

Fall 2014 Volume 01, Number 04

# Northwestern Medicine Magazine

A publication for the alumni and friends of  
Northwestern University Feinberg School of Medicine



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## DNA Sequence Of Events

Genomics expert goes to the heart of genetic medicine

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p.12

A new Northwestern  
Lake Forest Hospital

p.20

From the Military  
to Medicine

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STUDENTS FROM THE COOPER SOCIETY CELEBRATE THEIR VICTORY AFTER THE ANNUAL SOCIETY OLYMPICS IN SEPTEMBER. READ ABOUT THE EVENT ON PAGE 26.

# Northwestern Medicine Magazine

FALL 2014  
VOLUME 01, NUMBER 04

Northwestern Medicine Magazine is published quarterly for alumni and friends of Northwestern University Feinberg School of Medicine, Northwestern Memorial HealthCare, and the McGaw Medical Center of Northwestern University.

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Remarkable progress over last three years

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## Northwestern Medicine Leadership



Given the complex and troublesome world of modern medical schools, the Feinberg School of Medicine can be thankful for our superb clinical partners, university support, and a strong faculty dedicated to our key missions of education, research, and clinical care.

Together, we have elevated the stature of the medical school by recruiting outstanding clinical and research faculty, developing important new centers of excellence, implementing a new medical school curriculum, and migrating our adult clinical practice to Northwestern Memorial HealthCare (NMHC). Our new national brand, Northwestern Medicine, is evolving quickly and successfully as the health system continues to expand its outreach.

Over the last three years we have witnessed many achievements, from breakthrough science to discoveries that advance new therapy, leadership contributions to the larger world of medicine, and the extraordinary ways we are evolving patient care.

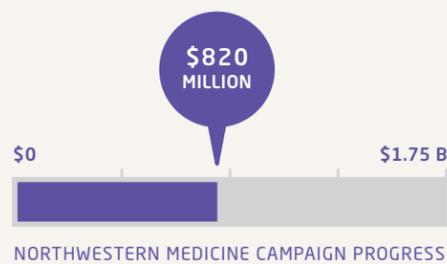
With the close of the 2014 academic year, I had an opportunity to reflect on the remarkable progress we've made over these last few years, and I wanted to share some of the highlights:

- » 407 new faculty joined Feinberg as Clinician-Educators or Investigators – half of this group are women, and overall there are now 85 faculty from under-represented minority groups.

- » A number of eminent scholars, educators, and clinicians have advanced from within or joined Feinberg to lead departments, centers, institutes, clinical divisions, or administrative units.

- » The rollout of the redesigned MD curriculum began with the Class of 2016. The goal is to make the curriculum more integrated and relevant to today's learners across the four-year experience while adding a degree of flexibility to address individual needs.

- » The now completed migration of our adult clinical practices, a major clinical arm of the medical school, to NMHC will allow us to operate more strategically.



- » The medical campus continues to grow with the opening of NMH's new outpatient care pavilion in October, the final acquisition of Cadence Health on Sept. 1, and the groundbreaking for the new Northwestern Lake Forest Hospital in August.

- » We have nearly completed a three-year, \$55-million renovation of 100,000 sq. ft. of wet lab research space and have leased 70,000 sq. ft. for dry laboratories.

- » The school has substantially revamped the resources for clinicians to conduct clinical trials.

- » Northwestern University ranks 14th on a recent list of the most highly cited

scientists worldwide, according to data compiled from Thomson Reuters. Of the 28 faculty on that list, six had primary appointments at Feinberg.

- » Numerous faculty members took on national leadership positions or received national and international awards, bringing Feinberg to the external world of academic medicine.

- » We launched an ambitious new **Institute for Public Health and Medicine (IPHAM)**, a collaboration of ten centers that link scientists across Northwestern, integrating traditional medical disciplines with public health. We have also launched a new **Developmental Therapeutics Institute** within the Lurie Comprehensive Cancer Center, re-launched the **Asher Center for the Study and Treatment of Depressive Disorders** in psychiatry, the **Osher Center for Integrative Medicine**, a new **Center for Rare Diseases** and a **Center for Sleep and Circadian Medicine** in neurology, a **Center for Aging and Molecular Senescence** in medicine, and a **Center for Pharmacogenomics** in pharmacology.

With all this progress thus far—and with sustained focus, commitment, and passion—I am confident in our continued quality improvement as an academic medical center. I am grateful for the thoughtful work by faculty, staff and health system employees each and every day in support of our mission.

With warm regards,

**Eric G. Neilson, MD**  
 Vice President for Medical Affairs and Lewis Landsberg Dean, Northwestern University Feinberg School of Medicine

## Campus News



(LEFT TO RIGHT) DIMITRI KRAINIC, MD, CHAIR OF NEUROLOGY, HARVEY GAFFEN, PRESIDENT EMERITUS OF THE LES TURNER ALS FOUNDATION BOARD, WENDY ABRAMS, EXECUTIVE DIRECTOR OF LES TURNER ALS FOUNDATION, KEN M. CRANE, PARTNER AT PERKINS COIE LLP, AND KEN HOFFMAN, PRESIDENT OF THE LES TURNER ALS FOUNDATION BOARD.

### Les Turner ALS Foundation Commits \$10 Million for New Center

The Les Turner ALS Foundation has made a \$10 million commitment to create the Les Turner ALS Research and Patient Center at Northwestern Medicine to accelerate research and advance treatment for amyotrophic lateral sclerosis (ALS), also known as Lou Gehrig's Disease. ALS is a fatal neurodegenerative disease that often strikes people in the prime of their lives.

The Center will bring together the Les Turner ALS Research Laboratories, the Les Turner/Lois Insolia ALS Center, the ALS tissue bank and other ALS research, clinical and education activities at Northwestern.

"The advantage of having all the research and clinical activities joined as part of the Center is to enhance collaborations between researchers and clinicians and, therefore, facilitate the development of new therapies for ALS," says **Dimitri Krainc, MD**, chair of the Ken and Ruth

Davee Department of Neurology at Northwestern Medicine and the Aaron Montgomery Ward Professor at Feinberg.

The Foundation, a partner with Northwestern for 35 years, has provided support that has led to significant advances from the Feinberg laboratories of **Teepu Siddique, MD**, the Les Turner ALS Foundation/Herbert C. Wenske Foundation Professor, and **P. Hande Ozdinler, PhD**, assistant professor of neurology.

Dr. Siddique's lab has made several important discoveries in the field, including the identification of genetic causes of ALS. His work provides potential targets for drug therapy. Ozdinler's lab for the first time isolated the motor neurons in the brain's cortex that die in ALS and gave them fluorescent tags so that they can be tracked and studied.

"Northwestern scientists have made important advances in ALS research, and the foundation's generosity in the creation of the new Les Turner ALS Research and Patient Center will help generate even more significant discoveries related to this yet incurable disease," says Northwestern University President Morton Schapiro.

### Lefkofsky Family Foundation Supports Innovative Studies in Cancer

The Lefkofsky Family Foundation recently pledged to create the Liz and Eric Lefkofsky Innovation Research Awards at the Robert H. Lurie Comprehensive Cancer Center of Northwestern University. These awards will help to support promising investigators, providing them with the resources and protected time needed to push the envelope, as they develop a research track record that will lead to National Institutes of Health (NIH) funding for their basic, translational and clinical cancer studies.

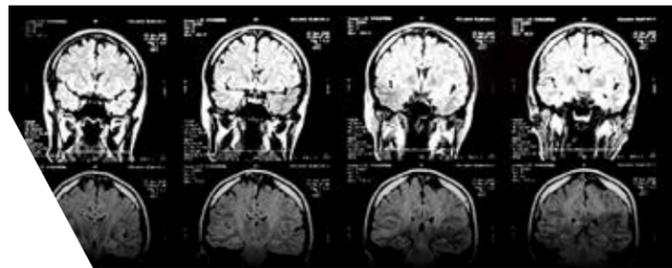
"The lack of early-stage funding is a prevalent and difficult obstacle for promising treatments," says Liz Lefkofsky. "Researchers at the Lurie Cancer Center are doing revolutionary work to eradicate



a cruel disease that has affected everyone in some way. With these grants, we will ensure more potentially life-saving ideas get the development and investment they critically need."

The Lefkofsky Family Foundation was established in 2006 by Liz and Eric Lefkofsky, and serves to advance high-impact programs, initiatives, and research that enhance the quality of human life in our community. One of its missions is to propel innovative medical research, which aligns directly with Northwestern Medicine's vision to transform health care. **LM**

## Research Briefs



### Electric Current to Brain May Help Treat Memory Disorders

Stimulating a particular region in the brain via non-invasive delivery of electrical current using magnetic pulses, called Transcranial Magnetic Stimulation, improves memory, reports a new Northwestern Medicine study published August 29 in *Science*.

The discovery opens a new field of possibilities for treating memory impairments caused by conditions such as stroke, early-stage Alzheimer's disease, traumatic brain injury, cardiac arrest and the memory problems that occur in healthy aging. The approach also has potential for treating mental disorders such as schizophrenia.

"We show for the first time that you can specifically change memory functions of the brain in adults without surgery or drugs, which have not proven effective," says senior author [Joel Voss, PhD](#), assistant professor of Medical Social Sciences at the Feinberg School of Medicine. "This noninvasive stimulation improves the ability to learn new things."

The study also is the first to show that TMS improves memory long after treatment and is the first to demonstrate that remembering events requires a collection of many brain regions to work in concert with the hippocampus. The electrical stimulation helps the brain regions operate in closer synchrony.

The hippocampus is too deep in the brain for the magnetic fields to penetrate, so the Voss lab identified a region one centimeter from the skull's surface with high connectivity to the hippocampus. He wanted to see if he could stimulate the hippocampus.

"I was astonished to see that it worked so specifically," Voss says.

"This opens up a whole new area for treatment studies where we will try to see if we can improve function in people who really need it," says Voss. "For a person with brain damage or a memory disorder, those networks are disrupted so even a small change could translate into gains in their function." **M**

*The research was supported by grants P50-MH094263 from the National Institute of Mental Health and F32-NS083340 from the National Institute of Neurological Disorders and Stroke of the NIH.*



### Accelerating Diabetic Wound Healing

Depleting an enzyme called GM3 synthase with gene therapy may help diabetics heal wounds faster, according to recent research by Northwestern Medicine scientists published in the *Journal of Investigative Dermatology*.

Nearly 21 million people in the United States have Type 2 diabetes. About 15 percent of them experience chronic wounds that heal poorly, especially in the feet.

"There are many factors that influence this poor wound healing, among them poor functioning of the nerves and blood vessels that supply the skin, poor sugar control, and resistance to the effects of insulin and other growth factors, which are important for how skin cells move and grow," says [Amy Paller, MD, '81, '83 GME](#), Walter J. Hamlin Professor of Dermatology and chair of the Department of Dermatology.

The Paller lab found that mice engineered to be deficient in GM3 synthase resist becoming diabetic on a high-fat diet and have no trouble with wound healing, despite becoming obese. GM3 synthase is a key enzyme in making GM3, a molecule important in the function of growth factors.

"The skin cells that lacked GM3 synthase grew faster, moved more quickly in wounds and showed greater responses to insulin and insulin-like growth factor-1," says Dr. Paller, who is also a member of the Robert H. Lurie Comprehensive Cancer Center of Northwestern University.

When they fed the cells high concentrations of sugar to mimic poorly controlled diabetes, they found that the cells missing GM3 synthase actually grew and moved even more quickly to heal the wound.

This direct effect suggests the possibility of topical treatment to decrease GM3 synthase levels at the wound site, a focus of ongoing research. **M**

*This work was supported by NIH grants R01AR44619 and R21AR062898 and the Astellas Research Endowment and used Core resources provided by the NIH-funded Northwestern University Skin Disease Research Center.*

### Air Pollution Shown to Increase Lung Inflammation and Blood Clots

Exposure to high levels of air pollution has been linked with increased risk for heart attacks and stroke, according to a paper published in the *Journal of Clinical Investigation*.

[Scott Budinger, MD](#), associate professor in Medicine-Pulmonary and Cell and Molecular Biology, in collaboration with Gokhan Mutlu, MD, chief of Pulmonary and Critical Care at the University of Chicago, showed that exposure to air pollution causes an elevation in the levels of the stress hormone adrenaline.

The scientists used mouse models to demonstrate how increased adrenaline activates beta-2 adrenergic receptors on immune cells and promotes lung inflammation and a tendency to form blood clots. Similar to the effects of adrenaline, inhalers called beta-2 agonists that are used for conditions such as asthma or chronic obstructive pulmonary disease further worsen these effects.

"Our findings show that stress can make existing lung inflammation worse and increase the tendency to form clots," says Dr. Budinger. He further explains that physicians still do not



### First Large-Scale Study to Look at Death Rates in Delinquent Youth

Delinquency in youth predicts a significantly higher rate of violent death in adulthood—especially from firearms—and females are among the most vulnerable, reports a new Northwestern Medicine study published June 16 in the journal *Pediatrics*.

Delinquent females died violently at nearly five times the rate of those in the general population, while delinquent males died at three times' general population rates. Now the largest minority



understand some of the unexpected side effects of commonly used beta-agonists such as albuterol, formoterol and salmeterol.

"Our findings are reassuring for patients with heart disease who cannot avoid exposure to air pollution," says Dr. Mutlu. "Our results suggest that beta blockers, commonly used to treat heart disease, might protect against the increased risk of heart attacks and strokes associated with air pollution exposure." **M**

*The study was funded by NIH grants ES015024, ES013995, HL071643, the Northwestern University Clinical and Translational Sciences Institute Center for Translational Innovation Pilot Award and the Veterans Administration.*

group in the U.S., Hispanic females and males experienced death rates nine and five times greater, respectively.

"Early violent death is a health disparity," says lead author [Linda Teplin, '75 PhD](#), the Owen L. Coon Professor of Psychiatry and Behavioral Sciences at the Feinberg School of Medicine. "Youth who get detained are disproportionately poor and racial and ethnic minorities. We need to reduce the likelihood that youth will become delinquent. And, if they are arrested and detained, we need interventions to reduce violence. Otherwise, perpetrators often become victims."

The study used newly available data from the Northwestern Juvenile Project, a longitudinal study of 1,829 youth who were detained at the Cook County Juvenile Temporary Detention Center in Chicago between 1995 and 1998. The authors used official death records up to 16 years after the initial interviews were conducted. **M**

*The study was supported in part by National Institute on Drug Abuse grants R01DA019380, R01DA022953 and R01DA028763, and National Institute of Mental Health grants R01MH54197 and R01MH59463, all of the NIH; 1999-JE-FX-1001, 2005-JL-FX-0288 and 2008-JF-FX-0068 from the Office of Juvenile Justice and Delinquency Prevention; the Substance Abuse and Mental Health Services Administration, the Centers for Disease Control and Prevention and the Robert Wood Johnson Foundation.*

## Incoming Medical Students Don their White Coats at Founders' Day

WRITTEN BY: Sarah Plumridge  
PHOTOGRAPHY BY: Randy Belice

See the Founders' Day slideshow online at [magazine.nm.org](http://magazine.nm.org).



Alexandra Williams picked up her crisp, white coat and listened to advice from second-year student Ryan Sacotte on August 15 as they headed to Founders' Day, a ceremony that serves as the official start of the academic year.

