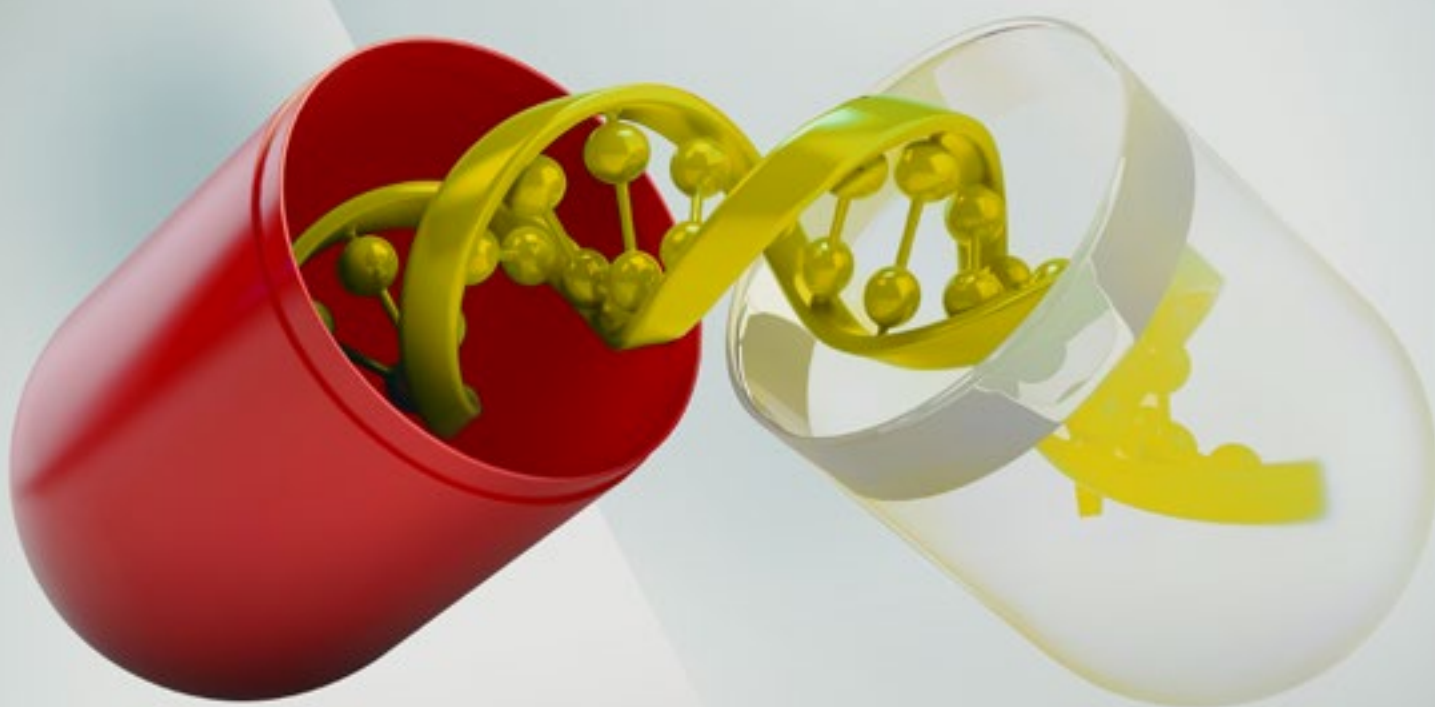


Summer 2014 Volume 01, Number 03

Northwestern Medicine

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

Magazine



P.20

A Place for Drug Discovery

George melds genetics, drug discovery to personalize medicine

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Mighty Mitochondria
Make A Comeback

P.24

Lobbyist is persuasive
about patient care

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THESE MEMBERS OF THE MEDICAL SCHOOL CLASS OF 1969, AND
NORTHWESTERN UNDERGRADUATE BETA THETA PI BROTHERS,
RECONNECTED AT ALUMNI WEEKEND 2014. THEY INCLUDE ANDY HEISKELL,
MIKE RAPP, GARY RUSK, LARRY FRANKS AND LARRY HULEFELD.

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Magazine

SUMMER 2014
VOLUME 01, NUMBER 03

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Northwestern Medicine Leadership



Another national medical school Match Day has passed and the Feinberg Class of 2014 will soon be embarking on new paths for postgraduate training in their chosen medical specialties. For these aspiring medical graduates, all their hard work has afforded them exciting opportunities for the future.

About one-fifth of the Feinberg class will remain at Northwestern for residency, while the rest will soon be departing to other states and institutions. We are proud of the fact that for every year since 2008, more than 50 percent of our medical students have secured residencies at the Top 25 institutions, as ranked by *U.S. News & World Report*. This year was no exception, with 61% of the class (the highest rate ever) going to hospitals that are affiliated with the most elite medical schools. This is even more noteworthy when you consider how competitive the National Resident Matching Program is and how the number of physicians graduating from U.S. medical and osteopathy schools has grown in recent years, while the volume of postgraduate positions to which they can advance has not.

As talented as our medical students are, we are also recruiting equally gifted new physicians for our residencies at the McGaw Medical Center of Northwestern University.

In 2014, 48 percent of our PGY-1 and 2 trainees are coming from Top 25 schools, and for the past five years, 30 percent or more of our incoming residents have been members of AOA, the national medical honor society. In addition, we are attracting a more diverse population of trainees. This year, 14% of our new residents are from ethnic backgrounds underrepresented in medicine.

Why are trainees interested in coming to Northwestern Medicine? They seek an environment that will provide them with rigor and challenges, from diverse patient populations and complicated conditions, to learning from accomplished clinicians and scientists who are thought leaders and innovators in their field. They also want to be in an environment where research findings in the laboratory are informing innovations in care delivery at our affiliate hospitals, pre-eminent institutions such as Northwestern Memorial Hospital, Rehabilitation Institute of Chicago, Ann & Robert H. Lurie Children's Hospital of Chicago and the VA Medical Center. As they hone their clinical skills, our trainees will also have a voice in achieving quality measures that truly impact patient care outcomes, while fine tuning their teamwork and communication skills and their teaching capabilities.

An event such as Match Day also reminds us of the importance of residency training in the overall education of a physician and allows us reflect upon the quality of the McGaw programs. Internally, we have always known that our residencies are strong, but this year we received external validation when our Internal Medicine training program was rated among the Top 10 in the country, based on a new Doximity survey of physicians conducted by *U.S. News and World Report*. With a commitment to community health, as well as hi-fidelity simulation-based experiences and research opportunities, the McGaw Internal Medicine program is highly sought-after, with nearly 4,000 applicants

vying for 120 positions.

This is not to detract from our 23 other residency programs, which also garner great interest from prospective trainees. Dermatology, neurology, radiology, pediatrics, obstetrics and gynecology, physical medicine & rehabilitation, plastic surgery and urology are among some of the most competitive. And one residency that we continue to expand is Family Medicine, which began as a new program in 2010 with eight positions at Norwegian American Hospital, an urban community hospital, and Erie Family Health Center, a Federally Qualified Health Center in Humboldt Park. In July 2015, we will launch another Family Medicine residency program based at suburban Northwestern Lake Forest Hospital (NLFH), which will provide an additional eight positions each year for individuals interested in primary care medicine. NLFH will begin construction this fall on a new three-story, state-of-the-art hospital to open in fall 2017.

Of course, there is more work to be done as we maintain our focus on quality and patient safety, discovery and global health opportunities, and leadership skills for our residents and other clinical trainees. And by continuing to effectively utilize our world-class resources across Northwestern Medicine, we look forward to future advancement and success.

With warm regards,

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

Dean M. Harrison
President and CEO
Northwestern Memorial HealthCare

Campus News

A Transformational Commitment to Scholarships

WRITTEN BY: Marla Paul

EARL AND LOVIE BEARD SCHOLARSHIP FUND WILL BE ESTABLISHED

A transformational gift from Dr. Earl and Mrs. Lovie Beard will endow the Earl and Lovie Beard Scholarship Fund at Northwestern University Feinberg School of Medicine.

Once received, the bequest commitment will directly support medical student scholarships. The Beards, who live in Houston, want to help Feinberg attract exceptional students and compete successfully among the nation's leading schools.

"At Feinberg, we want to be the top choice for the most gifted and promising students, regardless of ability to pay," says Eric Neilson, MD, the vice president for medical affairs and Lewis Landsberg Dean. "Scholarships such as the Beard gift allow Feinberg students to choose a career path that truly interests them without the worry of looming debt."

This year alone the medical school has raised \$19 million in support of medical student scholarships. In recent years, more than half of Northwestern medical students have received some level of scholarship support.

Medical school alumnus **Earl Beard, '48 MD**, was a cardiologist during his career. After working with the U.S. Air Force for several years, he joined the Kelsey-Seybold Clinic in Houston, where he served as chief of cardiology for more than 60 years. Lovie Beard, a nurse, also spent the early part of her career working with the U.S. Air Force, prior to a 32-year career at The University of Texas MD Anderson Cancer Center.

"I was thrilled to attend Northwestern's medical school—it propelled me into a wonderful future and career," says Dr. Beard. "We are happy to provide the opportunity for students in need to attend medical school by including Northwestern in our estate plans. We feel very fortunate to be able to do this."

This gift comes at a pivotal time for Northwestern. On March 14, the University announced its \$3.75 billion fundraising



EARL BEARD, '48 MD, AND HIS WIFE LOVIE HAVE MADE A SUBSTANTIAL BEQUEST IN SUPPORT OF SCHOLARSHIPS FOR MEDICAL STUDENTS AT FEINBERG.

campaign, **We Will. The Campaign for Northwestern**, to address society's critical challenges and prepare global leaders. The University-wide, multi-year effort will support initiatives across Northwestern. The Campaign goal for Northwestern Medicine is \$1.75 billion.

