.’s Kaiser Permanente. The dermatology residency will be the first independent Kaiser Permanente residency program in the country. A board-certified dermatologist, he has written 100 book chapters and PubMed journal articles.

2003
Shanna C. Ten Clay, MD, of Vacaville, Calif., completed a fellowship in cardiothoracic anesthesiology at Duke University in June. A volunteer faculty member at the University of California at Davis, she serves on the medical staff at David Grant Medical Center, Travis Air Force Base.

Birth becomes an ‘alumni’ affair

Rebecca “Becky” Liddicoat Yamarik, MD ’00 (right), shares that she had a “six degrees of separation” experience giving birth to her new baby Sam on September 10. She reports that she works at the University of California at Irvine (UCI) as an internal medicine hospitalist and palliative care physician along with Northwestern classmate Tony Marengo-Barbick, MD ’00, an obstetrics and gynecology residency program director at UCI. “Tony delivered my baby, and this photo is of all of us at two weeks old.” Dr. Yamarik also shared that Tony’s husband, Brian C. Barbick, MD ’00, works at Mission Hospital in Mission Viejo, Calif., as a minimally invasive surgeon. They have two children. Other Northwestern alums at UCI include Brandie J. Metz, MD ’00, a dermatology specialist who had a baby this year, and Darren J. Malinowski, MD ’99, a trauma surgeon.
Progress Notes

2004
Emily Bedrick Graubart, MD, of Decatur, Ga., completed her ophthalmology residency at Emory University in June. She joined the Emory University School of Medicine as an assistant professor and provides clinical care in the comprehensive section of the Department of Ophthalmology. She also will teach medical students and residents at Emory, Grady Memorial, and Crawford Long hospitals.

2005
Sejal H. Shah, MD, of Palo Alto, Calif., announced her marriage to fellow Northwestern graduate Sean Lindo, SESP ’02, this summer. She will start a fellowship in pediatric endocrinology at Stanford University next year.

2006
Ashley Green Dorin, MD, of Santa Monica, Calif., married former classmate Ryan P. Dorin, MD, on September 27 at the Winvian Hotel in Morris, Conn. She writes that many family members and friends attended the wedding, including several Northwestern alums. From the Class of 2006 were Kathryn Chell, MD; Ryan Cunnane, MD; Mauricio de la Lama, MD; Lindsay Forbess, MD; Sarah Hemmer, MD; and Jamie Marko, MD. Taylor Holve, MD, and Philip Kim, MD, represented the Class of 2005. Ashley is completing her psychiatry residency at the University of California at Los Angeles and Ryan, a urology residency at the University of Southern California.

GME PROGRAMS

Internal Medicine
Jason Gonsky, MD, GME ’04, of Brooklyn, N.Y., has joined the faculty of SUNY Downstate and Kings County as assistant professor of medicine in the Division of Hematology and Oncology. He is involved with developing the clinical trials program, serving as a preceptor to fellows in the clinic, and teaching residents and medical students. His research focuses on new therapies for multiple myeloma. “I can report that in my first month here I have seen more zebras than in the past three years. I am having lots of fun,” he says. “My daughter, Shiloh, is now five and in kindergarten. Her sister, Tallulah, is four and in pre-K. Shiloh wants to be a doctor and take care of patients and go to work with me in the hospital when she is older.”

In Memoriam
William E. Barnes, MD ’48, of Waukegan, Ill., died July 27, 2008.
Donald H. Boettner, MD ’45, of Bellingham, Wash., died July 26, 2008.
Thomas C. Bolton, MD ’47, of Medford, Ore., died July 13, 2008.
Donald K. Bufmire, MD ’48, of Paradise Valley, Ariz., died July 2, 2008.
Paul L. Conrad, MD ’45, of Goshen, Ind., died July 17, 2008.
Samuel W. Hall Jr., MD ’70, of Shoreview, Minn., died July 19, 2008.
Brian J. Hartigan, MD, GME ’99, of Glenview, Ill., died September 23, 2008. Dr. Hartigan was assistant professor of clinical orthopaedic surgery at Northwestern.
W. Robert Meadows, MD ’44, of Elgin, Ill., died July 13, 2008.
Robert R. Oden, MD ’48, GME ’52, of Captiva, Fla., died May 18, 2008.
Harry S. Ogden, MD ’49, GME ’50, of Monterey, Calif., died August 22, 2008.
Ralph E. Otto, MD ’67, GME ’74, of Wilmette, Ill., died August 11, 2008. Dr. Otto was an associate in surgery at Northwestern.
Phillip G. Spiegel, MD ’60, of Englewood, Fla., died June 26, 2008.
Carol L. “Sunny” Sundberg, MD ’43, of Spokane, Wash., died July 15, 2008.

Items for Progress Notes may be sent to the Office of Communications, Northwestern University, Feinberg School of Medicine, 303 East Chicago Avenue, Rubloff 9th floor, Chicago, Illinois 60611-3008 or via e-mail to ward-rounds@northwestern.edu. Be sure to include the year the MD degree was received or the GME or Other Program was completed.