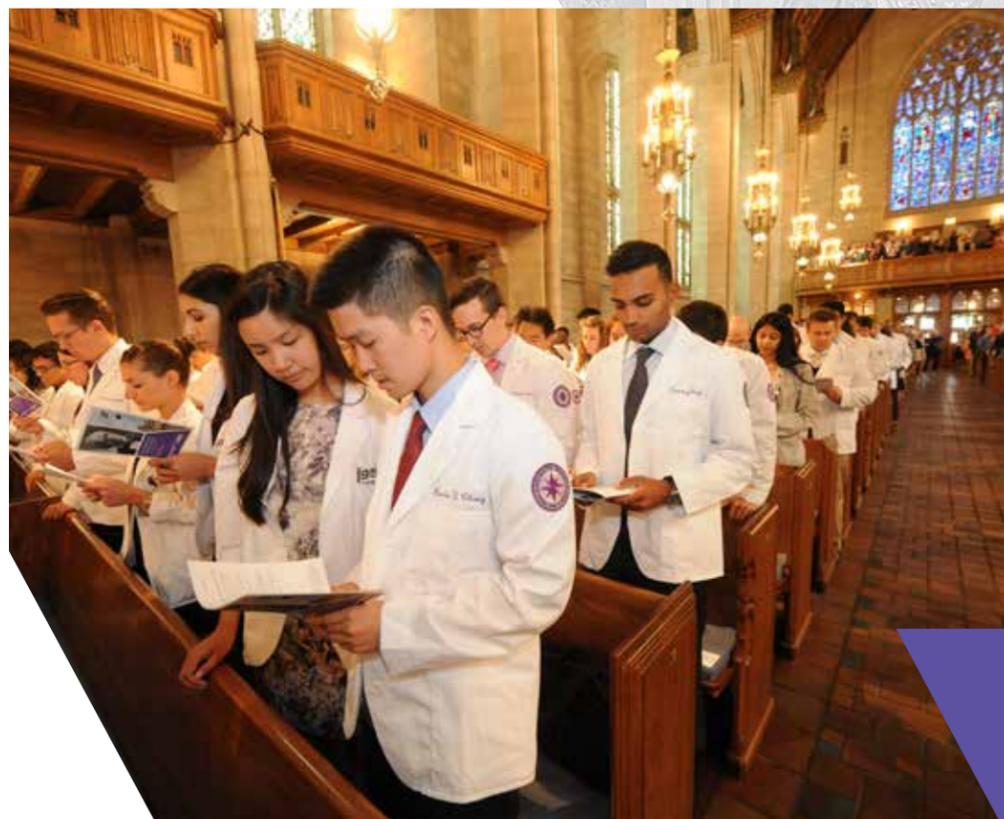
"It is a special honor to receive my white coat and the responsibilities that come with it," Williams said. "Having a second-year medical student as a guide and role model is nice as it connects us early-on to the program, and it's someone I can ask a quick question of, someone who has been there before."

During the convocation, Williams was presented with her white coat by Sacotte alongside the other 162 members of the incoming Class of 2018. The event marks the culmination of the Introduction to the Profession Module, a week of activities to orient students to campus, give an overview of the curriculum and provide hands-on learning opportunities.

Kicking off the 156th Founders' Day, Eric G. Neilson, MD, vice president for medical affairs and Lewis Landsberg Dean, welcomed students, faculty members and guests.

"You have opened a new portal to your life work that focuses on medicine and science very few are privileged to enter. There are a myriad of exciting times ahead for you, not the least of which is working in a medical center teeming with world-class hospitals," said Dr. Neilson.

"Founders' Day is the traditional start of our new academic year; it is also a new beginning for our students on a path that



THE 163 MEMBERS OF THE CLASS OF 2018 RECITE THE DECLARATION OF GENEVA FOR THE FIRST TIME.

will lead them into careers of life-long responsibility," he continued. "Feinberg, as it always has, will prepare you well for whatever path you choose to follow."

Following Dr. Neilson's remarks, University Provost Daniel I. Linzer, PhD, congratulated students and encouraged them to take advantage of all Northwestern has to offer during the course of their education.

"It is a tough life to get to medical school and it gets tougher," Linzer said. "I salute you for your dedication, your commitment to work hard and to care for people."

Keynote speaker, Douglas Vaughan, MD, the Irving S. Cutter Professor of Medicine, addressed the students.

"The white coat represents our acceptance

of you as colleagues," said Dr. Vaughan, also chair of medicine. "It also represents the honor and sanctity in our profession. The white coat does not provide you with the skills, the experience or judgment that will come with being a physician; that will take time and work."

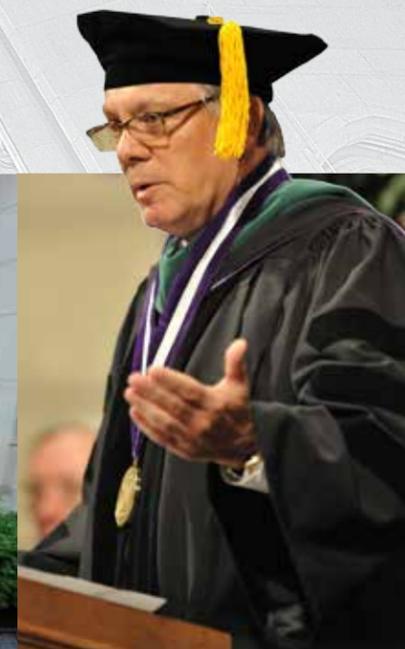
He concluded, "The next four years should be one of the most exciting and challenging times of your life. Make the most of it—learn everything you can and more. The world of science and medicine has never been as exciting. I wish you the most satisfying and successful journey."

Led by Diane Wayne, MD, vice dean for education, faculty mentors Aaron Gilbert, MD, assistant professor in physical medicine and rehabilitation, Jessica Montalvo, MD,



### Meet the Class of 2018

The Class of 2018 comprises 163 MD candidates selected from a pool of 7,727 applicants. Members of the class have a collective total of 79 undergraduate majors ranging from biomedical engineering, chemistry, economics, mathematics, philosophy and public health.



LEFT: HAPPY STUDENTS POSED FOR PHOTOS BEFORE AND AFTER THE FOUNDERS' DAY EVENT. RIGHT: DOUGLAS VAUGHAN, MD, CHAIR OF MEDICINE, GAVE THE KEYNOTE ADDRESS.

85

women

78

men

79

majors

66

institutions

21

spoken languages including Chinese, Hindi and Spanish

35

U.S. States represented

9

foreign countries

86%

engaged in undergraduate research

assistant professor in medicine-hospital medicine, Boye Ogunseitan, MD, assistant professor in medicine-hospital medicine, and Angira Patel, MD/PhD, assistant professor in pediatrics-cardiology and medical education-medical humanities and bioethics, members of the Class of 2017 bestowed white coats upon the first-year medical students.

Marking entry to the profession, the incoming class recited the Declaration of Geneva, the modern-day equivalent of the Hippocratic Oath, repeating after Dr. Wayne, that the health of their "patient will be their first consideration" and to maintain by all means in their power "the honor and the noble traditions of the medical profession."

Excited to receive her white coat and say the oath, Ayelet Cohen, a first-year medical student, said, "Reciting the oath with distinguished faculty members—and knowing the rich history behind the declaration—was my favorite part of the day, especially knowing that they are the values I will embody not only for the next four years, but for the rest of my career as a physician."

Austin Culver, president of the Feinberg Student Senate and third-year medical student, presented the Student Senate Service Awards to members of the Class of 2017 who were selected by their peers in recognition of their community service and leadership at the local, national and international levels during their first year at Feinberg. Award recipients were second-year medical students Jakita Baldwin, Rachel Chang, Timothy Janetos, Molly Lohman and William Webber.

Following the convocation, members of the Feinberg community and invited guests attended the Nathan Smith Davis Founders' Day reception. Sponsored by the Medical Alumni Association, the reception honors one of the founders of the medical school, who also served as its first dean.

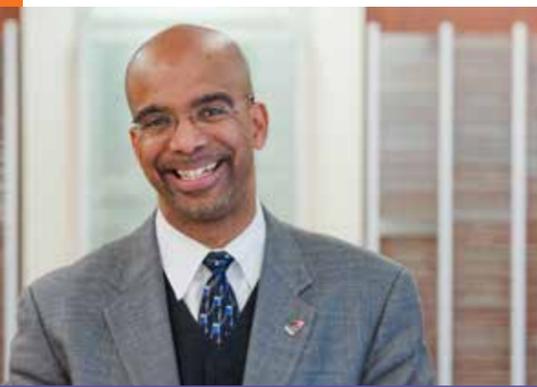
"After today's ceremony I feel like I am part of the profession," said Emmanuel Ogele, a first-year medical student. "To me, the day was symbolic of community. As the mentors and second-year students gave us our white coats, it reminded me that we are all working together as a team against disease." **NM**

## Faculty Awards and Honors

Northwestern University ranks 14th for most highly cited researchers worldwide in a list compiled using data from Thomson Reuters. The researchers wrote the greatest number of articles and reviews that ranked among the top one percent most cited for their subject field and year of publication. The data came from papers published in science and social sciences journals from 2002 through 2012.

The Feinberg scientists included in the list are:

- » Eileen Bigio, MD, Paul E. Steiner Research Professor of Pathology
- » Robert Bonow, MD, Max and Lilly Goldberg Distinguished Professor of Cardiology
- » Philip Greenland, MD, Harry W. Dingman Professor of Cardiology
- » Stephen Hanauer, MD, Clifford Joseph Barborka Professor in Medicine-Gastroenterology and Hepatology
- » Donald Lloyd-Jones, MD, ScM, chair of the Department of Preventive Medicine and senior associate dean for Clinical and Translational Research
- » Clyde Yancy, MD, chief of the Division of Cardiology and Magerstadt Professor



CLYDE YANCY, MD

The American Heart Association (AHA) presented two national awards to Northwestern Medicine physician-scientists: Clyde Yancy, MD, chief of medicine-

cardiology and Magerstadt Professor in Cardiology and medical social sciences, has been honored with the AHA's 2014 Gold Heart Award, and Neil J. Stone, '68 MD, '74 '75 GME, (below) Robert Bonow MD Professor in Cardiology, received the association's 2014 Physician of the Year Award.



The Gold Heart Award, the AHA's highest honor, recognizes volunteers who have given continued distinguished service. Dr. Yancy has held numerous appointments with the AHA, including past president, spokesman and authoring clinical guidelines. He has found it most meaningful to champion the association's cause: to define cardiovascular disease (CVD) disparities and to deploy new models to achieve health equity.

Dr. Stone, recipient of the Physician of the Year Award, has volunteered for more than 30 years on various AHA committees. He is a past chair of the Nutrition Committee (1993-1996). As part of the Expert Panel on Population and Prevention Science, he participated in the writing groups that published the 2002 AHA guidelines for primary prevention of cardiovascular disease and stroke, the 2004 guidelines for cardiovascular disease prevention in women and the AHA/ADA statement on prevention of CVD in diabetes. In 2009, he chaired a committee commissioned by the National Heart Lung and Blood Institute to update cholesterol guidelines.

Jennifer Chan, MD, MPH, assistant professor of emergency medicine, received the Global Emergency Medicine Academy (GEMA) Humanitarian Service Award. GEMA's mission is to improve the global delivery of emergency care through research, education and mentorship.



David Cella, PhD, professor and chair of the Department of Medical Social Sciences, and director of the Center for Patient-Centered Outcomes - Institute for Public Health and Medicine, was awarded the Health Assessment Lab/Medical Outcomes Trust John Ware and Alvin Tarlov Career Achievement Prize in Patient-Reported Outcomes Measures for lifetime career achievement.



Todd A. Kuiken, '90 MD/PhD, '91 '95 GME, professor in physical medicine and rehabilitation, McCormick School of Engineering and surgery, as well as associate dean for Hospital Academic Affairs at the Rehabilitation Institute of Chicago, gave the capstone speech at Northwestern's Medical Scientist Training Program 50th anniversary celebration. Dr. Kuiken talked about his journey as an MSTP student at Feinberg and his research career in prosthetics.



He also spoke about his process for developing a technique using nerve transfers to improve myoelectric control of prosthetics, called targeted reinnervation. "Having arm loss is a terrible disability,

but I find the emotional disability for upper limb amputations to probably be the bigger problem that we spend a lot of time on in the clinic," says Dr. Kuiken.



Brigid Dolan, MD, and Bernice Ruo, MD, both assistant professors in medicine-general internal medicine and geriatrics, received this year's Augusta Webster Faculty Fellowship in Educational Research and Innovation. The fellowship provides funding and mentorship to support the career development of junior faculty members researching medical education.

A committee from the Educational Research and Innovations program at the Center for Education in Medicine selected projects that address current issues and/or challenges in health professions education, and that could serve as a pilot for future research.

Dr. Dolan will describe how milestones-specific measurable outcomes that demonstrate trainee skill attainment—are being tracked and how they can be aligned across both levels and multiple disciplines.

Dr. Ruo aims to improve the assessment of internal medicine residents. She plans to optimize the evaluation form to be more user-friendly and to develop an evaluator training to assess resident performance more accurately and thoroughly.

Marianne Green, MD, associate professor in general internal medicine, associate dean for Medical Education and Competency Achievement, and director of the Honors Program in Medical Education (HPME), was appointed to the



American Board of Internal Medicine's (ABIM) Board of Directors. The Board oversees the organization's strategic direction and supports efforts to make Maintenance of Certification (MOC) and the Certification credential relevant and valuable to participating internists and the broader healthcare community.

James P. Chandler, MD, Northwestern Brain Tumor Institute co-director, Lavin/Fates Professor of Neurological Surgery and surgical director of neuro-oncology at Northwestern Memorial Hospital, was honored with the 2014 Ivan S. Ciric, MD, Distinguished Educator Award from the Department of Neurological Surgery. The award was established in 2013 to recognize faculty members who have demonstrated a commitment to excellence in teaching.



Lingqun Hu, MD, (right) and Christine Park, MD, both associate professors in anesthesiology, and Rukhsana Mirza, MD, assistant professor of ophthalmology and Medical Student Education program director, were welcomed to the Feinberg Academy of Medical Educators (FAME) in May. FAME, which plays a critical role in the recognition and support of outstanding education contributors, acknowledges these doctors as exceptional scholars, leaders and mentors.



Frank Gonzalez-Crussi, MD, professor emeritus in pathology, received the literary prize "Premio Letterario Merck" for his book, "Carrying the Heart. Exploring the Worlds Within Us," Kaplan Publishing, 2009, which was recently translated into



Italian. Merck KGaA, Germany, awards prizes for literature that "combines scientific importance of research with a literary writing style."

Dr. Gonzalez-Crussi retired in Sept. 2001 from his post as head of laboratories at Children's Memorial Hospital of Chicago. His career contributions have been both medical and literary. In the medical field, he has written more than 200 articles published in peer-reviewed journals of his specialty; he has served as editor-in-chief of the journal *Pediatric Pathology*; and has authored two books on the pathology of specific types of pediatric tumors. In the literary field, he has written 16 books, most in the essay genre. Translations of his work exist in seven languages. Dr. Gonzalez-Crussi has been the recipient of numerous awards, including a fellowship from the John Simon Guggenheim Foundation (2000-2001).

Melina R. Kibbe, MD, '03 GME, has been named editor in chief of the journal *JAMA Surgery*, effective Jan. 1, 2015. Dr. Kibbe is the Edward G. Elcock Professor of Surgical Research in Surgery-Vascular Surgery at the Feinberg School of Medicine.



"This is an incredible honor for me," says Dr. Kibbe. "I hope to provide a vehicle through which surgeons can remain up-to-date on current standards of care. However, I also hope to provide surgeons with novel data and innovative concepts and approaches that challenge current paradigms, forcing us to think more broadly about how we treat patients with surgical disease and to develop better and safer ways to care for our patients."

Dr. Kibbe joined Feinberg as a full-time faculty member in 2003, after completing a fellowship in vascular surgery at Northwestern Memorial Hospital. She is the vice chair of research in the Department of Surgery and a member of the Robert H. Lurie Comprehensive Cancer Center of Northwestern University. **MM**

## Media Spotlight

### 1 PHYSICIAN ASSISTANTS IMPORTANT PLAYERS IN TEAM-BASED HEALTHCARE

CHICAGO TRIBUNE - JUNE 13, 2014

Physician assistants function much like doctors, taking patient histories, performing physical exams, ordering and interpreting laboratory and diagnostic tests, prescribing medications and making referrals—all under the supervision of a medical doctor. “PA life offers a lot of flexibility,” says **Kristine Healy, MPH, PA-C**, associate director of the Physician Assistant Program and an assistant professor of medical education at the Northwestern University Feinberg School of Medicine. “I’m a family medicine PA, however, my national certification and state licensure permit me to work within the scope of practice of the specialty of my supervising physician. ...The model is very adaptable.”

### 2 ‘THINKING OF WAYS TO HARM HER’ - NEW FINDINGS ON TIME AND RANGE OF MATERNAL MENTAL ILLNESS

THE NEW YORK TIMES - JUNE 15, 2014

A fast-growing body of research is changing the very definition of maternal mental illness, showing that it is more common and varied than previously thought. Depression

in pregnancy can be missed because symptoms like trouble sleeping and moodiness also occur in pregnant women who are not depressed. And doctors have historically been taught in medical school that “women don’t get depressed during pregnancy because they are happy,” says **Katherine L. Wisner, MD**, director of the Asher Center for the Study and Treatment of Depressive Disorders and a professor of psychiatry and obstetrics at the Feinberg School of Medicine. In a 2013 study, Dr. Wisner and colleagues found that 14 percent of 10,000 women had depression four to six weeks after giving birth, but that for a third of them it actually started during pregnancy.