More information about **We Will. The Campaign for Northwestern** is available at wewill.northwestern.edu. Further details on Northwestern Medicine initiatives can be found at www.feinberg.northwestern.edu/giving. **M**

Gala Celebrates Launch of We Will. The Campaign for Northwestern Medicine

WRITTEN BY: Andrea Arntsen-Harris and Sarah Plumridge
PHOTOGRAPHY BY: Nathan Mandell

See We Will Campaign video and slideshow online at magazine.nm.org.

In spaces resplendent with purple, nearly 950 faculty, staff, students, alumni and friends gathered to celebrate the launch of We Will. The Campaign for Northwestern Medicine on May 28 at Navy Pier. The Feinberg School of Medicine and Northwestern Memorial Foundation are working together to raise \$1.75 billion to provide crucial resources that will increase innovation and excellence across the academic medical center. To date, \$750 million has been raised toward that goal.

Twelve educational sessions kicked off the event, with guests hearing short presentations by faculty members and leading experts such as Donald M. Lloyd Jones, MD, ScM, Eileen M. Foell Professor of Heart Research and chair of Preventive Medicine, on heart health, and Andrew Parsa, MD, PhD, Michael J. Marchese Professor of Neurosurgery and chair of Neurological Surgery, on innovations for brain tumor treatment.

Chicagoan Leo B. Kerr attended the diabetes presentation given by Joseph Bass, MD, PhD, Charles F. Kettering Professor of Medicine and chief of the Division of Endocrinology. “Dr. Bass talked about drugs I have never heard of. It is so important that this type of information be disseminated. There is so much new research and so many new

approaches to old problems,” says Kerr. Other session topics included the Future of Personalized Medicine, Getting into Medical School, Breakthroughs in Cancer Research, the Power of Big Data in Medicine, and Clinical Depression.

At the dinner that followed, Clyde Yancy, MD, Magerstadt Professor and chief of Cardiology, welcomed guests and shared a campaign video before turning the program over to Eric G. Neilson, MD, vice president for Medical Affairs and Lewis Landsberg Dean, and Dean M. Harrison, president and CEO of Northwestern Memorial HealthCare.

“Through our shared strategic plan, we are advancing medical science and discovery while training the next generation of physicians,” says Harrison. “Working together provides the potential for us to exceed every patient’s expectation.



OPERA SINGER SANDRA MARANTE SPOKE ABOUT THE CARE SHE RECEIVED AT NORTHWESTERN MEDICINE.

DURING HIS PRESENTATION, DEAN ERIC G. NEILSON COMPARED THE PURSUIT OF SCIENCE TO RUNNING. “THE BEST RUNNERS WANT MORE THAN TO CROSS THE FINISH LINE. THEY WANT TO QUICKEN THE PACE, TO IMPROVE THE RECORD OF ACCOMPLISHMENT. THAT PRETTY MUCH ENCAPSULATES WHAT THE WE WILL. CAMPAIGN IS ALL ABOUT.”



LEFT: FEINBERG DONORS SANFORD AND JUDY KAHN AT THE GALA.

RIGHT, TOP: ORIN BLOCH, MD, ASSISTANT PROFESSOR OF NEUROLOGICAL SURGERY, AND WIFE NIKKI. RIGHT, BOTTOM: SATTER FAMILY FOUNDATION SCHOLARS PATRICK HURLEY, M3 STUDENT, AND ASHISH SARRAJU, '14 MD, BOTH SPOKE AT THE EVENT.

Together, we are realizing our shared vision to make Northwestern Medicine one of the country’s premier destinations for patient care.”

Dr. Neilson adds: “It is often said that biomedical science is not a sprint—it is a relay race from one generation to the next, and it takes a mighty combination of heart, intellect and stamina to achieve real progress. And most importantly, lots of fuel. The best runners want more than to cross the finish line. They want to quicken the pace, to improve the record of accomplishment. That pretty much encapsulates what the We Will. Campaign is all about.”

Dr. Yancy introduced presenters throughout the evening to talk about research breakthroughs, life as a medical student, and what makes Northwestern Medicine a national epicenter for health care, community service and advocacy.

Other speakers included:

- » Benefactors Muneer Satter, a member of Northwestern University Board of Trustees, and his wife, Kristen Hertel,

member of the School of Education and Social Policy board of advisers

- » Patrick James Hurley, a rising third-year medical student and Satter Family Foundation Scholar
- » Ashish Sarraju, '14 MD, recent graduate and Satter Family Foundation Scholar
- » Melina R. Kibbe, MD, Edward G. Elcock Professor of Surgical Research
- » Laura Boitano, '14 MD, recent graduate and mentee of Dr. Kibbe
- » Carol Lavin Bernick, chair of the Northwestern Memorial HealthCare board of directors
- » Bill Osborn, chair of the Board of Trustees of Northwestern University.

The second half of the evening included a comedic video featuring Northwestern alumni Stephen Colbert and Seth Meyers talking about the campaign’s four pillars.

Northwestern University President Morton O. Schapiro followed up the video with

some serious context: “The four pillars that characterize our We Will. Campaign for Northwestern—discovery and creativity, the student experience, campus and community, and global connections—are tied inextricably to the successes of the Feinberg School of Medicine and Northwestern Memorial HealthCare. Together as Northwestern Medicine, they are paving the way at the forefront of this campaign, shaping the future of Northwestern University as a whole.”

Opera singer Sandra Marante gave a performance and shared her experience as a patient of Bernard Bendok, MD, a leading neurosurgeon at Northwestern Memorial Hospital.

“I want to tell you—there truly is hope. I am a believer in the medical visionaries at Northwestern Medicine. It is their medical expertise that saved me, and there are many more discoveries to be made and many more lives to save,” she says.

The evening concluded with dessert and a cascade of fireworks against the night sky.

Media Spotlight

- 1

GOOD DAY SUNSHINE: COULD MORNING LIGHT HELP KEEP US LEAN?

NPR - APRIL 3, 2014

“We found that the earlier this light exposure occurred during the day, the lower individuals’ body mass index,” says study author **Kathryn Reid, PhD**, a research associate professor at the Feinberg School of Medicine. That was true even when the researchers accounted for activity level, caloric intake, sleep timing, age or season. The people with the strongest correlation between light and BMI were exposed to more than 500 lux of light, equivalent to bright indoor lighting. Outdoor light can range from 1,000 lux into the hundreds of thousands.
- 2

YOUNG DADS AT RISK OF DEPRESSIVE SYMPTOMS

U.S. NEWS AND WORLD REPORT - APRIL 14, 2014

Researchers found that for men who become fathers in their 20s and live with their children, depression symptoms tend to rise during the first five years of the child’s life. Experts stressed that the findings don’t mean that young dads are destined to be clinically depressed. “But this does show us a time period where fathers are at increased risk,” says lead researcher **Craig Garfield, MD**, an associate professor of pediatrics at the Feinberg School of Medicine.

- 3

CASUAL MARIJUANA USE LINKED WITH BRAIN ABNORMALITIES

FOX NEWS - APRIL 15, 2014

For the first time, researchers at Northwestern University have analyzed the relationship between casual use of marijuana and brain changes—and found that young adults who used cannabis just once or twice a week showed significant abnormalities in two important brain structures. **Hans Breiter, MD**, professor of psychiatry and behavioral sciences, was co-senior author of the study published in the *Journal of Neuroscience*.
- 4

EARLY BIRTHS FOR PREGNANT WOMEN ON ANTIDEPRESSANTS MORE COMMON

THE WALL STREET JOURNAL - APRIL 28, 2014

New research showing a link between depression medication and early births highlights the need for pregnant women to talk with their doctors before taking these drugs. The risk of preterm birth was 53% higher, according to a paper published in March in *PLOS ONE*. There was a 96% increase when an antidepressant was taken during the final trimester.

“Fetal health is not going to be good unless maternal health is optimized,” says **William Grobman, MD**, professor of obstetrics and gynecology at the Feinberg School of Medicine. Women with a “clear need” shouldn’t let the research prevent them from taking an SSRI, he says.



Funds Will Name Stanley Manne Children’s Research Institute, Affiliated with Lurie Children’s

Ann & Robert H. Lurie Children’s Hospital of Chicago recently announced a transformative gift by retired local business executive Stanley Manne. In recognition, the hospital’s research center will be renamed the Stanley Manne Children’s Research Institute, affiliated with Lurie Children’s. The Manne donation will provide funding to sustain and enhance medical research at one of the nation’s premier pediatric medical centers.

“Scientific research needs predictable and sustained support to yield results that can transform care for children and adults,” says Mary J. C. Hendrix, PhD, president and scientific director of the research center. “With federal and state funding cuts prevalent,

Mr. Manne’s gift comes at a time when this type of investment is greatly needed to further progress. We are extremely grateful for his generosity and foresight.”

Stanley Manne, a successful corporate leader and investor for many years, most recently served as president of Brawny Plastics. He formed the Manne Family Foundation in 1997, which provides charitable assistance. Mr. Manne lived in Chicago for many years after graduating from Columbia University in his native New York in 1956, earning an MBA from the University of Chicago in 1963 while working full time and raising his family. He has three adult children and currently resides in Florida.

“It’s been my lifetime ambition to leave a legacy that benefits future generations and improves lives by giving to individuals who strive to rise above their challenges,” says Manne. “I chose Lurie Children’s for this gift because I have personally seen children grow healthy through successful treatment at the hospital. These children are now adults who are making a difference in society. I am grateful to be able to give back in this way.”

- 5

KIDS’ OWN DRIVERS, NOT STRANGERS, ARE BIGGEST DUI DEATH RISK

TIME - MAY 5, 2014

The biggest risk to children when it comes to drunk drivers is the adults driving them, according to a new study led by **Kyran Quinlan, MD, MPH**, associate professor of pediatrics-community based primary care, and researchers at the Centers for Disease Control and Prevention.

The study, published in the journal *Pediatrics*, found that child traffic deaths caused by drunk driving sharply declined in recent years. But of the 2,344 children under 15 killed between 2000 and 2010, about two-thirds were riding with a drunk driver. Most of the adults survived, suggesting children were not wearing seat belts.
- 6

ADULTS WITH AUTISM GET HELP FROM ‘HUMAN SIMULATOR’ TO NAVIGATE JOB INTERVIEWS

NBC NEWS - MAY 8, 2014

A computer program that simulates a job interview can actually improve the way autistic adults present themselves, according to a new study published in the *Journal of Autism and Developmental Disorders*. “Individuals with autism spectrum disorder have difficulties with social communication...,” says **Matthew J. Smith, PhD**, an assistant research professor at the Feinberg School of Medicine. “That makes interviewing a little more difficult for them.”