Please note: Progress Notes items printed in Ward Rounds may be posted on the medical school’s web site.
Can’t make it back to your alma mater? Then we will come to you. Leaders from Northwestern University’s Feinberg School of Medicine and Northwestern Memorial HealthCare (NMHC) will update alumni on the academic medical center, from coast to coast and someplace in between in early 2009.

Dean Larry Jameson; Dean Harrison, president and chief executive officer at NMHC; and key medical school faculty members will be among the featured speakers at three medical alumni brunch events. These leaders will update alumni on the latest people, programs, and activities of the Northwestern community.

We invite you to join us at an alumni brunch near you and learn more about what’s going on at your medical school. For more information, call the Office of Alumni Relations at 312/303-8012 or visit www.medschool.northwestern.edu/alumni.
Zero to more than 15,000 MD and GME alumni in 150 years! That’s your history and accomplishment . . . and ours. Join us this April for a very special alumni reunion to be celebrated during your alma mater’s historic 150th anniversary. Alumni Weekend 2009 will offer a myriad of opportunities for you and your former classmates to renew old ties and take a look at Northwestern’s future. In addition to class dinners and campus activities, the reunion weekend will offer a first-ever tour of Chicago sites significant in the history of the medical school as well as a Sesquicentennial Ball at the elegant, newly renovated Ritz-Carlton Hotel. Join us for history in the making.

We look forward to seeing you soon!
UPCOMING EVENTS

January 21–23
The Year in Internal Medicine / Northwestern Memorial Hospital, Feinberg Pavilion Conference Center, 251 East Huron Street, Chicago. Fee: $495 for physicians and $250 for fellows, residents, and nurses. For more information, call the Office of Continuing Medical Education, Northwestern University’s Feinberg School of Medicine, 312/503-8533.

February 4
The Second Annual Women’s Cardiovascular Health Symposium / Prentice Women’s Hospital, Third Floor Conference Room, 250 East Superior Street, Chicago. Fee: $60. For more information, call the Office of Continuing Medical Education, Northwestern University’s Feinberg School of Medicine, 312/503-8533.

February 5
Pediatric Pearls: Autism Spectrum Disorders / Doubletree Hotel, 1909 Spring Road, Oak Brook, Illinois. Fee: $125 for physicians and $110 for hospital employees, Children’s Community Physicians Association (CCPA) members, fellows, residents, nurses, and technicians. For more information, call Children’s Memorial Hospital, 773/880-6772.

February 5–7
The 13th Annual Update in Gynecologic Urology / The Westin Aruba Resort, J.E. Irausquin Boulevard, 77, Palm Beach, Aruba. Fee: $795 for physicians and $595 for residents, fellows, nurses, and affiliated health care providers. For more information, call the Office of Continuing Medical Education, Northwestern University’s Feinberg School of Medicine, 312/503-8533.

March 6
Aggressive Risk Reduction Therapies for Patients with Established Coronary and Other Atherosclerotic Disease: The Future is Now / Hyatt Regency McCormick Place, 2233 South Martin L. King Drive, Chicago. For more information, call CME-University, 877/263-8438, ext. 11.

March 6–8
Fifth Annual Winter Course on IBD, Nutrition, Obesity, and Intestinal Failure / Hotel Jerome, 330 East Main Street, Aspen, Colorado. Fee: $399 for physicians and $349 for fellows, nurses, and technicians. For more information, call the Office of Continuing Medical Education, Northwestern University’s Feinberg School of Medicine, 312/503-8533.

March 11
Pediatric Pearls: Endocrinology / The Renaissance Chicago O’Hare Suites Hotel, 8500 W. Bryn Mawr Avenue, Chicago. Fee: $125 for physicians and $110 for hospital employees, CCPA members, fellows, residents, nurses, and technicians. For more information, call Children’s Memorial Hospital, 773/880-6772.

April 16–17
Annual Interdisciplinary Stroke Course: The Brain and the Body Connection after Stroke / Rehabilitation Institute of Chicago (RIC), 345 East Superior Street, Chicago. Fee: $450. For more information, call RIC, 312/238-4451.

April 23
Pediatric Pearls 17 / Doubletree Hotel, 1909 Spring Road, Oak Brook, Illinois. Fee: $125 for physicians and $110 for hospital employees, CCPA members, fellows, residents, nurses, and technicians. For more information, call Children’s Memorial Hospital, 773/880-6772.

May 22
Pediatric Pearls: Functional/Non-Organic Pain / Hyatt Hotel Deerfield, 1750 Lake Cook Road, Deerfield, Illinois. Fee: $125 for physicians and $110 for hospital employees, CCPA members, fellows, residents, nurses, and technicians. For more information, call Children’s Memorial Hospital, 773/880-6772.

May 30
Pediatric Dermatology for the Primary Care Physician / Thorne Auditorium, Arthur Rubloff Building, 375 East Chicago Avenue, Chicago. For more information, call Children’s Memorial Hospital, 773/327-3204.

For more Northwestern CME offerings, visit www.cme.northwestern.edu/conferences/index.html. All courses offer AMA PRA Category 1 Credit(s)™.

Additional photography
Mary Hanlon, p. 44
Nathan Mandell, p.29
Jim Ziv, pp. 18, 20-21, 24–25, 27, 34