### 3 A MISSPENT YOUTH DOESN’T DOOM YOU TO HEART DISEASE

NPR - JULY 1, 2014

People who drop bad habits in their late 30s and 40s can reduce their risk of developing coronary artery disease, according to a recent study published in the journal *Circulation*. “And by the same token, if you get to adulthood with a healthy lifestyle, that doesn’t mean you’re home free,” says **Bonnie Spring, PhD**, director of the Center for Behavior and Health, professor of preventive medicine at the Feinberg School of Medicine and the lead author of the study. Those who pick up unhealthy behaviors in middle age up their risk of developing heart disease, the study found.

### 4 BREAST CANCER DRUG HAS A SURPRISING NEW APPLICATION

TIME - JULY 15, 2014

Tamoxifen, used for breast cancer treatments, blocks the effects of the female hormone estrogen on the breast, inhibiting uncontrollable breast tissue growth. Now, **Seema Khan, MD**, professor of breast surgery at the Feinberg School of Medicine, reports in *Clinical Cancer Research* that putting the drug in a gel and applying it directly to the breast tissue, where it needs to work, may have merit.

At the end of the small study, the women in both groups showed similar decreases in tumor-related proteins, but blood levels of tamoxifen were five times lower among the women using the gel than those taking the oral pill. That, says Dr. Khan, suggests that the drug’s major side effects, which occur in the blood and other reproductive organs, may be largely avoided by using a gel.

### 5 NIACIN DOESN’T REDUCE HEART PROBLEMS, MAY CREATE SOME

U.S. NEWS AND WORLD REPORT - JULY 16, 2014

Niacin, a commonly used cholesterol treatment, doesn’t reduce the risk of heart attack or stroke in people with hardened arteries. What’s more, the drug appears to have dangerous side effects, including a potential increased risk of death, according to new research.

The author of an accompanying journal editorial, **Donald Lloyd-Jones, MD, ScM**, senior associate dean for clinical and translational research, chair of the Department of Preventive Medicine, and director of the Northwestern University Clinical and Translational Sciences Institute (NUCATS) at the Feinberg School, added that “people taking niacin need to have a conversation with their doctor sooner rather than later to see whether it is appropriate to continue taking it and whether there are reasonable alternatives.”

### 6 ATHLETES SHOULD FEAR THE HEAT MORE THAN THE HEART ATTACK

NPR - JULY 29, 2014

Heatstroke is a more common killer among runners than cardiac conditions, according to a recent study. It is a big problem, says **George Chiampas, DO**, assistant professor in emergency medicine at the Feinberg School of Medicine and medical director of the Chicago Marathon, which made some changes after the 2007 race was halted amid high temperatures that sickened hundreds. Now runners see colored flags along the route to indicate whether the conditions, including weather, are good, less than ideal, potentially dangerous or so bad that the race has been stopped. And medical personnel near the finish line are trained to talk with runners to see if their mental status has been affected—a sign of heat illness. **M**

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JUNE

JULY

## Northwestern Memorial HealthCare, Cadence Health Finalize Plans to Integrate

As of September 1, the formal agreements that integrated Cadence Health with Northwestern Memorial HealthCare (NMHC) took effect. This step signifies the expansion of NMHC’s Northwestern Medicine®-branded health system to four Illinois hospitals, including Northwestern Memorial Hospital in Chicago, Northwestern Lake Forest Hospital in Lake Forest, Central DuPage Hospital in Winfield, and Delnor Hospital in Geneva.

“We are honored to welcome Cadence Health into the Northwestern Medicine family,” says Dean M. Harrison, NMHC president and CEO. “Cadence is an ideal health system to combine with as their vision, mission and values are very similar to ours. Together, we will continue to deliver the Northwestern Medicine brand promise, which is to provide trusted, quality care that is accessible where patients live and work, safe and accountable, and centered on world-class medicine.”

On July 14, the Illinois Health Facilities and Services Review Board unanimously approved NMHC’s application to combine health systems. The integration creates an expanded health delivery

network encompassing more than 60 sites of care across metro Chicago and the north and western suburbs, approximately 1,600 inpatient beds, 19,500 employees, and a combined medical staff with 4,000 physicians.

Harrison remains president and CEO of the expanded NMHC health system, and Mike Vivoda, Cadence Health’s president and CEO will be NMHC regional president, Western Region. Additional Cadence executive leadership who will transition to NMHC include Cadence CFO and Executive Vice President John Orsini, named NMHC CFO and senior vice president, and Liz Rosenberg, executive vice president of Strategy and Administration, named NMHC senior vice president, Strategy.

“Our union is great for patients because it positions us to continue to provide unrivaled quality care within our communities,” says Vivoda. “As one integrated health system, not only can we continue to fulfill the health needs of our region, we can leverage our collective strength as Northwestern Medicine to build stronger, healthier communities.” **M**

A new Northwestern Medicine Lake Forest Hospital will raise the bar by bringing academic medicine to Chicago's suburbs

WRITTEN BY: Martha O'Connell  
PHOTOGRAPHY BY: Laura Brown  
ILLUSTRATION BY: Pelli Clarke Pelli Architects

# SISTER TO THE NORTH



WORKING TOGETHER, STEPHEN FALK, PRESIDENT OF THE NORTHWESTERN MEMORIAL FOUNDATION, PATRICK MCCARTHY, MD, CHIEF OF THE DIVISION OF CARDIAC SURGERY, TOM MCAFEE, NORTHWESTERN MEDICINE LAKE FOREST HOSPITAL PRESIDENT, AND ANDREW PARSA, MD, PHD, CHAIR OF NEUROLOGICAL SURGERY, ARE HELPING TO MAKE THE NEW LAKE FOREST HOSPITAL A REALITY.

Martin Davidson, 72, came into the Emergency Department at Northwestern Medicine Lake Forest Hospital (NMLFH) with a complex myocardial infarction and received an angioplasty. Afterwards, he was brought to Northwestern Memorial Hospital for a difficult procedure to repair his ruptured mitral valve. Today, Mr. Davidson is doing well and his surgeon, Chris Malaisrie, MD, associate professor in

cardiac surgery, presented this case at a national thoracic convention—bringing the mission of an academic medical center full circle.

Lake Forest Hospital's place within Northwestern Medicine is growing stronger as a new hospital for the 21st century takes shape.

It is almost unheard of to have the extraordinary expertise of an academic medical center in a community of 20,000 people, but that is what occurred in 2010 when Northwestern Memorial HealthCare (NMHC) acquired Lake Forest Hospital, located 30 miles north of Chicago. The hospital has long been a top-ranked institution within the larger Lake County area.

NMLFH President Thomas McAfee, FACHE, knows all too well that many patients living outside the city will not come to downtown Chicago for treatment simply because of the distance. The new hospital solves that problem by bringing a new state-of-the-art Northwestern center to them.

A major goal for the new hospital is to enable clinicians to seamlessly manage patients at both locations and provide highly sophisticated care. To make that possible, much of the new medical equipment, patient room layouts, communication systems, patient safety features—and even the overall

aesthetics—at Lake Forest will replicate Northwestern Memorial.

“We will have the best of both worlds—a new Northwestern Medicine hospital in Lake County and we are incorporating everything we learned from Northwestern Memorial into this facility,” McAfee says.

**OLD HOSPITAL REBORN**

Opened in 1899, the community hospital underwent several expansions that have served residents well but do not meet today’s standards. Scheduled to open in 2017, the new \$378 million hospital will be more cohesive, and accommodate advanced procedures, efficient workflow and increased demand for outpatient care.

Key features in the 483,500-sq.-ft. facility include 114 private inpatient beds, 72 outpatient care bays, eight operating rooms, flexible space for outpatient procedures and common areas. It will feature abundant natural light, soaring ceilings, extensive use of wood building materials and architectural styling characteristic of the university.

Built to serve patients far into the future, Lake Forest Hospital will make it possible to incorporate new medical technologies as they emerge. Structured in a spoke pattern, the new facility will include

five interconnected pavilions set against an expansive reflecting pool and waterfall.

Outside, the 160-acre property is designed to fit sensitively into the landscape of Lake County, with hiking and biking trails, meadows and bioswales.

After the hospital opens, additional property on the site will be considered for health and wellness, education and research functions of the academic health system.

**SETTING UP HOUSE**

Northwestern Medicine is already laying the groundwork to fully integrate staff at both hospitals, focusing on cardiology, neurosurgery and neurology, orthopaedics, oncology and women’s health—and that starts at the top.

At 3 a.m., Andrew Parsa, MD, PhD, chair of the Department of Neurological Surgery and the Michael J. Marchese Professor, gets a call and drives to Lake Forest Hospital. Patrick McCarthy, MD, chief of the Division of Cardiac Surgery and the Heller-Sacks Professor of Cardiothoracic Surgery, will do the same and is also a Lake Forest Hospital trustee.

Other physicians and coordinators rotate between the Chicago and Lake Forest campuses, in addition to satellite clinic sites in nearby Grayslake and Glenview. These specialists include, emergency medicine physicians, overseen by James Adams, MD,

professor and chair of the Department of Emergency Medicine, and Christopher Beach, MD, assistant professor and vice chair of emergency medicine. Emergency care has been a longtime concern in Lake County, and leadership of both physicians brings the same high-quality emergency care to Lake County as patients receive at Northwestern Memorial.

Ian Cohen, MD, assistant professor of cardiology who also leads the Bluhm Cardiovascular Institute at Lake Forest Hospital, continues to increase referral networks among primary care doctors and specialists by demonstrating Northwestern’s superior care. His counterpart, Patrick Sugrue, MD, assistant professor of neurological surgery, does the same as head of neurosurgery at Lake Forest, in conjunction with Dr. Parsa.

With their past lives at the Cleveland Clinic and the University of California San Francisco, McAfee, McCarthy and Parsa are experienced at setting up multiple sites and communication interfaces. They note that patient satisfaction scores, outcomes, mortality rates and other quality measurements will apply uniformly at both hospitals.

“Right now, we track 730-plus quality measures of cardiovascular care on the downtown campus. These measurements have served us very well in making us the No. 1 program in Illinois and 13th in the country,” Dr. McCarthy says.

**NOT YOUR USUAL RESIDENCY**

Feinberg prefers residents start by working in a large, busy hospital. Lake Forest will be the right fit for some residents and students after the hospital increases patient volumes.

“When you are in medical school or residency, you learn a lot about taking care of patients in different settings. Having a clinic in Lake Forest will bring in more patients that residents would not ordinarily see,” Dr. Parsa says.

Currently, the Feinberg School of Medicine’s physician assistant students rotate through Lake Forest Hospital. The McGaw Family Medicine Residency program, under the direction of Deborah Clements, MD, chair of family medicine, will bring some of the first residents to the hospital in 2015 for a unique program that will bolster the number of these underrepresented physicians and focus partly on serving economically disadvantaged patients in Lake County.

McCarthy explains that residents and students based at Northwestern Memorial will be able to review additional complex cases referred from Lake Forest. Conversely, someone interested in routine cardiac practice can experience that in Lake Forest. Telemedicine also presents extra learning opportunities.

The new hospital exemplifies the trend for systemized care, meaning that difficult, complex treatments happen in the flagship medical center and the system’s outlying hospitals take patients who require less complicated therapies.

“I think residents will get more exposure to how medicine is going to be practiced in the future by understanding how care works at both of our hospitals,” McCarthy says.

**MAKING IT REAL**

Charitable giving ensures that the new hospital will provide exceptional health care for many generations. Northwestern’s immediate goal is to raise \$75 million over the next three years to open the new hospital. Another \$75 million will be raised over ten years to support future growth.

THE NUMBERS

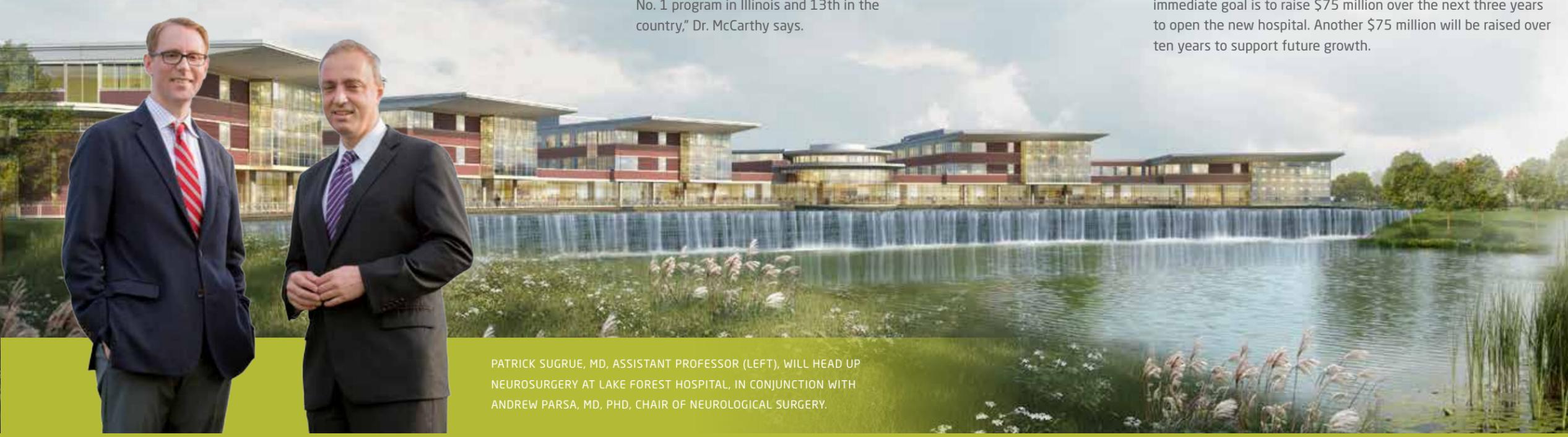
**\$378M**  
NEW HOSPITAL

**483.5K**  
SQ. FT. FACILITY

**160**  
ACRE GROUNDS

**114**  
PRIVATE IN-PATIENT BEDS

**72**  
OUTPATIENT CARE BEDS



PATRICK SUGRUE, MD, ASSISTANT PROFESSOR (LEFT), WILL HEAD UP NEUROSURGERY AT LAKE FOREST HOSPITAL, IN CONJUNCTION WITH ANDREW PARSA, MD, PHD, CHAIR OF NEUROLOGICAL SURGERY.

Stephen Falk, president of Northwestern Memorial Foundation, notes that funds raised thus far have already surpassed expectations. “Many of these generous donations have come from a new generation of donors—people with strong Lake County ties who have never supported Northwestern Medicine before but do so now because they feel a new hospital is critical for the well-being of local residents,” he says.

Two prominent leaders at Northwestern’s Chicago and Lake Forest hospitals are heading the campaign: James Stirling, Life Trustee for Northwestern Memorial Hospital and Debbie Saran, Northwestern Memorial Foundation Trustee and former Women’s Board president at Lake Forest Hospital.

All donors will be recognized either through naming opportunities or on a recognition wall that will be viewed by thousands of people for years to come. Contributions to the Lake Forest campaign will also be honored as part of We Will, the university-wide fundraising campaign to help Northwestern accomplish its strategic goals.

**QUALITY WILL RULE**

Continuing the expansion of Northwestern Medicine’s brand into Chicago’s western suburbs, NMHC recently finalized the merger with Cadence Health, bringing Central DuPage Hospital in Winfield and Delnor Hospital in Geneva into the fold.

With its world-class medicine and research, Northwestern Medicine provides an unparalleled level of care in the suburban market. Some patients who need highly complex treatment may have to go to Northwestern Memorial, but the dramatic changes soon to come at the three suburban hospitals will make it possible for many people to start and finish their care close to home.

With savvy consumers in the Lake County market, patients scrutinize physicians, hospitals and post-operative care before making their decisions. Second opinions are common.

“We know that the vast majority of care can be done at Lake Forest. Our patient volumes will increase and stay that way because quality care always prevails,” McAfee says. **NM**

Genomics expert goes to the heart  
of genetic medicine

WRITTEN BY: Cheryl SooHoo  
PHOTOGRAPHY BY: Bruce Powell

# DNA SEQUENCE OF EVENTS

Exploring the human genome makes good gene hunters of researchers. DNA trackers search for clues among the needle-in-the-haystack framework of the 25,000 genes in the human body to better understand and treat genetically caused diseases. Their perseverance, coupled with ongoing technological advances, has yielded quite a few “needles” in recent years. The use of genetic information to inform patient care, from cancer to neurological disorders, has personalized medicine for individual patients like never before. But more is still to come. Much more, according to **Elizabeth M. McNally, MD, PhD**, new director of Northwestern University Feinberg School of Medicine’s Center for Genetic Medicine.