Lurie Children’s, which opened in June 2012 after more than 130 years as Children’s Memorial Hospital, cares for nearly 153,000 children annually. The majority of patients come from Chicago and the collar counties, but many others travel from throughout Illinois, the U.S. and approximately 37 foreign countries to receive care.

As an affiliate of Northwestern University Feinberg School of Medicine, the hospital includes research as a central component of its mission. Its research center is one of only a handful in the country dedicated to pediatrics. With locations in Lincoln Park, Northwestern University and Lurie Children’s, the center’s long-range plan is to consolidate all pediatric research on Northwestern’s downtown campus in the new Biomedical Research Building, planned to open in 2018/19.

- 7

WALKING AT HOME CAN HELP BOOST POOR CIRCULATION IN LEGS

MSN HEALTHY LIVING - MAY 21, 2014

A home-based walking program benefits people with poor circulation in their legs. The study included patients with peripheral artery disease (PAD), a narrowing of the arteries that can cause leg pain and hinder walking ability. Previous research found that supervised exercise programs can improve walking and reduce symptoms.

“The problem with supervised exercise is that it takes many visits to a cardiac rehabilitation center or other exercise facility, and it is not covered by Medicare,” says study author **Mary McGrae McDermott, MD**, professor of general internal medicine and preventive medicine at the Feinberg School.
- 8

VITAMIN E MAY HARM, OR HELP, YOUR LUNGS

THE NEW YORK TIMES - MAY 29, 2014


A form of vitamin E found in vegetable oils like corn and canola may worsen lung function, while another form typically found in olive oil may protect it. The findings may help explain why studies of the health effects of the vitamin have had conflicting results.

Joan Cook-Mills, PhD, an associate professor in allergy and immunology at Feinberg, has found that in addition to being an antioxidant, vitamin E appears to play a role in inflammation. **M**



Graduation Season 2014

PHOTOGRAPHY BY: Randy Belice, Nathan Mandell, Jim Ziv

See the MD Graduation Day 2014 video and slideshow online  at magazine.nm.org.

Physician Assistant Program Graduates its Second Cohort

WRITTEN BY: Sarah Plumridge

"Admission into and completion of any physician assistant program is grueling, and I would bet every single one of us hit low points and questioned our entire path—and even our abilities—along the way," says Brittany Johnson, '14 MMS. "But today is important because ... it makes a lot of things feel so right."

Johnson, Class of 2014 president, and 28 peers in the Physician Assistant (PA) Program received their Master of Medical Science degree at commencement on Saturday, May 17.

Diane B. Wayne, MD, vice dean for Education, welcomed family and friends to the event.

"This program is one of the most distinguished and most competitive in the country," she says. "Your accomplishment is therefore one of which to be justifiably and immensely proud."

Commencement speaker Tony Miller, MEd, PAC, chief policy officer and head of research at the Physician Assistant Education Association, spoke about the significance of passion and commitment in their personal and professional lives.

"I challenge you to use your passion to do something that will change the world," Miller says. "I challenge you to go beyond the assembly line approach to medicine, to reflect on your skills and interests in order to determine what you can do to better the lives of your patients, family, community, society and the way in which we live."

Michael MacLean, MS, PAC, director of the PA program, led the graduates in reciting the Physician Assistant Oath before each was called on stage to be hooded by a faculty member.

After the conferral of degrees, MacLean presented the Dean's Academic Achievement Award to Deanne Barbara Shippee Martin, '14 MMS, for her accomplishments in academics and community service. He then introduced class speaker Keith Bond, '14 MMS.

"We may have started as complete strangers, but together in the first month of school we all decided that we would be here today walking across this stage," Bond says. "As we reflect on the past two years and where we are in our lives, I wish us all the best as we continue to write our own symphonies and biographies."



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GRADUATING MEDICAL STUDENTS IN 2014

27

INDUCTED INTO ALPHA OMEGA ALPHA

14

RECEIVED LATIN HONORS



TOP: PHYSICIAN ASSISTANT GRADUATES RECITE THE PHYSICIAN ASSISTANT OATH. **BOTTOM:** TWENTY-NINE MEMBERS OF THE PHYSICIAN ASSISTANT CLASS OF 2014 CELEBRATED COMMENCEMENT SATURDAY, MAY 17.

MD Class of 2014 Celebrates Commencement

WRITTEN BY: Amber Bemis, Sarah Plumridge

The 163 members of the Class of 2014, as well as faculty, friends and relatives, met at Chicago's Navy Pier Grand Ballroom Thursday, May 22, to celebrate the culmination of medical school.

Eric G. Neilson, MD, vice president for medical affairs and Lewis Landsberg Dean, greeted guests to the 155th commencement, and introduced Morton Schapiro, PhD, president of Northwestern University.

"I had the great honor of speaking to you a few years ago when you began your career at Feinberg," Schapiro says. "It was then, as it is now, very inspiring to look in your eyes and see the pride you take in your oath and to see your families filled with so much pride—congratulations on this great achievement."

Dr. Neilson thanked Schapiro for his remarks and reminded students that they are embarking on a journey of lifelong learning.

"This life, as you will quickly come to realize, is not a sprint, but a relay race," he says. "In this race you carry the weighty baton of current medical knowledge, a baton you will someday pass to a new generation not yet born, a generation who will depend greatly on how you have improved the profession and medical science for the good of human health."

Dr. Neilson then introduced the commencement speaker, Robert J. Alpern, MD, dean of Yale School of Medicine and Ensign Professor of Medicine.

"As you leave these academic halls today, I urge you to strive to be a physician with compassion, humility, knowledge and prudence," says Alpern, an alumnus of Northwestern University. "Do not be intimidated by the evolving healthcare system. As the next generation of physicians, you will define health care and you must define it well. The future is yours and I wish you well on your journey."

John X. Thomas, Jr., PhD, senior associate dean for Medical Education, presented the members of the Class of 2014. As the new physicians crossed the stage, they received their doctoral hood and diploma from their college mentor or a physician family member.

Matthew Rowland, '14 MD, nominated by his peers to give the senior class message, described life as a medical student and gave his fellow classmates some advice.

"I leave you with this last thought—we will certainly have challenging and frustrating days in our future," says Dr. Rowland. "I therefore ask you to always

remember what an honor it is to be a physician, what a privilege it is to take care of people at their weakest moments, how far a kind word and smile can go, the power of hope, and our duty to educate and advise. Today we get the honor of having the greatest career in the world."

As the commencement came to an end, the graduates recited the Declaration of Geneva, the same oath they took as first-year medical students. They pledged "to practice their profession with conscience and dignity," and to maintain by all means in their power "the honor and the noble traditions of the medical profession."

Twenty-seven graduates were inducted into the medical honor society, Alpha Omega Alpha. In addition, 14 graduates received Latin honors. Eighteen students graduated with joint degrees, including six graduates with a Master's Degree in Public Health, two with a Master's Degree in Medical Humanities and Bioethics, and 10 completed a doctorate in the Medical Scientist Training Program.

ERIC G. NEILSON, MD, VICE PRESIDENT FOR MEDICAL AFFAIRS AND LEWIS LANDSBERG DEAN (LEFT), WITH COMMENCEMENT SPEAKER ROBERT J. ALPERN, MD, DEAN OF YALE SCHOOL OF MEDICINE

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NUPTHMS
GRADUATES

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SCHOLARSHIPS
& RECOGNITIONS

6

CLINICAL EDUCATION
AWARDS

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COMMUNITY
ENGAGEMENT AWARDS

Physical Therapy Program Marks 86th Convocation

WRITTEN BY: Michele Weber

Friends, family and faculty gathered at Navy Pier Saturday, April 19, to celebrate the accomplishments of 77 students graduating from the Northwestern University Physical Therapy and Human Movement Sciences (NUPTHMS) program.

Julius Dewald, PT, PhD, professor and chair of PTHMS, welcomed those assembled for the 86th convocation. He then turned the program over to Robert Rosa, MD, vice dean for Regulatory Affairs at Feinberg, who talked about what it means to be a member of a learned profession.

Shortly thereafter, James Gordon, EdD, PT, FAPTA, professor and associate dean for the Division of Biokinesiology and Physical Therapy at the Herman Ostrow School of Dentistry, University of Southern

California, delivered the commencement address, "Back to the Future: From RPT to DPT." In it he spoke about four decades of education, research, and clinical practice progress in PT. He also outlined what the profession needs to do to be great in the future.

Afterward, Babette Sanders, PT, DPT, MS, FAPTA, assistant chair for Curriculum Affairs, and Marjorie Johnson Hilliard, PT, MS, EdD, assistant chair for Professional Education, conferred upon each graduate a Doctor of Physical Therapy (DPT) diploma.

Fourteen students received additional recognition and scholarships, including six who were given the Clinical Education Award for their outstanding clinical abilities and two who received the Community Engagement Award for their superior commitment to community health in Chicago.

The formal program ended with a class message from [Justin Moore, '14 DPT](#), which focused on the theme, "Looking Forward."

Northwestern Memorial HealthCare and Cadence Health Reach Definitive Agreement to Combine Health Systems

The governing boards for Cadence Health and Northwestern Memorial HealthCare (NMHC) approved the definitive agreement to combine the two health systems. Subject to regulatory approvals, the combination would form an integrated academic healthcare delivery system spanning more than 60 sites across Chicago and its suburbs, including four hospitals, and more than 4,000 physicians and 17,600 employees.

"Cadence Health is a strong health system with similar Patients First values to Northwestern Medicine®, which is why it didn't take long for us to identify the multitude of complementary attributes between our respective organizations," says Dean M. Harrison, NMHC's President and CEO. "Together, we are better positioned to provide care that is safer, more effective and better coordinated that utilizes the latest breakthrough treatments and is accessible closer to where our patients live and work."