An internationally renowned expert on the genetics of heart disease and muscular dystrophy, this experienced gene hunter or “huntress” foresees an entirely new era for genetic medicine. “A revolution in DNA sequencing is dramatically driving down costs and transforming how we practice medicine,” says the recently named Elizabeth J. Ward Chair of Genetic Medicine, who arrived at Feinberg in September. “The center is poised to take genetic medicine to the next level. Now more than ever, we have the opportunity to expand our understanding of genetic

variations and link this information to clinical outcomes so that we may more effectively care for our patients.”

Dr. McNally fully understands the rewards of applying laboratory research to clinical care. Formerly at the University of Chicago, she founded the Institute for Cardiovascular Research as well as launched a Cardiovascular Genetics Clinic. One of a few of its kind in the nation, the clinic focused on diagnosing and treating patients with inherited forms of heart disease. At Northwestern Medicine, she will direct a clinical cardiac genetics program through the Bluhm Cardiovascular Institute. A new offering for Northwestern in the area of genomics and cardiovascular medicine, the program will take advantage of genetic counseling and testing to identify individuals at risk for hereditary heart disease and to plan appropriate treatment from devices to drugs.

While her expertise will further advance Northwestern Medicine’s influence in genetic medicine, McNally envisions more. In her latest leadership role, she hopes to strengthen inter-institutional collaborations across the city to establish Chicago as a “mecca for genetics.” It may sound like a pipe dream but so was the physician-scientist’s goal to go after genetic modifiers some



DR. McNALLY AND HER GROUP STUDY THE GENETICS OF INHERITED MUSCLE AND HEART DISEASE (MUSCLE FIBERS OUTLINED IN GREEN). USING GENETIC METHODS, THEY MAPPED A GENE THAT CONTROLS TGF $\beta$  SIGNALING (RED), AS A MAJOR MODIFIER OF MUSCULAR DYSTROPHY.



LISA CASTILLO IS A CERTIFIED GENETIC COUNSELOR WHO WORKS CLOSELY WITH DR. MCNALLY, STAFFING THE CARDIOVASCULAR GENETICS CLINIC, WHERE GENETIC TESTING IS USED TO PINPOINT THE CAUSE OF INHERITED DISEASES LIKE CARDIOMYOPATHY, MARFAN SYNDROME AND INHERITED ARRHYTHMIAS.

15 years ago when genetic medicine was still in its infancy. Today, she counts among her most significant scientific accomplishments the identification of two gene modifiers that could change the destructive nature of muscular dystrophy: TGF-β binding protein involved in preventing muscle weakness and a newly identified modifier known as annexin A6 that sheds light on muscle cell injury and repair. McNally and colleagues are currently working on a novel therapeutic agent that modulates TGF-β activity to reduce tissue damage and fibrosis and could be potentially applicable to a variety of diseases, including myocardial injury, radiation-induced injury and vascular disease.

**MATERNAL INSTINCTS**

The second oldest of five siblings, Dr. McNally credits two moms—her own and that of a boyfriend—for serving as key role models who helped shape her career. “My mother raised us all, while at the same time earning her college degree in Spanish, English and education,” shares the Chicago native, who spent her teen years in Platteville, Wis. “In my family, there was definitely a push for education from my mother because she knew education and

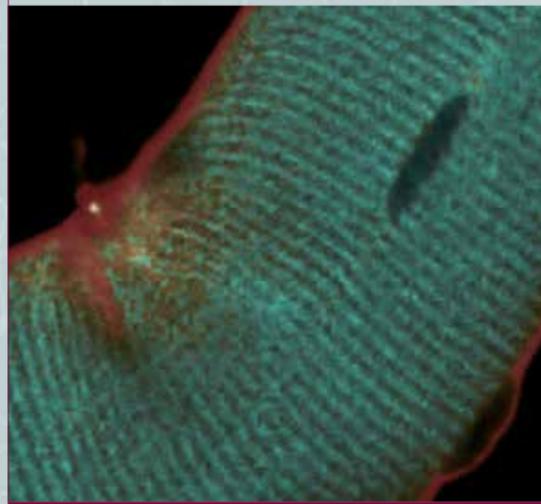
advancement were tightly tied.” McNally attended Barnard College, Columbia University, in New York, where she earned bachelor’s degrees in biology and philosophy in 1983. While at college, she dated a guy whose mother happened to be preeminent scientist Ora M. Rosen, MD. (The late Dr. Rosen and colleagues at Memorial Sloan-Kettering were the first to clone the gene for the human insulin receptor in the mid-’80s.) “I was interested in research and medicine but wasn’t quite sure of my direction,” recalls McNally. “Ora took me under her wing and encouraged me to work in a lab while I was still an undergraduate.”

Dr. Rosen connected McNally with researcher Leslie Leinwand, PhD, a faculty member at Albert Einstein College of Medicine. A summer stint in Leinwand’s lab allowed the budding young investigator to not only clone her first bit of DNA, the myosin gene, but also find her research calling. A major motor protein found in heart and skeletal muscles, myosin mutations interfere with muscle contraction that can lead to disorders such as cardiomyopathy (weakness of the heart muscle) and muscular dystrophy. McNally has focused on both of these areas of investigation throughout and ever since completing

the MD/PhD program at Albert Einstein in 1990. She even worked under the mentorship of Dr. Leinwand, who served as her dissertation advisor. McNally jokes, “I was the summer student who never went away!”

An internship and residency training in internal medicine, however, took McNally to Brigham and Women’s Hospital in Boston. There she also completed a fellowship in cardiovascular medicine in 1996 before going on to a research fellowship in genetics at Boston Children’s Hospital. She then joined the faculty at the University of Chicago, where her husband, Stephen Kron, MD, PhD, is currently professor of molecular genetics and cell biology.

Twenty-eight years ago the Oak Park, Ill., couple met at the Marine Biological Laboratory in Woods Hole, Mass., where McNally spent two summers as a teaching assistant. Coincidentally, it was also at this seaside haven for scientists that



SHOWN IS SUPER-RESOLUTION IMAGING OF A SINGLE MUSCLE FIBER AFTER INJURY. A MUTATION IN ANNEXIN A6 (GREEN) INHIBITS MUSCLE REPAIR AFTER INJURY BY SLOWING ANNEXIN A6’S ABILITY TO RESEAL THE INJURY SITE (RED).

McNally first made the acquaintance of Rex Chisholm, PhD, vice dean for Scientific Affairs and Graduate Education, and the Adam and Richard T. Lind Professor of Medical Genetics at Feinberg. In 2000 he founded Northwestern’s Center for Genetic Medicine—the very one McNally looks forward to building upon.

**25K**

genes in the human body

**13**

years passed before the Human Genome Project was declared successful

**3**

billion bases can be viewed with today’s whole genome sequencing technology

**\$1K**

the cost of sequencing an entire human genome using new technology

**24**

hours to sequence an entire human genome using new technology

“I love what has been established at Northwestern,” she says. “The extensive research resources like the NUGene Project [one of the nation’s first DNA banking studies] and clinical services such as genetic counseling are not only fantastic but also necessary components of getting us to where we want to go in the future.”

**AFFORDABLE GENOMES**

When McNally began hunting genes decades ago she relied on Southern blotting, a molecular biology technique used to isolate and examine a single DNA fragment from an individual. “We would get just one nucleotide at a time to study—one out of three billion base pairs in a human genome,” she explains. “Today with whole genome sequencing technology, we can look at all three billion bases in many different individual genomes and begin to search for both common and rare genetic variations that link to disease in populations of people.”

“ A revolution in DNA sequencing is dramatically driving down costs and transforming how we practice medicine. ”

In 2003, the Human Genome Project completed the sequence of the first human genome. The international effort cost upwards of \$3 billion and took 13 years to be declared a success. Last year, the average price tag for whole genome sequencing was \$10,000. In January, biotech company Illumina introduced a new machine that can sequence an entire human genome for \$1,000 in about 24 hours. This exciting development will extend whole genome sequencing to many more patients, providing richer and more robust genetic data that will dramatically change health care.

“Lower cost sequencing technology will allow us to better classify diseases. That’s already been happening in the cancer field, cardiology and neurosciences,” explains Dr. McNally. “In cardiology, we tend to lump conditions into broad categories—the group of heart failure, the group of cardiomyopathy. What we are learning is that there are many different diseases within these groups, and many times there is a strong genetic influence. If we can understand the effect of specific gene mutations on disease progression, we will have a better sense of when to intervene with medical and surgical treatments for each and every patient.”



MUSCLE WITH MUTATIONS IN DYSFERLIN AND THE RELATED PROTEIN MYOFERLIN DEVELOP FAT ACCUMULATION WITHIN MUSCLE (RED).

The growing field of personalized medicine relies on the ability to tap into DNA codes. Dr. McNally has both hunted and gathered revealing biological data for many years in her quest to improve care for her heart patients and generations of their families. “In our clinic, we’ve already been doing personalized medicine to deliver more precise therapies, minimize side effects and improve outcomes,” she says. “Cardiovascular genetics has grown at an amazing rate and demonstrated the importance of using genetic information in the practice of good medicine in cardiology and across other areas of medicine as well.” **M**



FROM THE  
MILITARY  
TO  
MEDICINE

"IT IS FROM NUMBERLESS DIVERSE ACTS OF COURAGE AND BELIEF THAT HUMAN HISTORY IS SHAPED. EACH TIME A PERSON STANDS UP FOR AN IDEAL, OR ACTS TO IMPROVE THE LOT OF OTHERS, OR STRIKES OUT AGAINST INJUSTICE, HE SENDS FORTH A TINY RIPPLE OF HOPE. THAT RIPPLE BUILDS OTHERS. THOSE RIPPLES—CROSSING EACH OTHER FROM A MILLION DIFFERENT CENTERS OF ENERGY—BUILD A CURRENT THAT CAN SWEEP DOWN THE MIGHTIEST WALLS OF OPPRESSION AND INJUSTICE."

- SENATOR ROBERT F. KENNEDY

Throughout the decades, Northwestern University Feinberg School of Medicine students, faculty and alumni have had a long-standing history of serving in the U.S. Armed Forces for a variety of reasons. Past and present, soldiers, sailors, airmen and reservists may have enlisted to learn a trade, see different regions of the country or world, find discipline and structure, obtain funding to further their education, and serve their country. During periods of world conflict, some have answered the government's call to duty through mandatory physician drafts, even though they may have disagreed on a personal level with the potential for harm to self and others.

To commemorate Veterans' Day on November 11, *Northwestern Medicine Magazine* is recognizing medical school alumni who are military veterans. We asked Feinberg graduates to submit information about where, when and in what capacity they served, and the response was overwhelming. You can find their summaries in the "Ward Rounds News" section in the back of the magazine, with more details online. (We will include additional submissions in the winter 2014-15 issue of the magazine.)

On Northwestern's Chicago campus, there are also current students and trainees who are former or active-duty military—and we wanted to share some of their stories, too. Featured are three first-year students—MD, Physician Assistant, and Physical Therapy—as well as a neonatology fellow. Though only in their 20s, each has already had some interesting life experiences. We thank them and other military personnel and veterans for their personal sacrifices and their eventual commitment to becoming clinicians and scientists in a variety of fields.



# STEPHEN

MD STUDENT X U.S. MARINE

# GRAVES

First-year medical student Stephen Graves, 27, says that he was a good but unmotivated high school student who only applied himself when he liked a subject. He also had no desire to follow in the footsteps of his physician parents. His ambitions were to see the world beyond Reno, Nev., and serve his country as a U.S. Marine.

Graduating from high school in 2006, he enlisted in the U.S. Marine Corps Reserve. "What I needed was structure and discipline," he says. Graves trained and served in the Reserve while working toward his undergraduate degree at the University of Nevada, Reno. He went to boot camp at the San Diego Recruit Depot before entering a Reserve unit, where he trained as a scout sniper in the 4th Anti-Terrorism Battalion.

These experiences, he says, "taught me that regardless of whether you want to do something, you give it your all."

Whatever motivation Graves was lacking in high school, he made up for in college, where he pursued dual majors in international business and management with a minor in economics. He attended Officer Candidate School the summer between his junior and senior years.

Though driven in college, Graves still was unsure about a career path, so when a surgeon friend of his parents suggested that he shadow him at a hospital for a few months, he decided to give it a try. "I saw how he had a direct impact on people's lives and thought, 'This is what I want to do.'" Graves added science prerequisites to his course load, carrying 22 credit hours each semester of his junior and senior years.

After graduating in 2009, he commissioned into the U.S. Marine Corps as a lieutenant and reported to the Officer Basic Course in Quantico, Virginia. All commissioned officers attend this course to learn how to be a provisional rifle platoon commander. "The Corps wants everyone to understand what it's like to be on the ground. It's about producing leaders," Graves says.

Ranked by instructors and peers, he graduated first in his class of 300 officers and earned both the Honor Graduate and Gung Ho awards. "The Marine Corps is a pretty alpha male, aggressive culture, and some people lead by yelling. I led by helping others," he explains.

His next stop was the infamous Infantry Officer Course, known for its grueling Combat Endurance Test. After passing, Graves reported to his unit, 2nd Light Armored Reconnaissance (LAR) Battalion, at Camp Lejeune in North Carolina, and assumed command of four LAR vehicles and 32 marines. Three years later, he deployed to Afghanistan, where he lived in a shipping container with another service member and worked 12 to 14 hours a day, every day for a year. His primary role was reporting to the commanding general on operations in Helmand province.

Besides discipline and leadership, Graves says that his military experience heightened his appreciation of family, the comforts of life in the United States, and personal freedom. "The Marine Corps is instrumental in who I am and the reason I have had any success." His highest honor, he says, came in June when he and wife Allie were married.

# SILENA

NEONATOLOGY FELLOW X UNITED STATES AIR FORCE

# CHAPMAN, MD



Neonatology fellow Silena Chapman, MD, knew as a child that she wanted to be a doctor, decided to specialize in neonatology in college, and graduated from medical school at age 23. When she joined the U.S. Air Force as a commissioned officer during her first year of medical school, it was not because she needed direction. Her grandfather had served in the Army Air Corps and, she says, "I thought it would be a good opportunity to serve my country and pay for my medical education."

Dr. Chapman, 29, grew up in Chicago and Bellwood, Ill. She obtained her bachelor's and medical degrees in a six-year program at Youngstown State University and Northeast Ohio Medical University. She attended Officer Training School at Maxwell Air Force Base, Alabama, which, she explains, is like a professional school. Among other things, attendees learn how to present themselves as an officer, leadership, team building and physical fitness.

In her last year of medical school, Chapman did rotations at the military hospitals at Keesler Air Force Base, Mississippi, and Lackland Air Force Base, Texas. She also attained the rank of captain. She chose to do her pediatrics residency at Naval Medical Center Portsmouth, Virginia, because she knew that it would provide maximum exposure to procedures and give her a head start on caring for sick and premature babies. She explains that military residencies focus on giving trainees the skills to stabilize and manage critically ill patients until emergency transport arrives.

Chapman's interest in neonatology stems from having a cousin who was born eight weeks premature. "I got to visit with him in the ICU and enjoyed observing the procedures and how the neonatologists interacted with my family. The atmosphere felt very comfortable," she says.

After graduating from her residency in 2011, she served for a year as chief resident at Portsmouth and as pediatric hospitalist at Langley Air Force Base Hospital, Virginia. She sought permission to do her neonatology fellowship at a civilian hospital, so that she would have a different experience.

"There's something special about caring for families who are doing so much for this country. I'm taking time away, so that I can provide military families with better care when I return," Chapman says. Her commitment will include serving as an attending neonatologist at a military hospital for four years.

A highlight of her service was participating in a U.S. Air Force humanitarian mission during her residency. She lived on a naval ship for one month and treated patients, some of whom had never seen a doctor, at temporary clinics in Guyana and Surinam.

Dr. Chapman and her husband Sean became first-time parents in June with the birth of their son Rory. She credits her military training and support from colleagues and family with helping her balance clinical and research commitments with motherhood. "Being able to help families through a difficult time has always been what keeps me going," she says, "but since having a baby, I find myself a little more emotionally invested."



COLIN  
PA STUDENT X NAT'L GUARD  
O'CONNOR

When first-year physician assistant student Colin O'Connor returned from his 16-month Iraq deployment in 2007, the young Minnesota National Guard reservist felt lost. "I was 19 when I left and 21 when I returned. I went in as a fire support specialist and was promoted overseas to sergeant. But when I got home I was just a punk college kid," he says.

O'Connor, 28, joined the National Guard shortly after graduating high school, knowing that his unit would be deployed. He was one of the youngest recruits in boot camp at Fort Sill, Oklahoma, and wanted to quit. "It was a shock to the system for a kid who had never been away from home," O'Connor explains. His drill sergeant, however, encouraged him to tough it out.

He was studying sociology at the University of Minnesota and planning to go into law enforcement, when the U.S. Army activated his unit. They trained at Camp Shelby, Mississippi, and O'Connor recalls, "I remember wondering if we were going to do okay."

He was assigned to a combined infantry and armor battalion, stationed at Camp Taqaddum in Central Iraq. The Iraq mission had shifted from combat to stability and security, and his responsibilities included security patrols and conducting a census to gain knowledge of local customs and culture. O'Connor got to know and drink tea with Iraqi families.

Returning home with no sense of direction, O'Connor went back to college to complete his bachelor's degree. During his last semester, he enrolled in an emergency

medical certification class as an elective and, he says, found his purpose.

After graduating, he worked with a Red Cross mobile blood collection team and as a phlebotomist at a medical clinic. It was then that O'Connor decided to become a physician assistant and spent the next two years taking science prerequisites at a community college.

The U.S. military, however, had other plans for him. Though he had completed his Guard service, he remained in a pool of recently active soldiers. A Reserve recruiter encouraged him to join a newly formed psychological operations unit to reduce the likelihood of being recalled to active duty. He joined as a sergeant and became distinguished honor graduate of the class.

But before taking the plunge into a medical career, O'Connor went on a spiritual journey. He and his wife Sara attended bible school in California. Unbeknownst to him, the two-year program would also provide a head start on his medical training. To fulfill a community service requirement, he was invited to work at the school's free clinic.

While applying to physician assistant programs, O'Connor learned about the deficit of primary care physicians and the growing demand for physician assistants and, he says, it struck a chord. "When I heard about our country's healthcare needs, I thought, 'I'm willing, I'm interested, and I'm able.'"

EMILY  
PT STUDENT X U.S. NAVY  
BAKER



As a first-year physical therapy student at Northwestern University, Emily Baker is seeing a softer side of Chicago than she did in winter 2007 when she reported for training at Naval Station Great Lakes. The self-described Navy brat says that even she was unprepared for the degradations of boot camp. When Baker returned to Chicago in the summer of 2014 to find an apartment, she got another shock—beautiful weather and friendly people. "I loved it," she says.

Seeking adventure and a sense of purpose, Baker, 27, enlisted in the Navy at age 19. The military delivered on the adventure front, but when she completed her service in 2012, she felt uncertain about her career path.

Baker trained as an aircraft maintenance worker, specializing in F-18s, an older plane that requires more upkeep. She was stationed at Naval Air Station Lemoore in California from 2007 to 2011, following one year at a base in Washington. Her job was to maintain aircraft and flight decks. Volunteering for detachments, she spent several months at a time on aircraft carriers in the Atlantic and Pacific oceans. She also earned the privilege of supporting training squadrons that filled in for the Blue Angels at air shows.

"It was a cool experience to work behind the scenes of an air show and see ordinary Americans' appreciation for the military," she says.

Before enlisting, Baker was more interested in cross-country running than mechanics. "I knew that I would feel like a fish out of water," she says. "I had no

mechanical aptitude and was in a male-dominated environment, but I was determined to do my best. It was empowering." She attained the rank of third class petty officer in less than three years.

Nonetheless, when Baker completed her service, she knew she did not want a career in naval aviation. In search of direction, she volunteered at the VA San Diego Healthcare System. They assigned her to a spinal cord injury physical therapy unit and, Baker says, she found her calling. "I thought I could do this for the rest of my life."

Baker worked with patients diagnosed with paraplegia, quadriplegia and multiple sclerosis. She saw many of them progress from sitting in wheelchairs to standing with the aid of robotics and other mechanisms. "They were facing incredibly tough challenges, but it was a happy atmosphere. There was so much camaraderie among the patients and therapists. It blew my mind every day."

She had nearly completed her bachelor's degree in social science while on active duty, but after deciding on a physical therapy career spent more than a year taking science prerequisites. Baker applied to the physical therapy program at the Feinberg School of Medicine "on a wing and a prayer," she says, and was thrilled when she was both accepted and granted a Post 9/11 GI Bill Yellow Ribbon Scholarship.

"I wouldn't trade my Navy experience for anything. It gave me direction and the strength and confidence to pursue a physical therapy degree at Northwestern."



## Alumni President's Message



Dear Fellow Alumni:

The fall season brings with it the excitement of incoming and returning Feinberg

School of Medicine students to the Chicago campus. I want to share with you a student event I had the pleasure of attending on September 5 that epitomizes our medical students' close interaction with one another—the annual "Society Olympics."

This event is an outgrowth of the Feinberg Society Program established in 2008. The four societies link the previously established four colleges from the 1990s across the four years of medical school at Feinberg. These "Olympics" enable students to compete against one another in a variety of fun, relatively low-skill events such as a water balloon toss, tug of war, and cornhole bean bag toss.

Rather than battle it out in a muddy field after some hard rains that Friday afternoon, "the Games" were brought indoors and students went head-to-head in a spirited rock, paper, scissors contest, bean bag toss, and penny wars. (Members of each society contributed pennies to a jar bearing the society name—receiving a point for each cent—and opposing societies could donate larger denominations to their opponents' kitties in order to subtract points from their rivals. All proceeds went to Chicago Youth Programs.)

The four societies, each of which is named after a famous Feinberg graduate, include: **Cooper** (John A.D. Cooper); **Ricketts** (Howard Taylor Ricketts); **Thompson** (Mary Harris Thompson); and **Lawless** (Theodore K. Lawless). This year the winning team was Cooper, and I had the privilege of presenting the trophy to their team. The Medical Alumni Association sponsored the

indoor picnic and hopes to continue to support this event in the future because we feel strongly that it's important to promote interaction among students, faculty and medical alumni.

In addition to encouraging socialization, these Feinberg societies are geared to promote interaction between older and



A SPIRITED COMPETITION OF ROCK, PAPER, SCISSORS WAS PART OF THE SOCIETY OLYMPICS THIS YEAR.

younger students, and improve the experience at Feinberg through better connections, mentoring and teaching, and more participation in community engagement. I saw the enthusiasm with which the students competed and the wonderful camaraderie that exists and it brought me back to my med school days.

My thanks go to Dr. Gregory Brisson, a key organizer of the Society Program, for providing me with background information so I could share this with you.

Now for a Board update ... Your MAA National Board has been active this spring

and summer through its four major committees. In particular, I would like to recognize the accomplishments of the Fundraising Committee, chaired by Dr. Jimmy Hill, immediate past president of the Medical Alumni Association Board, and committee members Drs. Bournias, Grayhack, Humes, Hurman, Kelly, Rusk

and Sullivan. Through their efforts, our Board has achieved 100% annual giving for our current fiscal year! We hope that this sets an example for all of our alumni to contribute annually to the medical school in order to provide scholarship support for our future students.

All the best,

David Winchester, '63 MD  
Alumni Board President

## Remembering the Contributions of Two Feinberg Pioneers— Drs. John J. Bergan and Sherman Elias

WRITTEN BY: Sarah Plumridge



John J. Bergan, MD, '59 GME, a vascular surgeon, died June 11 in Chicago, 50 years after he performed the first kidney transplant at Northwestern Memorial Hospital (NMH).

After serving in the Navy for two years during World War II, Dr. Bergan attended Indiana University School of Medicine. He completed a general surgery residency at Chicago Wesley Memorial Hospital and began his medical career as a clinical assistant in surgery at the medical school at Northwestern.

Along with James Yao, MD, PhD, professor emeritus in surgery-vascular, Dr. Bergan founded the Division of Vascular Surgery at Feinberg in 1976 and established one of the earliest vascular surgery fellowships at Northwestern. Together, they developed the noninvasive vascular laboratory at Wesley Hospital.

"We have lost a skilled surgeon, a prolific scholar, a dedicated educator, a great speaker, a tireless investigator, a fearless leader and a staunch advocate for venous disorders," says Dr. Yao, who was recruited by Dr. Bergan in 1972. "I am grateful he gave me the opportunity to launch my career in vascular surgery, and I am honored and privileged to have worked side-by-side with him for 16 years."

Bergan published more than 800 academic papers and edited or authored more than 40 textbooks, including one of the most authoritative books on the circulatory system. He started new societies, including the Midwestern Vascular Surgical Society and the Society for Vascular Surgery. He served as president of numerous societies, such as the Society for Vascular Surgery and the American College of Phlebology.

He received national and international honors and awards, including the Roving Silver Medal from the Danish Surgical Society, Honorary Fellowship in the Royal College of Surgeons of England, and the Lifetime Achievement Award from the International Society for Endovascular Surgery.



Sherman Elias, MD, '78 GME, former chair of Obstetrics and Gynecology and professor emeritus of obstetrics and gynecology-clinical genetics, passed away July 14 at age 67.

Under his leadership, the department rose nationally and internationally, including moving from No. 39 to No. 8

in NIH rankings. He expanded the clinical and educational missions by creating new divisions and fellowship programs, overseeing the transition of the new Prentice Women's Hospital and developing training opportunities at John H. Stroger, Jr. Hospital of Cook County.

His research focused on reproductive genetics, including prenatal diagnosis using fetal cells and nucleic acids from maternal blood. He authored more than 375 articles, reviews and chapters, as well as six books.

"Dr. Elias was a friend and valued mentor to countless physicians and scientists in the fields of obstetrics and genetics," says Jeffrey S. Dungan, MD, chief of obstetrics and gynecology-diagnostic ultrasound. "He was a pioneer in the specialized area of prenatal genetics, and his research and publications in this area were visionary. I will remember him most for his deep passion for the ethical foundations that guide us every day in this field."

Elias earned his medical degree from the University of Kentucky. He began his obstetrics and gynecology residency at Michael Reese Hospital in Chicago and completed it at the University of Louisville. He completed his postdoctoral fellowships in genetics at Yale University School of Medicine and at Feinberg.

He joined Northwestern in 2003 after holding leadership positions at Baylor College of Medicine in Houston and at the University of Illinois at Chicago.

Dr. Elias served in key roles in numerous professional organizations, including the Society of Gynecologic Investigation, the American Board of Obstetrics and Gynecology, and the International Society for Prenatal Diagnosis. He was a diplomate of both the American Board of Obstetrics and Gynecology and the American Board of Medical Genetics.

He was the recipient of the Basil O'Connor Award and the Jonas Salk Health Leadership Award in Research from the March of Dimes Birth Defects Foundation, the W.K. Kellogg National Fellowship Award, the Distinguished Alumnus Award from the University of Kentucky and was named a University of Illinois Scholar. **M**

# Progress Notes

## EDITOR'S NOTE:

IN RECOGNITION OF VETERANS' DAY WE HONOR CURRENT ALUMNI WHO HAVE SERVED IN THE U.S. ARMED FORCES. WE APPRECIATE THEIR PERSONAL SACRIFICE AND SERVICE. (MORE SUBMISSIONS WILL BE INCLUDED IN THE WINTER ISSUE.)

**BERRY PLAN:** To ensure a supply of trained medical specialists for the military, in 1950 Congress passed public law 779, called the "Doctor Draft Law," to remove healthcare professionals from the general manpower pool and place them in the Reserve Medical Corps. From the mid-1950s to the mid-'70s, those who were training to be doctors and were eligible for the Doctor Draft, had the option of requesting a deferment of service under the Armed Forces Reserve Medical Officer Commissioning and Residency Consideration Program, also known as the Berry Plan. If the physician were granted a deferment, he could postpone military service until after specialty training, and if not, he had to enter upon completion of an internship. Several references are made to the Berry Plan and the Doctor Draft throughout these pages.

*Information from JAMA, 1961*

'40s

George R. Clutts, '48 MD, served in the Navy from 1943 to 1945 in Chicago, and at Eglin AFB in Florida in the USAF from 1952 to 1954.

Dudley J. Fournier, '48 MD, entered Northwestern three months before WWII began. Dr. Fournier writes: "It wasn't until July 1, 1943, that the Navy V-12 and Army ASTP started. I joined the Navy. We did some marching and were really on active duty, but continued school. We went year round until Dec. 1945. In the fall of 1943, I was sent to Great Lakes Naval Station in Illinois until med school started in Dec. (More details are online.)"



'50s

A. Charles Alexander, '51 MD, '55 MS, served almost nine years on active duty and 29 years as an active reservist in the Navy as a medical officer. He retired as a captain.

Paul Rosen, '51 MD, was in the Air Force from 1953 to 1955 and delivered babies.

Donald L. Unger, '51 MD, finished his internship in June 1951, was in the Army within a week and in Korea by September, serving as a physician. After four months there, he spent 17 months in Hokkaido, Japan, before returning home. He retired three years ago after more than 50 years as a practicing allergist. During that time, he became chief of allergy at the Stritch School of Medicine, president of the American College of Allergists and the author of 50 published papers.

Robert K. Baum, '52 MD, was drafted in July 1954 near the end of the Korean War. He had completed only 15 months of his surgical residency, but for military purposes was considered a general surgeon. Dr. Baum served 19 months in northern France as the only Air Force physician on his base with more than an internship, except for the commanding officer of the hospital. The other doctors called him "chief."

Robert A. Kyle, '52 MD, serves as chairman of the Scientific Advisory Board of the International Myeloma Foundation and chair of the Scientific Advisory Committee of the International



## KEY:

- AFB** — AIR FORCE BASE
- ASTP** — ARMY SPECIALIZED TRAINING PROGRAM - ESTABLISHED DURING WWII AT UNIVERSITIES TO MEET DEMANDS FOR JUNIOR OFFICERS AND SOLDIERS WITH TECHNICAL SKILLS
- HPSP** — HEALTH PROFESSIONS SCHOLARSHIP PROGRAM
- LTC** — LIEUTENANT COLONEL
- LTCDR** — LIEUTENANT COMMANDER
- MC** — MEDICAL CORPS
- MP** — MILITARY POLICE
- NAVY** — COLLEGE TRAINING PROGRAM ESTABLISHED TO PROVIDE THE NAVY WITH A CONTINUOUS SUPPLY OF OFFICERS
- V-12** — U.S. AIR FORCE
- USAF** — U.S. AIR FORCE
- USAR** — U.S. ARMY RESERVES
- USNR** — U.S. NAVY RESERVES

Waldenstrom's Macroglobulinemia Foundation. He was drafted into the USAF in 1955 from his residency in internal medicine at Mayo Clinic, Rochester, Minn., and stationed at Elmendorf Air Force Base in Anchorage, Ala., for two years. He found practicing internal medicine as chief of a large medical ward a very worthwhile experience. (More details are online.)

Gerson "G.C." Bernhard, '53 MD, '59 GME, was in the USAF on active duty from Feb. 1955 until Feb. 1957 stationed at Goose Bay AFB, Labrador, Canada, and Mather Airfield, Sacramento, Calif., as a physician with a rank of captain on entrance and major at discharge. Currently, he is a clinical professor of medicine at the University of California, San Francisco.

William "Bill" Johnson, '53 MD, served in the Navy V-12 from 1944 to 1945, remained in the Naval Reserve until approximately 1955, and then resigned. He entered the USAF in 1957 under the Physician's Draft and served two and a half years as a flight surgeon and commander of medical service at Oxnard AFB, Camarillo, Calif. (More details are online.)

Arthur L. Norins, '53 MS, '55 MD, was an intern in pediatrics at the University of Michigan from 1955 to 1956, then in residency in dermatology at Northwestern from 1956 to 1959, both on the Berry Plan Deferment. He entered the Army in July 1959 as a captain and served two years at Fort Leonard Wood, Missouri. There, everyone wore several hats and he was chief of dermatology, chief of medicine Fifth Army Stockade, and chief of the MASH Hospital for the 92nd Combat Engineers. (More details are online.)

Grandon Tolstedt, '53 MD, entered military service in April 1943 and was discharged in Sept. 1946. Nearly two years of that time was spent as a patient in an Army hospital. Before his injuries in Nov. 1944,



he was a private in the infantry engaged in battle in Belgium, Holland and Germany. As a first scout, he was the member of his platoon that went down the road or across the field first. He lasted five weeks in combat. (More details are online.)

James J. Monge, '55 MD, served from 1956 to 1958 in the USAF as a physician and surgeon during residency (interrupted for two years), which he says was a good experience. He currently lives in Duluth, Minn., where he practiced general and vascular surgery with the Duluth Clinic. He became a clinical professor and, although retired, continues to teach at the University of Minnesota, Duluth Medical School. (More details are online.)

Barrett H. Bolton, '56 MD, first served as captain MC USAR stationed at Ft. Sam in Houston, then from 1959 to 1961 as an internist at Rodriguez U.S. Army Hospital, San Juan, P.R. He spent six years in the Reserves (before and after active duty) as lieutenant of armor. (More details are online.)