Cadence Health was formed in 2011 following a merger that joined Central DuPage Hospital of Winfield, Ill., and Delnor Hospital of Geneva, Ill., Northwestern Memorial HealthCare is parent to Northwestern Memorial Hospital in Chicago, Northwestern Medicine Lake Forest Hospital of Lake Forest, Ill., and Northwestern Medical Group. The combined health system will operate under the Northwestern Medicine brand name. Harrison will serve as CEO of the combined health system, with Mike Vivoda, the current president and CEO of Cadence Health, serving as its regional president and NMHC senior vice president.

"The opportunity to partner with Northwestern will enhance the offerings of high quality compassionate care in Chicago's western suburbs," says Vivoda. "We believe this combination will create an integrated approach to patient care, augment a culture of service excellence and enhance and grow our clinical services to continue to position this system as the healthcare provider of choice."



More Cadence Health Information

Cadence Health is a locally based, locally governed health system focused on delivering excellent health care to more than 1.1 million patients in Chicago's western suburbs. For seven of the past eight years (2006-2010, 2012, 2013), Central DuPage Hospital (CDH) has been selected by Truven Health Analytics as one of the "100 Top Hospitals in the U.S." Delnor Hospital recently received accreditation by the American College of Surgeon's National Accreditation Program of Breast Centers for the Delnor Center for Breast Health. CDH and Delnor currently maintain affiliations with Ann & Robert H. Lurie Children's Hospital of Chicago for pediatric specialty care and Cleveland Clinic for cardiac surgery, adult medical oncology and cardiology services. Both hospitals have achieved Magnet® recognition for excellence in nursing services from the American Nurses Credentialing Center.

Cadence Health employs more than 7,600 professionals providing care across an interdependent network of healthcare organizations. Cadence Health also includes Cadence Physician Group, a local network of more than 275 primary care physicians and specialists on the medical staff at CDH or Delnor Hospital. [M](#)

Kris Lathan

LEFT: JULIUS DEWALD, PT, PHD, NUPTHMS DEPARTMENT CHAIR. RIGHT: PTHMS COMMENCEMENT SPEAKER JAMES GORDON, EAD, PT, FAPTA

CENTRAL DUPAGE HOSPITAL

Faculty Awards and Honors

Patricia Vassallo, MD, Lawrence E. and Nancy S. Glick Family Distinguished Physician and assistant professor of Medicine-Cardiology, was elected to the Association of Specialty Professors Council (ASP). A non-invasive cardiologist specializing in echocardiography and valvular heart disease, she is involved with research initiatives focused on developing heart disease prevention programs that cardiologists and others can use to improve health outcomes. Additionally, Dr. Vassallo is one of four site directors for the junior medicine sub-specialty rotation.



Robert O. Bonow, MD, '12 MS, Max and Lilly Goldberg Distinguished Professor of Cardiology and director of the Center for Cardiovascular Innovation, is the 2014 recipient of the Lewis Katz Visiting Professorship in Cardiovascular Research from Columbia University Medical Center.



ROBERT BONOW, MD, (RIGHT) PICTURED WITH LEWIS KATZ

The Katz Prizes were created through the generosity of entrepreneur and philanthropist Lewis Katz to recognize excellence in cardiovascular research and education. The Visiting Professorship recognizes outstanding lifetime achievement in cardiovascular research and/or education with national or international impact.

Dr. Bonow has authored or co-authored more than 475 published papers and 105 book chapters. He serves on the editorial

boards of 10 medical journals and is one of the four editors of "Braunwald's Heart Disease: A Textbook of Cardiovascular Medicine." He is past-president of the American Heart Association and a Master of the American College of Cardiology and the American College of Physicians. He has served on a variety of medical association boards.

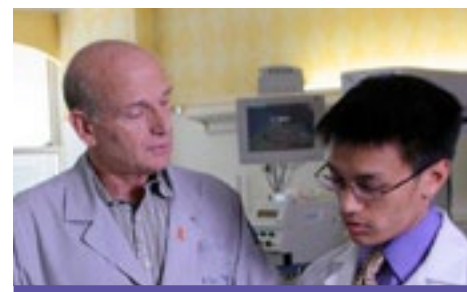
Among his honors are the NIH Director's Award, the U.S. Public Health Service Commendation Medal and Outstanding Service Medal, and elected membership in the American Society for Clinical Investigation and the Association of American Physicians. He is the recipient of the American Heart Association's Distinguished Leadership and Distinguished Achievement awards, Gold Heart Award, and James B. Herrick Award; the Distinguished Fellowship and Distinguished Service awards of the American College of Cardiology; the Denolin Award of the European Society of Cardiology; and the John Phillips Memorial Award of the American College of Physicians.

D. Mark Courtney, MD, '10 MS, associate professor of Emergency Medicine, and Ram Yogev, MD, professor of Pediatrics-Infectious Diseases, received



D. MARK COURTNEY, MD

2014 Mentor of the Year awards at the tenth annual Lewis Landsberg Research Day in April. Bestowed annually by the Medical Faculty Council, the award acknowledges the commitment of Feinberg faculty members in fostering the professional growth of junior colleagues.



RAM YOGEV, MD, (LEFT)

The awardees were invited to share their tips and stories at a mentoring workshop held prior to Research Day.

Also part of the Research Day program was the awarding of the Tripartite Legacy Faculty Prize in Translational Science and Education to Lee M. Jampol, MD, Louis Feinberg, MD, Professor of Ophthalmology. This award is bestowed upon a faculty member who embodies excellence in research that emphasizes translational approaches, teaching, mentoring and leadership.

Edward Gong, MD,

assistant professor of Urology at Northwestern University Feinberg School of Medicine, an attending physician at Ann & Robert H. Lurie Children's Hospital of Chicago, and a member of the Developmental Biology Program at the Stanley Manne Children's Research Institute, has received a 2013 Hartwell Individual Biomedical Research Award.



Dr. Gong's research focuses on a congenital condition called posterior urethral valve that occurs in the urinary system of newborn boys. Current treatments include managing the disease through self-catheterization or replacing the organ with artificial bladders, which has the potential to cause other health problems. Dr. Gong aims to use a patient's own stem cells to regenerate bladder tissue and restore normal function.

Hartwell Fellowships offer support for two years to scientists in the early stages of their research careers by enabling them to pursue further specialized training as part of professional career development.

Scott Budinger, MD, associate professor in Medicine-Pulmonary and Cell and Molecular Biology, was recently elected into the American Society



for Clinical Investigation (ASCI). He joins the more than 3,000 physician-scientists honored with membership based on their outstanding record of scholarly achievement in biomedical research.

Dr. Budinger's laboratory studies how exposure to air pollution activates signaling pathways in the lungs that might contribute to the development of acute lung injury and fibrosis. His research has been continuously funded by the National Institutes of Health since 2001. While studying the development of lung injury, he was the first to link cell structure dysfunction with epithelial repair and fibrosis. His group also discovered that a drug used widely for the treatment of cancer is effective in preventing lung fibrosis in mice.

Dr. Budinger has served for the past three years as a deputy editor for the *American Journal of Respiratory and Critical Care Medicine* and is on the editorial board of the *American Journal of Respiratory Cell and Molecular Biology*. He is also a member of the Alpha Omega Alpha medical honor society and has received the Department of Medicine Outstanding Teaching Award.

R. Kannan Mutharasan, '03 MD, '10 GME, assistant professor in Medicine-Cardiology, was chosen by all four medical school

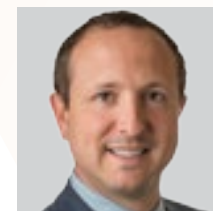


HONORS DAY SPEAKER R. KANNAN MUTHARASAN, MD, (CENTER) PICTURED WITH DOUGLAS VAUGHAN, MD, CHAIR OF MEDICINE, AND LEWIS LANDSBERG DEAN ERIC NEILSON

classes to give the keynote address at the 2nd annual Honors Day, the day before Commencement. As part of the occasion, David Salzman, '05 MD, '09 GME, assistant professor in Emergency Medicine, and Gaurava Agarwal, MD, '11 GME, instructor in Psychiatry and Behavioral Sciences, both received George H. Joost Outstanding Teaching Awards, and Elizabeth Ryan, EdD, assistant professor in Family and Community Medicine, received the Michael M. Ravitch Teaching Award.

Myles Wolf, MD,

MMSc, director of the Center for Translational Metabolism and Health and professor of Medicine-Nephrology, is being honored by the American Society of Nephrology (ASN) with its Young Investigator Award.



The major focus of Dr. Wolf's lab is studying metabolism of the minerals calcium and phosphate in individuals with chronic kidney disease (CKD). He has published extensively on the topic—including a recent paper in the *Journal of the American Society of Nephrology*—on how elevated levels of the hormone FGF23 that prompt the kidney to excrete phosphate are associated with cardiovascular disease and mortality in CKD.

The ASN Young Investigator Award is presented annually to an individual with an outstanding record of achievement and creativity in basic or patient-oriented research related to the functions and diseases of the kidney.

Throughout the past decade, Dr. Wolf has been invited multiple times to present his research at the ASN as well as numerous other international scientific meetings. He also regularly teaches at the society's annual Board Review Course, now held in Chicago. Among his professional memberships, Dr. Wolf was elected to the American Society for Clinical Investigation in 2010.

Tanya Simuni, MD, medical director of Northwestern University's Parkinson's Disease and Movement Disorders Center, was awarded



a grant from the National Institutes of Health (NIH) to conduct a \$16 million Phase III study of the safety and efficacy of the drug isradipine as a potential neuroprotective agent in Parkinson's disease.

This is the only Phase III Parkinson's neuroprotective study currently funded by the National Institute of Neurological Disorders and Stroke at NIH. The research is being conducted by Northwestern University Feinberg School of Medicine in partnership with the University of Rochester Medical Center. The study will be carried out at 56 Parkinson Study Group centers in North America over five years.