Robert W. Boxer, '56 MD, retired in 2013 after 51 years of practicing allergy and clinical immunology in the Chicago area, primarily in Skokie and Northbrook. He is a longtime Wildcat football fan and attended the Rose Bowl in 1996. He is finishing a book on driving safety and plans to write two books about the medical field. Dr. Boxer has also written five pun/cartoon books. He and his wife attend musical events on Northwestern's Evanston campus. They are

looking forward to spending time with their three grandchildren.

Robert W. Olson, '57 MD, '57 GME, served in the USAF on active duty from July 1, 1959, to June 30, 1961, as a radiologist at Langley AFB Hospital in Virginia. He then served four more years in the Air Force Reserves, the first two on active status. He greatly values his time spent in the military. His father had served 32 years and it was a great experience for him to live in so many places growing up.

George Austin Conkey, '58 MD, enlisted in the Navy and became an ensign, USNR, whose first assignment was his senior year of medical school, after



the military introduced a program of paying for medical education. After graduation, he became regular Navy. Following a general internship at U.S. Naval Hospital, Portsmouth, Va., he attended flight school at Pensacola, where he served two years as flight surgeon for patrol squadrons in Hawaii and Japan. Afterward, he served two years with transport squadrons where he had opportunities to visit much of Europe and what was then the Belgian Congo.

He then completed a psychiatry residency at U.S. Naval Hospital, Philadelphia, then the Navy sponsored his training in child psychiatry at Langley Porter Psychiatric Institute in San Francisco. He decided to stay there and was fortunate to spend the next 10 years as director of training, followed by chair of the psychiatry department at U.S. Naval Hospital, Oakland, Calif., one of the Navy's three psychiatry residency programs. He says it was a rewarding experience because the military staffed their training programs with the top Berry Plan psychiatrists from training programs throughout the country. (More details are online.)

Gerald M. Berkowitz, '59 MD, served at a USAF Strategic Air Command base from 1966 to 1968 as chief physician, plus six years in the reserves.

'60s

**Roger Hurwitz, '60 MD**, writes: "I spent two glorious years in the Army in Georgia after residency. I resigned as soon as possible."

**Robert S. Martino, '60 MD, '62, '65 GME**, served in the U.S. Army during the Korean police action as a company grade infantry officer (2nd Lt., 1st Lt., Capt.) from 1953 to 1955 as a platoon leader company commander and also coached the division football team. He writes: "I was never in harm's way. I enjoyed my time in the Army. It was my intention to become a physician; however, I thought about becoming regular Army. My regimental commander, Col. Green, said to go to medical school, then if I wanted to return to the Army, to do so as a physician. So it goes. I didn't return to the military."

**William B. Scholten, '60 MD**, served in the Army from July 1964 to Feb. 1967 as chief of neuropsychiatry at Bassett Army Hospital, Ft. Wainwright, Fairbanks, Ala.

**Wally Doren, '61 MD, '65 GME**, served in the Navy from Jan. 1967 to Jan. 1969 as an orthopaedic surgeon. He was assigned to the 3rd Marine Division in Phu Bai, South Vietnam (I Corps), from April 1967 to April 1968. The hardest medical work he endured was taking care of battle casualties 18 to 20 hours a day the entire month of February 1968 during the TET offensive (Battle of Hue). (More details are online.)

**Arthur C. Johnson, '61 MD, '65, '67, '68 GME**, served in the Navy from 1962 to 1964 as the general medical officer for four destroyers in Destroyer Division Twelve of the Pacific Fleet.

**Maynard D. Poland, '61 MD**, had a year in an NIH endocrine/diabetes fellowship at the Joslin Clinic and New England Deaconess Hospital in Boston after a year of rotating internship and two years of internal medicine at Methodist Hospital in Indianapolis. He entered active duty in the Army Medical Corps through the Berry Plan in 1965 during the peak build-up of military forces for the

Vietnam War, and reported to Womack Army Hospital, Ft. Bragg, N.C., serving until Nov. 1967. (More details are online.)

**Donald M. Coder, '62 MD**, was drafted in the Vietnam doctor draft and chose the Navy. For one year in 1968, he was on the carrier USS Forrestal CVA 59 that was deployed in the Mediterranean Sea. Dr. Coder writes: "Every attack carrier has a surgeon and a well-equipped operating room, but it is not a challenging place for a surgeon. My second year, 1969, I worked in the U.S. Naval Hospital, Jacksonville, Fla., as a surgeon, which I found to be an excellent experience. When this mandatory two years ended, I went to work with a surgical specialty group in Highland Park, Ill., where I stayed for 27 years." (More details are online.)

**G. Byington Pratt, '62 MD, '63 GME**, was a "Draftee Doc" who served in the USAF in Sept. 1963, stationed at Shepherd AFB in Texas.

**Jack Shartsis, '62 MD**, served two years in the Army. He was drafted about three months before starting his residency in internal medicine, but wasn't called to duty until the end of Dec. 1964. He served as post surgeon at Camp Pickett, Blackstone, Va., as the second ranking of 11 officers. They had about 100 enlisted men, one permanent building, 1,500 temporary buildings (barracks), and a 2,500-bed hospital in mothballs. Blackstone had a population of 1,500 and two general practitioners in town. Dr. Shartsis treated a few enlisted and more wives and retired personnel. During the summer, 5,000 troops came in, bringing armor and artillery on trains for two weeks of training. They also brought their own hospital units. (More details are online.)

**John Weaver Jr., '62 MD**, served from 1963 to 1965 as a medical officer in the Naval Reserve following his internship. For the first year, he was stationed on Okinawa with the Marine Corps as surgeon for an artillery regiment. The second year he spent in an outpatient facility for dependents in San Francisco. He liked the Marine Corps best.



Dr. Weaver writes: "On one occasion on Okinawa we managed a mini reunion of five of us from the class of 1962: **Alex "Scott" Gunn II, '62 MD; Gerald "Gerry" Ujiki, '62 MD, '70 GME; Charles R. Thorpe, '62 MD; William "Bill" Ritchie, '62 MD, '69 GME; and myself.**" (More details are online.)

**J. Martin Lebowitz, '63 MD**, served on active duty in the Navy from 1969 to 1971 as a staff urologist. From Jan. until July 1970, he was chief urologist at the Naval Support Activity Hospital in Da Nang, Republic of Vietnam. He is presently retired and living in McLean, Va., just outside Washington, D.C.

**Charles Kent Smith, '63 MD, '64 MS**, served as a USAF captain at Wilford Hall Hospital in San Antonio from 1965 to 1967. He is currently the senior associate dean for students at Case Western Reserve University School of Medicine and a professor of family medicine.

**Bernard (Bud) Gore, '64 MD**, attended the 50th Medical Alumni Reunion in April. He writes: "Awesome, great fun. Just returned from steelhead trip to Alaska, check my Facebook."

**Martin Herman, '64 MD**, served as a lieutenant in the Navy from 1965 to 1967 as a physician at Portsmouth, Va.

**Charles (Charlie) Mahan, '64 MD**, joined the USNR in college at West Virginia University and was in the Ensign Program in medical

school at Northwestern. Under that program, he spent the summer of 1961 with the original Mercury astronauts—John Glenn, etc.—at the Naval Aviation Medical Acceleration Lab north of Philadelphia doing research on G-Forces on the human centrifuge. (More details are online.)

**John J. Beck, '65 MD**, entered active duty in the Navy Reserve and flight surgeon training in Sept. 1966. In 1967 he began medical practice and training to become a Naval parachutist in El Centro, Calif., where he served for two years. He was assigned to Naval Air Facility El Centro but jumped with the Naval Aerospace Recovery Facility and occasionally with the 6511th Test Group Parachute, as he was also a flight surgeon for the Air Force personnel and dependents at that base. During that time, he served as flight surgeon to the Blue Angels when they trained there during their off-season.

**Joseph D. Motto, '65 MD, '69 GME**, served as captain in the USAF from 1969 to 1971, practicing internal medicine at Kincheloe AFB, Kinross, Mich., Air Defense Command. He is currently retired from gastroenterology practice and living in Eau Claire, Wis.

**Marvin A. Perer, '65 MD**, served as a general internist in the Army from July 1969 to the end of June 1971. This was after his internal medicine residency at the University of Michigan and prior to his gastroenterology fellowship at the University of Wisconsin. (More details are online.)

**George D. Wilner, '65 MD**, comments that every member of his graduating class, except for the two women, was drafted and required to serve on active duty after completing their internships. He was able to get accepted into the Berry Plan and defer his activation until he finished specialty residency training in 1971. Dr. Wilner served two years of active duty at Walter Reed Army Medical Center where he directed the blood bank and transfusion services and the hematology laboratories. His rank at that time was major MC USAR. (More details are online.)

**W. Bruce Ketel, '66 MD, '68 GME**, served as captain USAF medical corps neurologist at the 93rd Evacuation Hospital in Long Binh, Vietnam, from Dec. 1968 to Dec. 1969. He was the only neurologist serving in Vietnam for six months of his 12-month tour, covering 500,000-plus troops. Around 300 to 400 patients were seen monthly in his outpatient clinic. The 93rd Evac. Hospital was designated as a Center for the Treatment and Study of Japanese B Encephalitis during his tour, allowing him to examine the disease in detail. (More details are online.)

**Anthony Rosenthal, '66 MD**, served as a general medical officer at the Miramar Naval Air Station from July 1967 through June 1969. While at Miramar he served with **Walter "Walt" Huurman, '62 MD.**

**Roland Summers, '66 MD**, served in the Navy as LTCDR at Little Creek Amphibious Base, Norfolk, Va., from July 1968 through July 1970 as director of an outpatient dependents clinic.

**E. Stephen Amis, Jr., '67 MD, '68 GME**, was in the U.S. Navy Senior Medical Student Program. The Navy paid him as an ensign during his senior year.

He interned at Great Lakes Naval Hospital, followed by a four-year urology residency at San Diego Naval Hospital. He returned to Great Lakes to practice urology, but after three years asked the Navy Bureau of Medicine and Surgery to train in radiology instead. Short of radiologists at the time, the Navy gave him a choice of Oakland Naval Hospital or returning to San Diego. Dr. Amis chose San Diego and remained on faculty there as a radiologist from 1978 to 1980, at which point he talked the Navy into sending him to Massachusetts General Hospital for a one-year fellowship in uroradiology. (More details are online.)

**Robert Montgomery Craig, '67 MD, '72, '75 GME**, retired from active practice

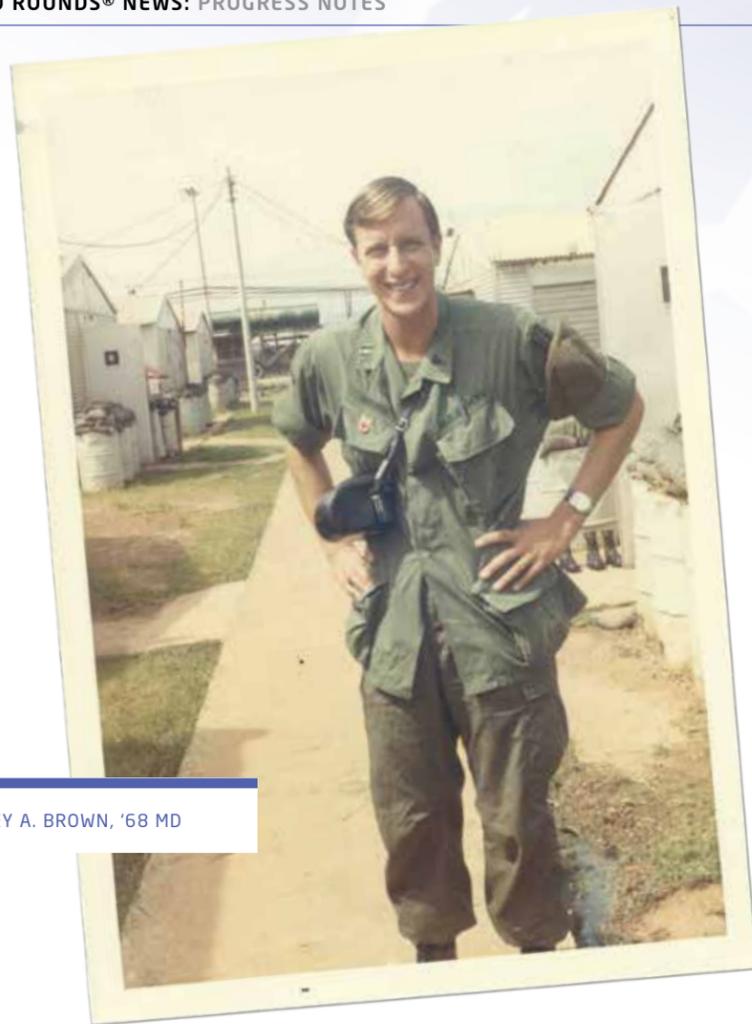
a little over two years ago and has been enjoying retirement with his wife of 48 years, travelling, reading, writing (philosophy and poetry), and playing tennis (three times weekly, both doubles and singles). Dr. Craig writes: "My first book is a short philosophical book, which was published this fall by Tate Publishing, 'The Good Life and Other Essays.' My next book will be selections of my poetry (I have written 100) and I like them, anyway."

**Michael A. Rosenberg, '67 MD**, was in the Navy and spent one year with the Marines in Vietnam: six months with a Marine battalion in the field as a general medical officer and six months in a Navy hospital in Da Nang. The other year was split between the San Diego Naval and the Bethesda Naval hospitals. When he finished his residency and fellowship, he returned to Chicago and after stints at the University of Illinois and Rush, he came to Northwestern. There he was vice chairman of ophthalmology and program director under Lee Jampol, MD, for about 20 years. He still practices full time at Northwestern, is a clinical professor, and is head of the neuro-ophthalmology section of the department.

**Richard L. Roth, '67 MD**, was drafted into the Vietnam War during his internship year (1967-68). He applied for deferment to complete a psychiatry residency but was not among the 50 percent who were granted one. He volunteered for the Air Force and was commissioned. Around April of his internship year, the Air Force requested that he resign and accept a commission in the Army. He declined, so when it came time for him to enter active duty, the Air Force assigned him to work for the Army (in an Air Force uniform, of course). (More details are online.)

**Larry Brinkman, '68 MD**, served in the Army MC, June 1967 through Sept. 1979.





HARVEY A. BROWN, '68 MD

Harvey A. Brown, '68 MD, entered into military service as a captain in the Army stationed at Fort Eustis, Va., after finishing his internship at Passavant Memorial Hospital. From there, he went to Vietnam in May 1970. Dr. Brown writes: "I spent one year in Vietnam doing amazing things." (More details are online.)



Richard Merel, '68 MD, writes: "Essentially all male graduates were expected to serve in the military because of the Vietnam War, and service was often not patriotic but reluctant. I know of only two male graduates at that time who didn't serve—one was a conscientious objector, and one was in remission from Hodgkin's Disease. So, reluctantly and fortunately, I served in the U.S. Public Health Service,

on assignment to the Coast Guard for two years." (More details are online.)

Kenneth "Ken" Wolski, '68 MD, served in the Army as a general medical officer and was ranked major at Fitzsimmons Army Hospital, Aurora, Colo., from 1970 to 1972. He is currently working in pharmaceutical drug development and living in Tewksbury Township, N.J.

Michael J. Cavanaugh, '69 MD, was in the Navy from 1972 to 1974 and was a pediatrician at Bethesda Naval Hospital, as well as spent two months on temporary additional duty with the Marines at Quantico. Wilbur Franklin, '68 MD, was also there as a pathologist. Dr. Cavanaugh writes: "I knew him well because we had been fraternity brothers. I was never in harm's way; the greatest problem that I had was in remembering when I was supposed to wear my hat."

My most memorable experience was meeting President Nixon and his daughter Julie when she had her first child. I did briefly encounter Kissinger and Humphrey as they passed through the ER. All in all, it was a good experience. D.C. was a great place to live and we made some good friends with whom we are still close."

Peter "Pete" Seyl, '69 MD, served in Vietnam from Aug. 1971 to 1972 as an ER triage officer for the Army, 24th Evacuation Hospital, in Long Binh, Vietnam. He met his wife, Lt. Christine Dittmer, neuro-intensive care RN, U.S. Army, now of 41 years, while at the hospital. After his service, he completed a family medicine residency in Seattle and then practiced with Group Health Cooperative of the Puget Sound for 28 years. He is now retired, splitting his time between Bellingham, Wash., and Corona, N.M.