"If this drug proves to be safe and effective, it will change the way we treat Parkinson's disease," says Simuni, the study's principal investigator. "The major advantage is isradipine is already widely available and inexpensive and will allow for rapid translation of our research into clinical practice."

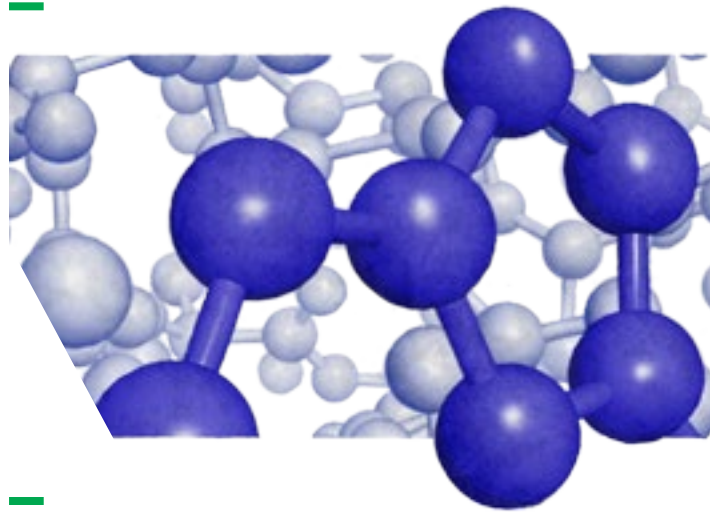
Brian Mustanski, PhD,

associate professor in Medical Social Sciences and Psychiatry and Behavioral Sciences, received an \$8.7 million grant from the National Institute on Drug Abuse for the study, "Multilevel Influences on HIV and Substance use in a YMSM Cohort."



Steven Wolinsky, MD, chief of the Division of Infectious Diseases in the Department of Medicine, received an \$8 million grant from the National Institute of Allergy and Infectious Disease for the "Multicenter AIDS Cohort Study."

Research Briefs



Drug Halts Protein Known to Affect Aging


Northwestern Medicine scientists have identified a protein's key role in cell and physiological aging and have developed—in collaboration with Tohoku University in Japan—an experimental drug that inhibits the protein's effect, prolonging lifespan in a mouse model.

The rapidly aging mice, which were fed the experimental drug—TM5441—daily, lived more than four times longer, and their lungs and vascular system were protected from accelerated aging, reports a study published April 28 in *Proceedings of the National Academy of Sciences*.

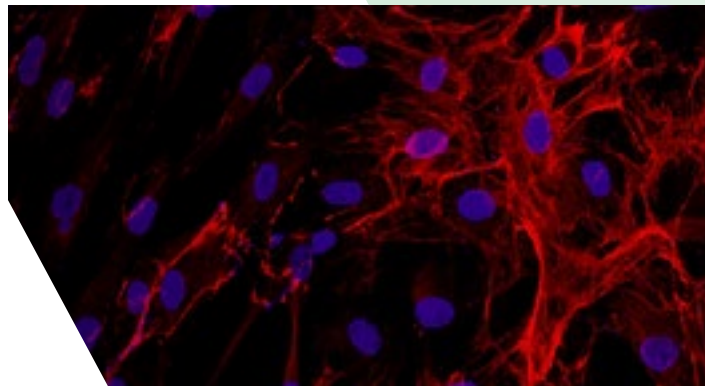
The experimental drug could potentially be used to treat human diseases that cause accelerated aging, such as chronic kidney disease, diabetes and HIV infection, as well as the effects of cigarette smoking.

"It makes sense that this might be one component of a cocktail of drugs or supplements that a person might take in the future to extend their healthy life," says Douglas Vaughan, MD, senior author of the study and chair of Medicine at the Feinberg School of Medicine and physician-in-chief at Northwestern Memorial Hospital. The discovery is the result of 25 years of research by Vaughan's lab.

When cells or tissues age, they lose the ability to regenerate and secrete certain proteins. One of those proteins, PAI-1 (plasminogen activator inhibitor), has been the focus of Dr. Vaughan's research, originally as it relates to cardiovascular disease.

Vaughan determined that the rapidly aging mice produce increased levels of PAI-1 in their blood and tissue. When the mice were fed TM5441, there was a decrease in PAI-1 activity, which increased their lifespan and kept their organs healthy and functioning. 

This work was supported by the NIH's National Heart, Lung and Blood Institute grants 2R01HL051387 and 1P01HL108795, and in part by the National Institute of Diabetes and Digestive and Kidney Diseases grant T32 KD007169.




New Clues on Tissue Scarring in Scleroderma

A discovery by Northwestern Medicine scientists, published April 16 in *Science Translational Medicine*, could lead to potential new treatments to prevent tissue scarring in people with scleroderma. Progressive tightening of the skin and lungs can lead to serious organ damage and, in some cases, death.

"Our results show how a damage-associated protein called fibronectin (FnEDA), markedly increased in the skin biopsies of patients with scleroderma, might trigger immune responses that convert normal tissue repair into chronic fibrosis," says Swati Bhattacharyya, PhD, research assistant professor in Medicine-Rheumatology at Feinberg.

Scleroderma is a disease with high mortality and no effective treatment. The factors for fibrosis are largely unknown. Working with John Varga, MD, John and Nancy Hughes Distinguished Professor of Rheumatology and director of the Northwestern Scleroderma Program, Bhattacharyya and colleagues previously showed that innate immunity is persistently activated in scleroderma patients. On a cellular level, FnEDA triggered an immune response in skin cells, leading to fibrosis. Moreover, a small molecule which specifically blocks this immune response was able to prevent skin fibrosis in mice.

"This pioneering study is the first to identify an innate immune pathway for scleroderma fibrosis," Dr. Varga says. "We expect that the results will shift our thinking about the disease, and hopefully open new avenues for its treatment." 

The multi-disciplinary team included scientists at Northwestern University and the University of Michigan. The study was supported by National Institute of Arthritis and Musculoskeletal and Skin Diseases grants AR42309 and AR057216.

Vitamin D Deficiency Linked to Aggressive Prostate Cancer

African American and European American men at high risk for prostate cancer have greater odds of being diagnosed with an aggressive form of the disease if they have a vitamin D deficiency, according to a new study from Northwestern Medicine and the University of Illinois at Chicago (UIC) published May 1 in *Clinical Cancer Research*.

"Vitamin D deficiency could be a biomarker of advanced prostate tumor progression in large segments of the general population," says Adam B. Murphy, MD, lead author and assistant professor of Urology at Feinberg, a physician at Jesse Brown VA Medical Center and a member of the Robert


H. Lurie Comprehensive Cancer Center of Northwestern University.

"Previous studies focused on vitamin D levels in men either with or without prostate cancer," says Rick Kittles, senior study author and an associate professor in the Department of Medicine at UIC.

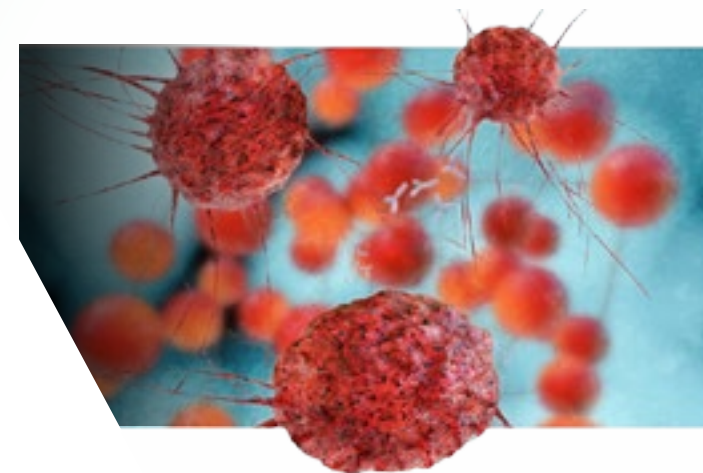
The authors were surprised to find that vitamin D deficiency seemed to be a predictor of aggressive forms of prostate cancer in African American and European American men, even after adjusting for potential confounders, including diet, smoking habits, obesity, family history and calcium intake.

"Vitamin D deficiency is more common



and severe in people with darker skin and among African Americans," Murphy says. "More research is needed, but it would be wise for men to be screened and treated for vitamin D deficiency." 

The National Institutes of Health and the U.S. Department of Defense funded this study.



New Path to Stop the Spread of Breast Cancer Cells Discovered

The primary cause of death from breast cancer is the spread of tumor cells from the breast to other organs. Northwestern Medicine scientists have discovered a new pathway that can stop the cells from spreading, according to a study published June 1 in the journal *Genes & Development*.


Scientists identified a new protein, hnRNPM, which helps launch a cascade of events that enables breast cancer cells to break away from the original tumor, penetrate the bloodstream, invade another part of the body and form a new tumor nodule. When that protein is

removed, the ability of the cells to metastasize to the lung is dramatically decreased.

"Our research suggests that hnRNPM could be an effective target to stop cancer cells from spreading," says Chonghui Cheng, MD, PhD, an assistant professor of Medicine in Hematology/Oncology at the Feinberg School and a member of the Robert H. Lurie Comprehensive Cancer Center of Northwestern University. "The more we understand of cancer metastasis and the pathways that control it, the better we will be able to stop breast cancer from spreading."

Breast cancer is the second leading cause of cancer death in women worldwide. Each year, approximately 40,000 women die from breast cancer in the U.S.

Collaborating with Kalliopi Siziopikou, MD, PhD, director of the Breast Pathology Program at Feinberg and a member of the Lurie Cancer Center, the scientists looked at levels of hnRNPM in tumor samples from breast cancer patients. They found aggressive breast tumors, including those that show metastatic traits, expressed higher levels of hnRNPM.

"This confirmed hnRNPM's role in the metastasis of human breast cancer," Cheng says. "Now we're investigating how the protein works in order to be able to develop a drug that could prevent tumor metastasis." 

The research was supported by grant R01GM110146 from the National Institute of General Medical Sciences and R01CA182467 from the National Cancer Institute, both of the National Institutes of Health.

MIGHTY MITOCHONDRIA MAKE A COMEBACK

A CELL MEMBRANE

B SIGNALING PATHWAYS

C MITOCHONDRION

D NAVDEEP CHANDEL, PhD



Many important medical discoveries in the first half of the 20th century involved metabolism, but by the 1960s scientists had shifted their attention to understanding how genetic mutations cause disease. They thought that illnesses like cancer caused metabolic changes, but didn't think that metabolism caused disease. Then in 1996, a group of scientists reported that mitochondria play a signaling role in conditions leading to cell death and, practically overnight, the organelle best known as the cellular power plant, regained the spotlight.

Navdeep Chandel, PhD, David W. Cugell Distinguished Professor in Medicine-Pulmonary and Cell and Molecular Biology at the Feinberg School of Medicine, was a doctoral student in cell physiology at the University of Chicago when he heard the news.

"My soccer buddy Craig Thompson (now president of Memorial Sloan-Kettering Cancer Center) told me about it, and I was skeptical at first," he says. After reading the paper, Chandel says he became excited about the likelihood that mitochondria played a signaling role not only in cell death, but also in a range of physiological conditions.

Signaling is part of the complex system of communication that

governs cellular activity. To coordinate activities including growth, repair, immune response and normal maintenance, cells release substances that transmit information both inside and between cells. Errors in information processing can lead to disease.

For decades, scientists have been analyzing signaling pathways in the hope of developing effective therapies. Today, Chandel says, "accumulating evidence suggests that metabolism regulates signaling pathways and gene expression, and metabolic changes underlie conditions including diabetes, neurodegeneration, cancer, drug-induced liver damage, and cardiovascular and inflammatory diseases." He believes that diet and environmental changes are at the root, and metabolism senses these changes.

An undergraduate work-study gig in an organ transplant lab at the University of Chicago, where scientists were trying to improve organ preservation, first piqued his interest in metabolism. In 1996, Chandel was finishing his thesis on the oxygen dependence of the mitochondrial protein cytochrome c oxidase with Paul Schumacker, PhD, now Patrick M. Magoon Distinguished Professor of Pediatrics at Feinberg. An outlier among his fellow

graduate students, Chandel thought that “there might be interesting biochemistry under limiting oxygen conditions, such as with tumors, ischemic diseases and during in-utero development.”

admits. “Yet, after decades of research, there is scant clinical evidence showing that antioxidants are effective against age-related diseases.” Conversely, there is a growing body of research, Chandel says,

Jacob “Iasha” Sznajder, MD, chief of the Division of Pulmonary Medicine, attributes the lab’s success to Chandel’s deep scientific knowledge and his passionate personality.

“Nav exudes enthusiasm. He not only is brilliant, but also is great fun. He’s kind, a great mentor to students, and a wonderful and generous collaborator,” says Sznajder, who recently received Northwestern’s Ver Steeg award for mentoring graduate students.

Of Sznajder, Chandel says, “He is the perfect chief—enthusiastic, positive, engaged—and gives me complete scientific freedom.” Chandel also praises his mentors Schumacker and Thompson, with whom he continues to collaborate.

CANCER RESEARCH RETURNS TO ITS ROOTS

The insights that Chandel and his counterparts have gained into mitochondrial signaling have led to a sea change in cancer research over the past 10 years. The emerging field of cancer metabolism returns cancer research to its roots. In the 1920s, Nobel scientist Otto Warburg reported that cancer cells proliferate by converting glucose to energy without oxygen, whereas, normal cells generate energy (in the form of adenosine triphosphate) more efficiently through cellular respiration. He erroneously considered cancer a mitochondrial dysfunction, but by the mid-1900s most scientists had concluded that cancer’s voracious appetite for glucose was merely a consequence of the disease.

Recent research suggests that mutations alter metabolic pathways and drive tumor growth, so experts seek to develop

suggesting that “a little oxidative stress may be a good thing, and that excessive use of antioxidant supplements or drugs could cause harm.”

A LAB IS BORN

Some of this research is conducted by Chandel and an enthusiastic cadre of Northwestern Medicine collaborators across disciplines, including immunology, rheumatology, allergy and dermatology. He joined the Division of Pulmonary Medicine in 2000 to establish a laboratory dedicated to understanding how mitochondria function

If metabolism is leading the way, then that’s where you should intervene.

as signaling organelles and how metabolism dictates biological action. Among the most significant findings are that ROS regulate metabolic adaptation, stem cell differentiation, and also activate infection-fighting T-cells.

drugs that target cancer cell-specific metabolic pathways. “Most people still think metabolic changes are late events in disease,” Chandel explains, “but the new hypothesis is that these changes precede genetic and phenotype changes.

If metabolism is leading the way, then that’s where you should intervene.” His recent research demonstrates that mitochondrial metabolism is essential for tumor formation.



Chandel cautions that this research faces formidable challenges. Scientists must be careful to preserve metabolic pathways that immune cells, for instance, rely on to proliferate rapidly; and since cancer cells, like all cells, are adept at finding alternative pathways, targeting just one is unlikely to be effective.

DIABETES DRUG TARGETS CANCER?

Chandel’s lab is elucidating how the drug metformin, used to reduce high blood-sugar levels caused by diabetes, could also be used to treat cancer. Epidemiology studies show that people on metformin experience lower incidences of multiple types of cancer and slower tumor growth. Clinical trials are underway to determine this drug’s potential as an anti-cancer agent. Since insulin causes cancer cells to divide, the slower rate of progression may simply be the result of metformin reducing insulin. Northwestern Medicine researchers, with colleagues at the University of Tampere, Finland, however, have been studying if metformin directly targets cancer cells.

This year they discovered that the drug inhibits cancer cell mitochondria from

producing energy in the form of adenosine triphosphate during cellular respiration. Cancer cells, however, have a propensity for converting glucose to energy without oxygen. The researchers further determined that metformin inhibited cancer cell division when glucose was available, but killed the cells when they were deprived of glucose. They also reported that metformin reduces the activation of pathways that help cells survive low-oxygen conditions, a characteristic trait of many tumors.

UNDERSTANDING LUNG DISEASE AND INJURY

In the lab’s home base of Pulmonary Medicine, Chandel and his collaborators are gaining insight into the biological mechanisms that underlie lung injury and fibrosis. He and long-term collaborator Scott Budinger, MD, associate professor in Medicine-Pulmonary and Cell and Molecular Biology, found that mitochondrial-generated oxidants in the lung are responsible not only for injury and fibrosis, but also for the positive consequence of activating signaling pathways that help cells adapt to environmental stress.

“This work explains why repeated efforts to give nonselective antioxidants to patients with lung injury and fibrosis have failed in clinical trials and also offers new avenues for more targeted therapies,” Dr. Budinger says.

The researchers theorize that they may be able to design more effective therapies for patients with acute respiratory distress syndrome (ARDS), or lung fibrosis, by targeting damaging oxidants and preserving low levels of signaling oxidants. “These studies also suggest that it may be beneficial to induce oxidant generation in the cell to promote cellular adaptation before a planned environmental stress like a surgical procedure,” Budinger adds.

BACK TO BASIC SCIENCE

Chandel, a leader in the emerging field of metabolic signaling, spends more time than ever presenting at conferences around the world. After more than a decade in the hinterlands of scientific research, he is enjoying his turn in the spotlight and hopes to serve as an ambassador for basic science research. The U.S. Congress, general public and even physicians, he says, are indifferent and sometimes antagonistic toward the discipline.

As a physician-scientist, Dr. Budinger provides a unique perspective. “An unfortunate and unintended consequence of the NIH push for translational research has been the failure to recognize the contribution of basic science,” he says. “People don’t realize that drug discoveries are rooted in basic science. They think drugs spring from drug companies.” He notes that none of the drugs prescribed to patients when he was in training 20 years ago are used today. “The target or mechanism for every drug we prescribe today was discovered through basic research 20 years ago.” **M**

NAV CHANDEL’S COLLABORATORS IN THE DIVISION OF PULMONARY MEDICINE INCLUDE DRS. SCOTT BUDINGER, ASSOCIATE PROFESSOR; IASHA SZNAJDER, PROFESSOR AND CHIEF OF PULMONOLOGY; KAREN RIDGE, ASSOCIATE PROFESSOR; PETER SPORN, PROFESSOR; AND GOKHAN MUTLU, PROFESSOR AND CHIEF OF PULMONOLOGY AT UNIVERSITY OF CHICAGO.

RESEARCH FINDING CHALLENGES ORTHODOXY

Just two years after earning his doctorate, Chandel and Schumacker published a groundbreaking finding about mitochondrial signaling; however, few of their fellow scientists believed it was correct. “The initial response was ‘Huh?’ followed by ‘Nah!’” he says. Today, the finding that mitochondrial reactive oxidant species (ROS) are signaling molecules that help cells sense and adapt to low-oxygen conditions is widely accepted.

The idea that ROS facilitate healthy cell function countered leading theories about their role in aging and disease. The free radical theory of aging proposed that damaged mitochondria produce excessive amounts of ROS that cause tissue damage and aging. The idea that antioxidants could promote health, prevent disease and slow aging, first advanced in the 1950s, had given rise over subsequent decades to a flood of antioxidant research.