Ronald S. Weinger, '69 MD, served from 1974 to 1976 in the Army Medical Corps, stationed at William Beaumont Army Medical Center, where he did hematology and oncology to fulfill his Berry Plan obligation.

## '70s

J. Thomas Brown, '70 MD, '70, '79 GME, served in the Navy Medical Corps as a general medical officer in Norfolk, Va., from July 1971 to July 1973 after graduating and interning at Wesley Memorial Hospital. He was assigned to the USS Chilton, LPA-38, his first year and the second year to the Navy Regional Branch Dispensary at the Norfolk Naval Station, both under the rank of lieutenant. After practicing neurosurgery for 34 years in the Chicago area, he retired in July 2012 and lives with his wife in Elmhurst, Ill. He sends all the best to the Class of 1970.

Ed Forkos, '70 MD, served for two years starting in 1972 as a general internist at Ellsworth AFB, S.D. He writes: "The tour was noteworthy in that I greatly improved my piano playing, had plenty of time for the kids and discovered that military medicine was not for me."

John Jennings, '70 MD, was in the Air Force as a major in the MC in Biloxi, Miss., at Keesler AFB, from July 1, 1975 to June 30, 1977.

Karsten F. Konerding, '70 MD, '71 GME, writes: "Like practically all of my (male) 1970 classmates, I had a military obligation under the Berry Plan. Following surgical internship and a year of diagnostic radiology residency (both at the University of Miami), I served at Orlando Naval Hospital as a radiologist. Classmate Robert "Bob" Woelfel, '70 MD, was there at the same time, as a general medical officer, I believe. I resumed my residency in 1974 at Medical College of Virginia in Richmond, where my wife Hazle (WCAS '69) had secured a dermatology residency. I remained in the Navy Reserve, retiring as a captain in 1995.

I was recalled to active duty in 1991 during the first Gulf War and served at Naval Regional Medical Center, Portsmouth, Va., with a large contingent of reservists who filled in for much of the regular staff who deployed to Saudi Arabia as Fleet Hospital Five. I greatly value the time I spent on the two active-duty tours as well as the long reserve career as a way to serve my adopted country, and in a small way repay the many opportunities given to me since immigrating as a small child in 1949." (More details are online.)

David Barry, '71 MD, served as a pediatrician at the USAF Regional Hospital at Sheppard AFB in Wichita Falls, Texas, from July 1974 to July 1976. He writes: "It was much like a civilian practice at the time, with the exception of having ER duty and flying with premature babies to Lackland AFB, which had a neonatal ICU. It was a fun time!"

Michael "Mike" A. Dunn, '71 MD, served 39 years in the Army, including 28 years of active duty completed in 2005. He served in multiple senior command positions, as division surgeon for the 3rd Armored Division in Germany, and for seven years in the Middle East in medical research, peace-keeping and combat assignments. During Operation Desert Shield/Desert Storm he was responsible for chemical casualty care

of U.S. Armed Forces and led clinical expert teams attached to ground combat units at highest risk for chemical warfare agent exposure. (More details are online.)

Craig S. Miller, '73 MD, has been retired for 11 years and loves it. He writes: "I play a lot of golf and travel. My wife and I particularly love cruises. We will have been married 40 years in February. We have one daughter who is single. We also have a dog and cat. We live in a beautiful house in a gated community in the hills above the San Fernando Valley. On a clear day, we can see all the way to downtown Los Angeles, which is 26 miles away."

Kathryn Andolsek, '75 MD, '82 MPH, has been named assistant dean for premedical education at the Feinberg School of Medicine. In this new role, she



will serve as the primary liaison between pre-medical school education programs and the medical school. She will be the academic leader and faculty director of the school's new Master of Biomedical Science program, a professional master's degree aimed at enhancing the academic preparation of students interested in pursuing a career as a healthcare professional or in a biomedical-related field.

Dr. Andolsek has a track record of outstanding contributions and leadership in graduate medical education (GME) at Duke University for the past 30 years, first serving as the residency director for the Department of Community and Family Medicine from 1985 to 1998 and then as associate director of Graduate Medical Education from 2001 to present. She has represented Duke within the national GME community, serving in leadership roles with the AAMC, specifically the Group on Resident Affairs, and internationally in Singapore, Canada and the Middle East.

Richard Hill, '75 MD, was in the Army for three years, five months, and 14 days. He was discharged in August 1960.

Mark W. Peterson, '75 MD, served with the Navy in Japan as medical director for psychiatric services from 1978 to 1981 and was discharged as a commander.

Peter W. Pick, '75 MD, PhD, is a neurologist at the VA Health Care System, living and working in Sioux Falls, S.D. He plans to attend his 40th class reunion in 2015.

Roderic G. Eckenhoff, '78 MD, Austin Lamont Professor and vice chair for research, Department of Anesthesiology and Critical Care at University of Penn-

sylvania Perelman School of Medicine, writes: "A member of the Jacques Cousteau generation, and avid diver, I was always fascinated by the undersea environment. This was bolstered by working in a hyperbaric research facility at the University of Pennsylvania under Chris Lambertsen's mentorship (the inventor of SCUBA, and founder of what became the SEAL teams) while an undergraduate. So, while a medical student, it was only natural to join the U.S.



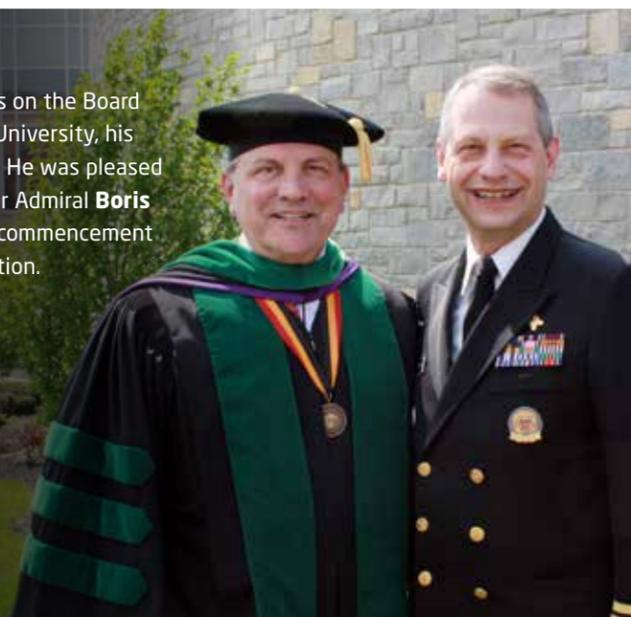
Navy on their HPSP and head toward the Naval Undersea Medicine Institute in Groton, Conn., after graduation. (More details are online.)

'80s

**Laura S. Gordon, '82 MD**, joined the Navy Medical Corps as part of the HPSP, which paid for her tuition at Northwestern and gave her a stipend. She met her husband of 34 years in Officer Training School. Dr. Gordon writes: "I was given a deferment for active duty to complete my residency in a civilian institution (UCLA), then I served the four years I owed for the scholarship at Long Beach Naval Hospital. Join the Navy, see the world! I am from southern California." (More details are online.)

which made it possible for her to attend and graduate with only a debt of time. After graduation she completed her residency in pediatrics and a fellowship in neonatal-perinatal medicine at Yale. Dr. Nichols writes: "The Air Force caught up with me at the end of my fellowship and in a personnel move that happened way above my pay grade, I was traded to the Navy for a pediatric neurologist. As a result, I did my scholarship payback time, plus one additional year, as an Air Force neonatologist at the Naval Medical Center in Portsmouth, Va." (More details are online.)

**Wade E. Young, '83 MD**, is on the Board of Trustees of Heidelberg University, his undergraduate alma mater. He was pleased to welcome classmate, Rear Admiral **Boris Lushniak, '83 MD**, as the commencement speaker at the May graduation.



**Joseph T. Morris, '84 MD**, joined the Army in June 1984 because a Health Professions Scholarship paid for his medical school. He decided to remain on active duty beyond his education payback obligation because "I receive the greatest satisfaction from providing high-quality care to soldiers, sailors, marines, airmen and Coast Guard personnel who perform their assigned duties with the knowledge that it may result in loss of one's life. We take the freedom that we have in the United States for granted and often forget about those who have served and are serving." (More details are online.)

**Katherine "Kit" Nichols, '85 MD**, was in an Air Force HPSP while at Northwestern,

**Lisa Trace, '86 MS**, graduated with a Masters in Nursing from Northwestern, which fell under the medical school. She spent 20 years in the U.S. Navy Nurse Corps: 12 years on active duty at Bethesda Naval Hospital and eight years in the Reserves at Glenview Naval Air Station as the commanding officer of the Medical/Dental Unit. She retired as a commander.

**Jill Lindstrom, '88 MD**, attended Northwestern on an Army Health Professions Scholarship and then completed her internship at Walter Reed Army Medical Center. She served two years as a general medical officer (one year each at the Watervliet Arsenal and the Seneca Army Depot, both in upstate New York), returned

to Walter Reed for her residency in dermatology and completed her military service at the Walter Reed Army Institute of Research (eight years total). (More details are online.)

'90s

**Elizabeth "Liz" Stroh Bloom, '90 MD**, was 17 years old when she entered Northwestern's HPME program and 19 years old when she started medical school and commissioned into the USAF as an officer with a full scholarship to pay for medical school. The Air Force deferred her to complete a residency in radiation oncology at the University of Texas MD Anderson Cancer Center. Then after graduation, she served four years at Keesler AFB in Biloxi, Miss., as a radiation oncologist. (More details are online.)

**Julius R. Ellis, '92 MD**, was in the Army HPSP scholarship program while at Northwestern. After graduating from medical school in 1992, he matriculated into the Army for his residency at Tripler Army Medical Center from 1992 to 2000. Thereafter, he was an attending physician at Ft. Belvoir Army Community Hospital in Virginia. He was discharged from the Army in 2000, and since then has practiced as an OB/GYN for IU Health LaPorte Hospital.

**Barbara "Bobbie" Byrne, '93 MD, '96 GME**, was named system vice president and chief information officer for Edward-Elmhurst Healthcare in December. She is also responsible for the facilities and construction departments at Edward Hospital & Health Services in Naperville and the Edward Cancer Centers in Naperville and Plainfield. Dr. Byrne practiced pediatrics for nearly 10 years.



**Sheila K. Gujrathi, '96 MD**, of San Diego, chief medical officer at Receptos, joined the board of directors of the biopharmaceutical company, Ambrx, Inc., in February.

'00s

**Antoinette Marengo (Toni Marengo-Barbick), '00 MD**, married classmate, **Brian Barbick, '00 MD/MPH**, a general surgeon. After medical school, the couple matched to Denver where she completed her residency in OB/GYN at the University of Colorado. She then entered the Navy as a lieutenant and served from 2004 to 2007 in Palms, Calif. In the military, she served as the senior medical officer in her department and was the chair of the Perinatal Advisory Board. While active duty, she earned the National Defense Medal, Global War on Terrorism Medal, Expert Pistol Medal, and the Navy Commendation Medal. Dr. Marengo-Barbick was honorably discharged as a lieutenant commander. (More details are online.)

**Michael Bloomfield, '06 MD**, and **Marin Mannix, '06 MD**, had twin boys, Luke and Daniel, in January. Michael is an orthopaedic surgeon at the Cleveland Clinic. Marin is an anesthesiologist at University Hospitals of Cleveland, Case Western Reserve University.

**Benjamin Singer, '07 MD, '10 GME**, holds his daughter Rachel Anne, born Feb. 19. Baby and mom, **Jessica Sime, '06 MD**, are doing splendidly. Ben is currently a pulmonary and critical care medicine fellow at Johns Hopkins. Jessica is an emergency medicine physician at Union Memorial Hospital in Baltimore.



'10s

**Kristen K. Mighty, '12 PhD**, returned to Northwestern in January as the program administrator for the Office of Postdoctoral Affairs (OPA) in The Graduate



School. Mighty did her postdoctoral training at Rush University Medical Center in Chicago's Medical District, where she served as a founding board member of the Rush Postdoctoral Society. She is eager to assist the OPA in increasing programming and helping postdoctoral fellows with professional and career development.

**Katherine Carlin, '13 MD**, attended Northwestern on an HPSP scholarship and is currently active duty Air Force. She writes: "I am a captain serving at Naval Medical Center Portsmouth (First and Finest!) as a pediatrics resident. I am technically assigned to the 633rd Medical Group at Langley AFB, but rarely go there. The hardest part of being active duty during residency is fulfilling all residency obligations on top of military obligations. The best part about being an Air Force doctor is taking care of the children of our nation's heroes."

GME

**Mitchell F. Grasseschi, MD, '76, '78 GME**, interned at Chicago Wesley Memorial Hospital and entered the military Aug. 1, 1971. He was assigned to Womack Army Hospital at Fort Bragg, N.C., from 1971 to 1973, where he was a captain and general medical officer.

**Joseph Markham, MD, '93 GME**, served in the Army from 1976 to 1980 as a military policeman and police investigator. He was sent to Fort Dix, N.J., for basic training and then Ft. McClellan, Ala., for MP school. He was stationed at Seneca Army Depot for just over a year and then went back to Ft. McClellan for investigator school. Afterward, he went to Germany, stationed in Goeppingen with the 1st Infantry Division Forward, as an investigator. (More details are online.)

**Nancy Taft, MD, '09 GME**, completed a breast surgical oncological fellowship at Northwestern. She is in the Army Reserves and has completed two tours in Afghanistan.

**Holly A. Bartimus, MD, '12 GME**, enlisted during high school and served in the Army from 1990 to 1994. She spent four years active duty as a Chinese linguist (trained at the Defense Language Institute in Monterey, Calif.) and crypto analyst stationed at Fort Lewis, Wash., as part of the 201st MI Brigade. She currently lives and works in Camden, N.J., at Cooper University Hospital in the Department of Emergency Medicine.

PT

**Ingrid Swanson Perry, '43 CERT**, enlisted in the Army as a physical therapist in April 1943. She served in the 303rd Station Hospital in South Eastern England during WWII. That hospital cared for the 8th Air Force and the 82nd Airborne, and she reports that after D-Day the hospital was extremely busy when "casualties from the continent came in trainloads." She now lives in Hendersonville, N.C., and is grateful for the education she received from Northwestern and the contributions she was able to make because she could practice as a PT. Her daughter, **Alice Perry, '88 MSPT**, is an NU alumna as well.

**Paul A. Kleponis, '82 BSPT**, enlisted in 1986 and was commissioned as a second lieutenant in the Air Force Reserves as a physical therapist. In 1991, he was called to active duty for Desert Storm and served as a PT at Wilford Hall, Lackland AFB, San Antonio. In the following years, he went to the Air Force's Health Services Administrator School and was re-commissioned as a Medical Service Corps officer in 1992.

He writes: "Military service is an honor and a privilege that much of the population of the U.S. just doesn't quite get. Everyone tries to be politically correct and recognize what the military does, but very few encourage their children to pursue it as a career. I had decided many years earlier that I wanted to give back to this country and finally had the opportunity when I obtained a degree in the medical profession." (More details are online.) **TM**

# War Wound Sparked Interest in Medicine

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## Editor's Note:

Dr. Robert Cromer passed away June 25, 2014. We are proud to pay tribute to his military service and his dedication to the practice of rural family medicine.

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By Bob Kronemyer

Bob Cromer, '52 MD, thanked his lucky stars that a German mortar shell hit his left leg during World War II combat in March 1945. That "million-dollar" wound—serious enough to remove the 19-year-old infantryman from action but without causing permanent crippling—allowed him to receive a disability rating and have his education paid for under Public Law 16 (rehabilitation) instead of the standard G.I. Bill.

"This carried me through both undergraduate and medical school at Northwestern University and paid for everything: tuition, books, supplies and even a stipend for living expenses," recounted Dr. Cromer, 88, before his passing in June. "So the German soldier who damaged me many decades ago actually wound up doing me a favor." Fortunately, the bones in his leg had been spared. "The shrapnel had merely cut my calf in half, leaving a piece of burned trousers in the wound," explained the recipient of the Purple Heart Medal.

Following his injury, Cromer underwent several leg surgeries and spent more than five months recuperating at various Army hospitals in Germany, Belgium, France, England and America, which allowed him to observe up-close caregivers in action.

"I was impressed by the medical and nursing care," he said. Furthermore, the young man had plenty of spare time to read, including numerous Ellery Queen mystery novels. "I thought solving medical problems was a little bit like being a detective."

His path toward medicine was also guided by what happened a few days before sustaining his injury. "About half of my platoon got wiped out, and a good many others in my company," he recalled. "I felt I was a survivor. I believe a lot of survivors feel they owe it to their deceased buddies to not waste the life that their buddies never got."