“Everybody became an expert on antioxidants. To this day, my mom tells me to take vitamin C when I get sick,” Chandel

A PLACE FOR DRUG DISCOVERY

AL GEORGE, MD, CHAIR OF
THE DEPARTMENT OF
PHARMACOLOGY AND DIRECTOR
OF THE NEW CENTER FOR
PHARMACOGENOMICS

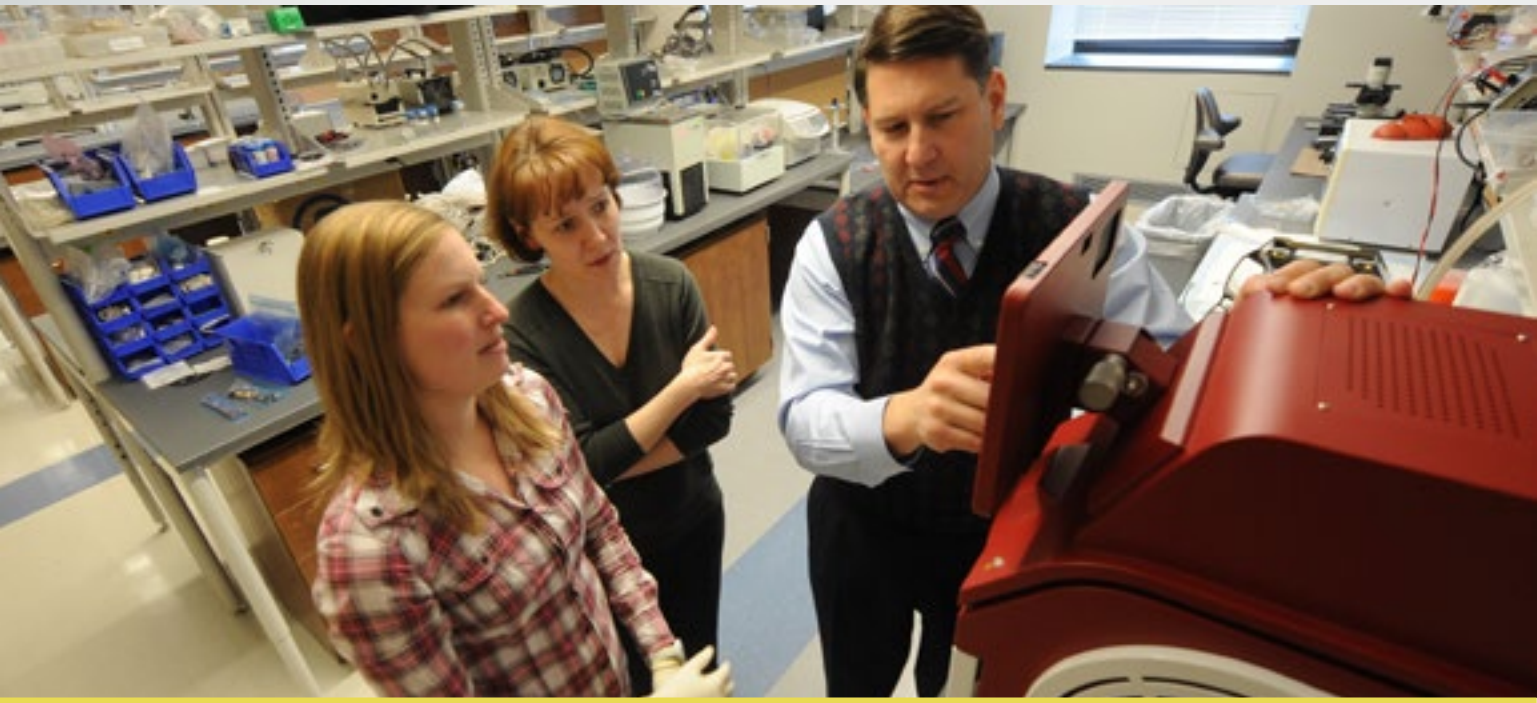


When it comes to easing, if not curing, what ails us, the study of how drugs work in living organisms establishes pharmacology as one of the most clinically relevant of scientific disciplines. So it's fitting that Northwestern University Feinberg School of Medicine's recently reimagined Department of Pharmacology has an inaugural leader who specifically trained as a physician to pursue a research career—and a stellar one at that.

"Pharmacology is a basic science discipline that is highly translatable to clinical medicine," says Alfred L. George Jr., MD, a renowned expert in the field of ion channel proteins who joined Northwestern in March as the Magerstadt professor and chair of pharmacology and director of the new Center for

Pharmacogenomics. He was most recently at Vanderbilt University where he held a named professorship in medicine and was professor of pharmacology, chief of genetic medicine and director of the Institute for Integrative Genomics. "While I no longer consider myself a clinician, I still have a clinical perspective and that can only serve as an asset in this field."

The medical school's Department of Pharmacology became a standalone academic unit in early 2014. Established with members from the former Department of Molecular Pharmacology and Biological Chemistry, this new entity will expand the discipline at Northwestern Medicine through research, training and drug discovery, and help to further strengthen collaborative efforts on



AL GEORGE, MD, WORKS WITH LAB MANAGER TATIANA ABRAMOVA (CENTER) AND LYNDSEY ANDERSON, POST-DOCTORAL FELLOW, IN HIS LABORATORY.

the Chicago and Evanston campuses. Dr. George envisions a department that will meld classic pharmacology topics with emerging areas of pharmacogenomics, drug discovery and translational pharmacology. The resulting research programs will have direct relevance to human diseases, including cardiovascular and neurological disorders—areas in which George has already contributed a great deal. His own body of work focuses on conditions such as cardiac arrhythmia and epilepsy, both caused by genetically disturbed ion channel function.

EARLY INFLUENCE

George’s father was a physician in private practice and his homemaker mother was involved in politics in Batavia, New York. Interested in science, George graduated with honors from the College of Wooster in Ohio in 1978 with a bachelor’s degree in chemistry. While he had no plans to become a practicing physician, his familiarity with the field of medicine—thanks to his dad—prompted him to enter medical school at the University of Rochester as a means to a different end.

He explains, “I went into medicine with the intention of conducting research.”

With that mindset, he completed his residency in internal medicine at Vanderbilt followed by a fellowship in nephrology at the University of Pennsylvania. Then a visiting postdoctoral fellowship in Switzerland took George, wife Jackie and toddler son William (now 29) to Europe for a year. (The couple has another child, Lindsay, 25.) Once stateside again, he returned to Penn as a research fellow. There he began studying the genetics of ion channels—specifically, voltage-gated sodium channels responsible for generating electrical impulses or “action potential” that drive neural activity and evoke contractions of muscles including the heart.

In the late ‘80s, little was known about genetic defects in sodium channels and connections to disease except for a “small shred of evidence published in a very specialized journal,” according to Dr. George. A German research group had reported a possible relationship between an abnormal muscle sodium channel function and rare familial neuromuscular disorders causing periodic paralysis, or myotonia. This was

evidence enough for George that his chosen research focus had endless possibilities.

“If I had been advising a graduate student on whether to pursue study based on this limited finding, I probably would have said, ‘Do something else!’” he remarks. So why did he do it as a young investigator? George admits, “It was incredibly interesting.”

THE HEART OF THE MATTER

Cloning a human heart sodium channel to study genetic disorders seemed like a good idea. Scientific evidence was beginning to show that genomic defects in ion channels might be linked to cardiac and neurological conditions.

“It was human and was in the heart,” he recalls about his early work at Penn. “We thought it had to be good for something, although we didn’t know what. That something turned out to be gold.”

George and others used the clone to better understand inherited heart rhythm disorders, such as congenital long QT syndrome (LQTS). Causing rapid, erratic heartbeats, this condition can lead to fainting and sudden death, often in

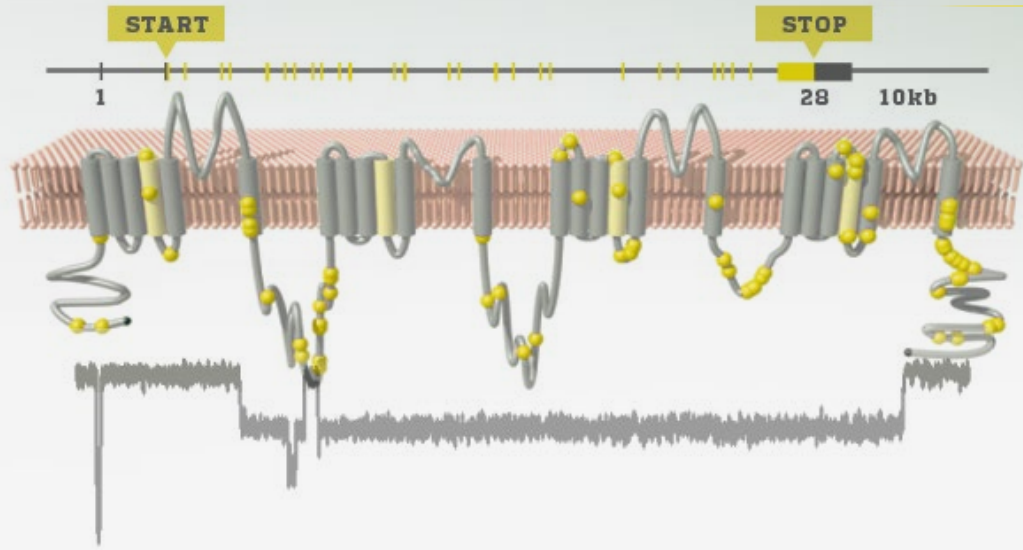


ILLUSTRATION DEPICTING THE ORGANIZATION OF THE HUMAN CARDIAC SODIUM CHANNEL GENE (**SCN5A**). LOCATED ON CHROMOSOME 3 (TOP) AND A REPRESENTATION OF THE SODIUM CHANNEL PROTEIN AS IT SITS WITHIN THE CELL MEMBRANE (MIDDLE). THE LOCATIONS OF KNOWN MUTATIONS ASSOCIATED WITH CONGENITAL LONG-QT SYNDROME ARE DENOTED BY YELLOW SPHERES. THE LOWER IMAGE DEPICTS AN ELECTROPHYSIOLOGICAL RECORDING FROM SINGLE MUTANT SODIUM CHANNELS.

children and young adults. In 1995, a Utah geneticist discovered a family with a history of LQTS with a mutation in the very same sodium channel that George had genetically mapped. A Vanderbilt faculty member at the time, Dr. George quickly set out to investigate the functional consequences of the mutation as a first step to understanding the cause of irregularly beating hearts. In a matter of six weeks, he and his colleagues submitted their results to the journal *Nature*, which published the findings two months later. The investigators were first to link an ion channel anomaly with an inherited arrhythmia. “It was gratifying to know we were on the right track from the very beginning,” shares George.