Cromer grew up in the Chicago suburb of Maywood and originally wanted to become an ornithologist to study birds. But shortly after the war ended, he followed in his older brother's footsteps and attended Northwestern, earning a bachelor's degree in liberal arts in 1948.

Upon receiving his medical degree in 1952, Dr. Cromer served two years at Cook County Hospital in family practice. "In those days, Cook County did not have a residency program, and I did not feel one year of internship was enough," he explained.

He was attracted to family medicine because of the great need in rural areas, despite substantially less compensation than for many specialties. In 1954, when he joined a group practice in the small community of Antigo, Wis. (about 150 miles northwest of

Milwaukee), an office visit was a mere \$2 and a house call \$4. The young doctor also wanted to live in an area where he could pursue his passion for hunting and fishing.

Dr. Cromer remained in practice in Antigo until early this June, when a medical condition forced him to step down. "I did not plan on retiring," he admitted. During his decades in practice, the father of five delivered 3,000 babies, some of them home births in his early years.

He also vividly remembered a country house call he made on Christmas Eve more than 40 years ago. While his wife Dede and young children were opening gifts, he received a call from a couple whose severely disabled son was sick. Although there were blizzard conditions, Dr. Cromer got in his Jeep and drove more than 15 miles out of town to this family's farm. He arrived to find that the boy had a high fever and a "nasty cough, with scattered rales when I listened to his chest." Diagnosing pneumonia, the physician gave him an injection of long-acting penicillin and wrote a few prescriptions, leaving instructions to give the patient plenty of fluids and keep him in a semi-recumbent position.

"On the way home, as I drove slowly through the storm, it seemed to me that I had just been subjected to a test," he recalled. "It was as if some 'Presence' had wanted to test me to see if I was a real doctor. I like to think that I passed the test."

Throughout his 60 years of practice, Dr. Cromer found family medicine highly rewarding. "I could hardly wait to get up in the morning to go to work," he said. "I enjoyed getting to know our patients and their families as well as treating them." One needy family, for whom he delivered several babies, compensated him by making a fine cabinet for his office. Following his recent retirement, the cabinet was moved to Dr. Cromer's home.

"My advice for anyone contemplating a career in medicine is not to do it because you feel you must do it for your family's sake," he counseled. "Do it because it's what you really want."

Still, Dr. Cromer understood the reluctance of newly minted MDs to pursue rural medicine. "If you graduate with a debt of \$70,000 or more, you cannot afford to go into a lower-paying medical specialty," he said. "Improving the art of medicine cannot be done with new curricula alone. Somehow, the cost and overhead of medical education must be made more reasonable. And somehow, the cost of medical care must be made more reasonable. For me it was simple because I had no debt. The government paid for my education." **M**

# THE BATTLE CONTINUES

ALUMNUS WHO SERVED CONTINUES TO FIGHT ON BEHALF OF VETERANS WITH POST-TRAUMATIC STRESS, DEPRESSION & SUICIDAL IDEATION.

BY ED FINKEL

A decade ago, **Sudip Bose, '99 MD**, was a physician in the U.S. Army's 1st Cavalry Division, one of a handful of doctors in Baghdad, Iraq, treating soldiers fighting on the front lines.

Today, Dr. Bose is an emergency room physician with the Medical Center Health System and serves as medical director for the city of Odessa, Texas. He also holds the title of associate clinical professor of emergency medicine at the University of Illinois College of Medicine. In addition he continues to raise awareness—and funds—for the mental health issues plaguing veterans of the war in Iraq and previous wars through his nonprofit organization, The Battle Continues.

"We're trying to make a bigger impact on veterans' health care and other issues," he says. "We just don't want to forget about our soldiers once they return to civilian life."

After finishing the HPME program at Feinberg, Bose completed an emergency medicine residency at Carl R. Darnall Army Medical Center in Fort Hood, Texas, which is the highest-volume emergency department in the military. During his final year of medical training, the 9/11 attacks occurred and he volunteered to remain at Fort Hood, attached to a mechanized infantry unit.

"I thought enlisting was a no-lose situation because I wanted to do emergency medicine. The military is a great way to see the world, get great skills and serve," explains Bose, who was in the military from 1995 to 2007. He also has a family history of military service. His great-grandfather, Netaji Subhash Chandra Bose, was a prominent independence leader in India during the 1940s, and is memorialized both on Indian currency and as the namesake of Calcutta's international airport.

Dr. Bose spent 15 months in Iraq in 2004 and early 2005 as part of the second wave of soldiers out of Kuwait, known as Operation

Iraqi Freedom 2. He was honored with The Bronze Star for serving one of the longest combat tours by a physician since World War II. He vividly recalls events like a bombing in the middle of a busy street, resulting in hundreds of casualties. "How do you take care of all those people? How do you prioritize and treat everybody?" asks Bose. "It's tough." The experience made him realize the importance of training medics and the resulting multiplier effect that came from spreading his knowledge.

While the Army captain spent most of his time in Baghdad during the peak of the Iraqi insurgency, he also served in other areas including Fallujah, treating several thousand U.S. soldiers. Perhaps the most memorable encounter was handling the basic medical checkup for Saddam Hussein after the Iraqi strongman was captured.

"You don't want to be the physician who misses a critical diagnosis on Saddam when he's in jail," Bose explains, noting that he needed to put his personal feelings aside when doing the exams. "You're not the judge, jury nor the executioner. You just have to focus on your job. ... In the end, he was a patient we had to treat." While some patients need to be sedated, Saddam "ended up being pretty cooperative," he adds.

Brooke Langlois, a charge nurse who works with Dr. Bose in Odessa, says he is a

low-key, upbeat leader. "He brings a different vibe when he's around," she says. "He takes charge. He knows what he needs to do, when he needs to do it. Even in the most intense moments he's not intense, and yet he still gets the job done."

## THE CASUALTIES OF WAR

The U.S. soldiers Bose treated were able to endure horrific injuries, like the loss of limbs, which they probably would not have survived in earlier wars, he says. "In the Korean War, if you were an amputee, you were pretty much dead. In this war, amputees were coming back home. Medicine has definitely advanced." Often patients would be flown to Germany "with their bellies open" for further operations after Dr. Bose did "damage-control" on the front lines to stop the bleeding.

The fact that soldiers have been prevailing over such physical trauma has led to a

new round of mental and emotional battles, which Bose refers to as the "invisible injuries" of war. An estimated 23 veterans per day commit suicide, he says, and many more struggle with depression and post-traumatic stress disorder.

Shortly after he returned from Iraq, Bose began speaking publicly about veterans' mental health and donating the speaking fees to veterans' causes like the Wounded Warrior Project, American Legion, Veterans of Foreign Wars and others. This motivated him to start The Battle Continues and launch a website ([www.TheBattleContinues.org](http://www.TheBattleContinues.org)). Earlier this year, he incorporated the nonprofit so he can take donations and disperse them directly to veterans.

"What prompted me was the opportunity to make a bigger difference," he admits. "I'm trying to help veterans as they come back. A lot of the struggles they're battling with are the invisible wounds."

The ER physician educates through presentations to corporations, doctors' groups and the public. Personal photos, video footage and stories from his Iraq deployment help him share lessons learned in combat and their application in civilian life, as well as how to better understand soldiers' mental and emotional state upon discharge. Dr. Bose has given hundreds of speeches in the international arena,

including a keynote with U.S. President Barack Obama.

Many veterans return and have to fight to get health care, and some end up homeless and jobless, Bose explains. "A lot of people don't seek medical care because they think, 'My doctor is not going to understand.' I'm in a unique position to help, having been a battlefield doctor."

He readily admits, "I would not have known what they've been through if I had not served in Iraq. You come back and even your family and friends don't really understand. People can't conceive what soldiers are going through. These struggling veterans might be your next-door neighbor, or the guy in the next cubicle. These are often 20-year-old kids and they have their whole lives ahead of them."

As previous wars have improved the care of physical wounds, Bose hopes the Iraq War aftermath will help to advance the treatment of veterans' mental health. "These problems need to be addressed, and they need to be addressed early," he says. "Society is doing better in recognizing these issues, but there is room for improvement."

For more information and to find out how you can help, please visit [www.TheBattleContinues.org](http://www.TheBattleContinues.org). **M**

## In Memoriam

Ralph H. Baehr, '59 MD, '60 GME, of Greenville, S.C., died May 8, 2014.

C. John Baumgartner, '65 MD, of Bloomington, Minn., died June 13, 2014.

John J. Bergan, MD, '59 GME, of Chicago, died June 10, 2014.

Gene S. Coburn, '51 MD, of Lafayette, Calif., died July 30, 2014.

Robert K. Engholm, '62 CERT, of Ashland, Minn., died July 6, 2014.

Harold "Ted" T. Gross, '39 MD, of Appleton, Wis., died July 8, 2014.

John S. Harding, '64 MD, '65 GME, of South Bend, Ind., died July 23, 2014.

Dan M. Henshaw, '57 MD, of Greenville, N.C., died July 7, 2014.

James "Jim" D. Krolak, '68 MD, of Everett, Wash., died June 5, 2014.

Robert A. Lussky, '52 MD, of Glenview, Ill., died July 21, 2014.



More events at [magazine.nm.org](http://magazine.nm.org)

## Upcoming Events

NOV

NOVEMBER 15, 2014

**Simulation Course for Maintenance of Certification in Anesthesiology (MOCA®)**  
McGaw Pavilion, Simulation Lab, Lower Level  
240 E. Huron St., Chicago.  
For more information, call 312-503-4022.

NOVEMBER 18, 2014

**Manus Kraff, MD Lecture: Thomas A. Rando, MD, PhD**  
"Epigenetic Mechanisms of Stem Cell Aging and Rejuvenation"  
Robert H. Lurie Medical Research Center, Hughes Auditorium  
303 E. Superior St., Chicago.  
For more information, call 312-503-0636.

NOVEMBER 20, 2014

**Rheumatology Clinical Vignettes**  
Northwestern Memorial Hospital, Galter Pavilion, Galter 14th Floor, Board Room  
676 N. St. Clair St., Chicago.  
For more information, call 312-503-8003.

NOVEMBER 24, 2014

**IPR Colloquium: Ann Borders Bryant**  
"Measurement of Maternal Stress in Pregnancy"  
Chambers Hall, Ruan Conference Room, Lower Level  
600 Foster St., Evanston.  
For more information, call 847-491-8712.

DEC

DECEMBER 1, 2014

**Brain Tumor Institute Lecture: Waldemar Debinski, MD, PhD, Director, Brain Tumor Center of Excellence, Professor, Neurosurgery, Wake Forest School of Medicine**  
Robert H. Lurie Medical Research Center, Hughes Auditorium  
303 E. Superior St., Chicago.  
For more information, call 312-695-2523.

DECEMBER 9, 2014

**Microbiology-Immunology Seminars: Thomas Berhnhardt, PhD**  
"How Beta-Lactam Antibiotics Derail Bacterial Cell Wall Biogenesis"  
Robert H. Lurie Medical Research Center, Baldwin Auditorium  
303 E. Superior St., Chicago.  
For more information, call 312-503-9788.

DECEMBER 11, 2014

**T-Cell Lymphoma Patient Education Forum**  
Robert H. Lurie Medical Research Center, Baldwin Auditorium  
303 E. Superior St., Chicago.  
For more information, call 312-695-1300.

JAN

JANUARY 6, 2015

**Medical Grand Rounds: Lynnette K. Nieman, MD, Senior Investigator and Chief, Endocrinology - NIH Clinical Research**  
Northwestern Memorial Hospital, Feinberg Pavilion, 3rd floor, Conference Room A  
251 E. Huron, Chicago.  
For more information, call 312-926-7252.

JANUARY 9, 2015

**Cardiovascular Epidemiology Seminar**  
Stamler Conference Room, Suite 1400  
680 N. Lake Shore Drive, Chicago.  
For more information, call 312-908-1594.

JANUARY 23, 2015

**Center for Community Health Manuscript Writing Retreat**  
Arthur Rubloff Building, 11th Floor  
750 N. Lake Shore Drive, Chicago.  
For more information, call 312-503-2275.

JANUARY 26, 2015

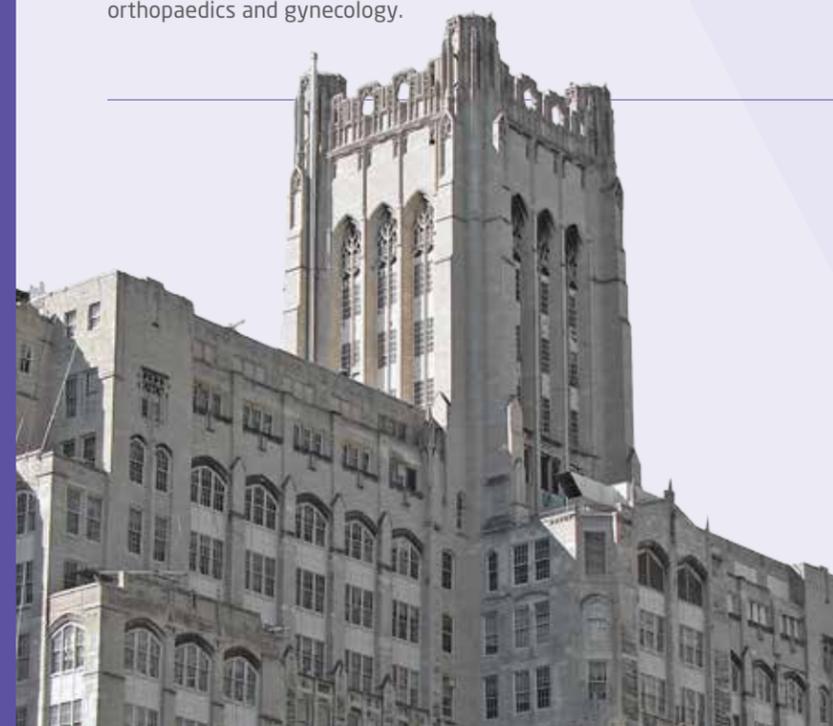
**34th CRS Mini-Symposium on Reproductive Biology**  
Robert H. Lurie Medical Research Center, Baldwin Auditorium and Ryan Family Atrium  
303 E. Superior, Chicago.  
For more information, call 847-467-2280.



## Northwestern Medicine No. 1 in Illinois and Chicago in *U.S. News*' 2014 'Best Hospitals'

Northwestern Memorial Hospital (NMH) and Northwestern Lake Forest Hospital (NLFH) continue to earn national recognition as part of the *U.S. News & World Report* ranking of America's Best Hospitals. Northwestern Memorial is 10th in the nation on the Best Hospitals 2014-15 Honor Roll—the third consecutive year on the list and third year in a row ranking No. 1 in Illinois and Chicago.

With an estimated 5,000 hospitals nationally, the "Best Hospitals" ranking recognizes institutions that excel in treating the most challenging patients. The ranking evaluates hospitals within 16 adult specialties—NMH is ranked in all but two, and in nine categories ranks 15th or higher. NLFH also continues to be among the best hospitals in Illinois and Chicago, ranking 34th and 29th, respectively, and being recognized as high performing in orthopaedics and gynecology.



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## Northwestern's History of Staffing Free Dispensaries and Clinics

The Chicago City Dispensary, a charitable outpatient service, opened in 1857. Two years later, with the launch of the newly established medical school known as the Medical Department of Lind University (precursor to Northwestern University Medical School), a relationship blossomed through which clinic patients were treated by teaching faculty who presented interesting cases to their medical students.

The dispensary was added to the regular curriculum in 1873. Until these clinics closed in 1975, they were a rich training ground for medical students.

Read more about these dispensaries (the name changed a few times) in the online version of *Northwestern Medicine Magazine*. Go to [magazine.nm.org](http://magazine.nm.org) and click on "History Blog" in the top menu.

## Ward Building Achieves Landmark Status

The Commission on Chicago Landmarks has approved Northwestern University's proposal to create a historic district encompassing three of Northwestern's iconic buildings on its Chicago campus, including the Feinberg School of Medicine's centerpiece Montgomery Ward Building.

The Northwestern University Chicago Campus District would include three historic buildings: the Montgomery Ward Building, Wieboldt Hall and Levy Mayer Hall/Gary Law Library. Renowned architect James Gamble Rogers designed all three of the Gothic Revival-style buildings, located on Chicago Avenue between Lake Shore Drive and Fairbanks Court. The buildings were constructed in 1925 and 1926, the first ones on Northwestern's Chicago campus, which brought its professional schools together in one location after being housed in various places in Chicago.

More at [magazine.nm.org](http://magazine.nm.org)

# Northwestern University

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