This groundbreaking finding revealed a subtle but life-threatening mutation in the heart sodium channel that disrupts the heart’s electrical stability. The observation has gone on to become an important one for pharmaceutical companies: some are now targeting the activity of this sodium channel in the development of drugs to control heart rhythm. In recent years, the NIH-supported George lab has investigated extreme forms of LQTS that occur early in life—even in utero.

“We’ve helped to make the connection between congenital LQTS and sudden infant death syndrome,” he explains. “Some 10 to 20 percent of SIDS cases are estimated to be related to inherited cardiac arrhythmias. Genetic testing might help determine which families are at risk for SIDS.”

FAMILIAR DISCOVERY

The majority of sodium channel genes are expressed in the central nervous system. Given his success with the heart, George soon turned his attention to a different organ. He says, “We often thought there might be genetic mutations in brain sodium channels and pondered the potential consequences.”

In 1998, his laboratory collaborated with investigators in Australia to publish the first identified mutation in a human brain sodium channel gene associated with epilepsy. Later in 2001, his lab uncovered a surprising discovery while studying mutations in SCN1A located on human chromosome 2—the most mutated gene among genetic forms of epilepsy. His lab found that the type of functional defect in heart sodium channels responsible for causing irregular heartbeats in congenital LQTS was the same culprit observed for certain brain sodium channel mutations causing a form of genetic epilepsy.

“There are only so many ways to break a sodium channel,” explains Dr. George. “This subtle defect is one of them.”

Currently, his lab is testing novel pharmacologic agents in a mouse seizure model to develop effective anticonvulsive drugs to control epilepsy. Dr. George will continue this exciting work at Feinberg with the assistance of mouse geneticist and epileptologist Jennifer Kearney, PhD, who left Vanderbilt to join Northwestern’s faculty in July.

ADVANCING PERSONALIZED MEDICINE

Genetics dictate how patients will react to any given medication. A rapidly emerging area of study, pharmacogenomics strives to understand how genetic determinants affect drug responses (both good and bad), which, in turn, allows for patient care that is truly personalized. In the area of oncology, for example, clinicians have already been tailoring drug therapy to specific tumor types determined by genetic testing.

“Of all the genetic discoveries that can be interpreted to the care of patients who have common disorders, pharmacogenomics—alongside cancer—is among the best examples,” says George. He helped to establish Vanderbilt’s expertise in genetic medicine by founding its first division in 1999 and the Institute for Integrative Genomics in 2004. At Feinberg, he looks forward to building a multidisciplinary center “without walls” focused on pharmacogenomics. An early emphasis of the center will be to study ways to implement testing and interpretation in the clinical setting. Over time, he plans to explore the development of basic research programs in drug metabolism as well as help to recruit more pharmacogenomics faculty to Northwestern.

“One day, doctors will be able to test preemptively for genetic susceptibilities and know which medications will work best for their patients, whether they should back off on the dosage or change drugs entirely,” says Dr. George. “There are great opportunities in the future to advance personalized medicine with pharmacogenomics.” **M**

PERSUASIVE ABOUT PATIENT CARE

Healthcare lobbyist takes patient and
community needs to heart

WRITTEN BY: Martha O'Connell
PHOTOGRAPHY BY: Laura Brown

Talk to Robert Christie and he shatters any pre-conceived notions people have about lobbyists. He is effective because he maintains a reputation as a straight shooter in a political arena fraught with high-pressure tactics, skewed information and unfulfilled promises.

"I have to be straightforward. I cannot lie. I can't even exaggerate. If I do, I can't go back there tomorrow," he says. As a healthcare lobbyist, he has seen many tomorrows—three decades.

With his forte in the legislative arena, Christie has guided Northwestern Memorial Hospital's (NMH) government relations for 13 years, and recently was named senior vice president of external affairs and communications to also oversee community relations/ services and the health system's communications and public relations.

Despite the scope of his work on state and national levels, Christie links his efforts back to enhancing patient care. An advocate for local youth and underserved communities, he has been integral in expanding initiatives and volunteer opportunities to benefit the people served by Northwestern Medicine.

KEEN ON COMMUNITY SERVICE

Under his leadership, several community outreach milestones have been met this year. He credits a "superb" staff, including Posh Charles, vice president of external affairs, for successfully managing the diverse community services responsibilities. Charles, along with Daniel Derman, MD, has developed a strong

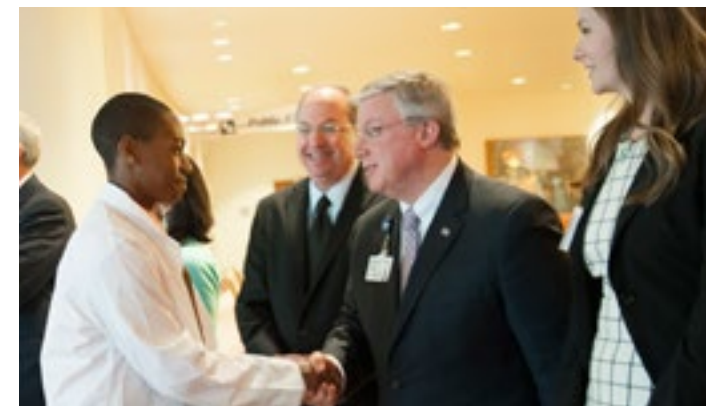
network of community services over the past decade, helping to foster relationships in Chicago's underserved communities.

NMH decides which community health programs are needed and where to operate them by collaborating with other area institutions to develop a comprehensive Community Health Needs Assessment.

Targeted efforts include the Northwestern Medicine Scholars Program, which graduated its first class in May. Christie serves on the board of directors. Top students from George Westinghouse



SIX GEORGE WESTINGHOUSE COLLEGE PREP STUDENTS GRADUATED FROM THE THREE-YEAR NORTHWESTERN MEDICINE SCHOLARS PROGRAM IN MAY. THEY ARE PICTURED WITH PROGRAM DIRECTOR ERICA MARSH, MD, ASSISTANT PROFESSOR OF OBSTETRICS/GYNECOLOGY (FAR LEFT).



ROB CHRISTIE CONGRATULATES ONE OF THE NORTHWESTERN MEDICINE SCHOLAR GRADUATES IN MAY.

College Prep, a high school on the city's West Side, are encouraged to pursue medical careers by spending three years at NMH exploring direct patient care and clinical research.

The experience also enables students to start college with financial assistance from various institutions. In addition, an NMH physician mentor will counsel students about earning medical school admission.

"It was very special to watch this first class of kids complete the program and see them mature educationally and socially," he says.



ROBERT CHRISTIE

1 NEW FQHC IN WAUKEGAN

Northwestern Medicine's core mission of delivering health care to economically disadvantaged people enables the hospital to continue strong relationships with 21 Chicago-area Federally Qualified Health Centers (FQHCs). This includes supporting Erie Family Health Center's first FQHC outside of Cook County, which opened in July in Waukegan. Northwestern Medicine Lake Forest Hospital partnered with the new facility to provide primary care and coordinate specialty care, as well as serve as a teaching site for the Feinberg Family Medicine Residency program.

This fall, Northwestern Medicine will participate in an innovative collaborative to help South Side residents cope with and reverse the impact of violence by providing post-trauma counseling through faith leaders and other supportive services specific to community needs. This initiative, which will draw on proven, data-driven models, will combine the efforts of Bright Star Church, United Way



MORE THAN 500 EMPLOYEES AND STAFF AT FEINBERG, NORTHWESTERN MEMORIAL HOSPITAL AND THE UNIVERSITY VOLUNTEERED TO HELP BEAUTIFY CHICAGO PUBLIC SCHOOLS DURING THE CHICAGO CARES SERVE-A-THON JUNE 7.

of Metropolitan Chicago, the University of Chicago Medicine and Northwestern Medicine.

In 2009, the Diabetes Initiative was introduced in Humboldt Park, a Chicago neighborhood with one of the highest rates of diabetes in the nation. To date, NMH has registered more than 3,000 residents, helping them through patient education and clinical care outreach so they can better manage their Type 2 diabetes.

And finally, with a focus on community service, NMH and the Feinberg School of Medicine—joined for the first time by Northwestern University—continue to provide the most volunteers in the city's annual Chicago Cares Serve-A-Thon. More than 500 individuals spent June 7 beautifying the city's public schools. Christie, who has done everything from painting to building benches and bookshelves, says he is proud of the "sea of purple participants" every year.

POWERBROKER FOR PATIENTS

Christie's success lies in his ability to rise above the cacophony of opposing views and think clearly to solve problems. He is in the thick of U.S. healthcare reform, offering input to Congress on the effects that the law will have on patients. After universal care got off to a rocky start, he focused on broadening future coverage and persuading more people to sign up.

On the state level, one of his team's most crucial victories was renewing Illinois tax-exempt status in 2012 for the new Prentice Women's Hospital. Christie helped lead an industry effort that passed legislation which clearly defined what qualifies a hospital to be exempt from property taxes. Instead of paying tens of millions of dollars in annual property taxes, that money can be directed to patient care.

His team proved that the hospital's benefit to the community was more valuable than its tax liability. They cited charity care, unreimbursed Medicaid care, and unreimbursed research and education programs. In fiscal year 2012, Northwestern Memorial HealthCare provided community benefits exceeding \$315 million, with charity care representing \$58 million.



THESE NORTHWESTERN MEDICINE VOLUNTEERS PAINTED A MURAL DURING THE SERVE-A-THON.

MORE THAN
3,000
RESIDENTS
REGISTERED

MORE THAN
500
NORTHWESTERN
VOLUNTEERS

MORE THAN
\$315M
IN COMMUNITY
BENEFITS

"The data stunned a lot of people," Christie says. "Getting lawmakers to understand that we serve all patients, and we do so at a cost that goes well beyond our property tax exemption, was the key."

A large part of his role entails being a reliable source of information for legislators. As an expert in Medicaid, hospital reimbursement and physician payment reform, he is highly sought after.

"I get calls at night and on the weekends from legislators, and it's actually a privilege. It means they trust me and they trust our institution," Christie explains. "That is why I am not ashamed to be called a 'lobbyist.' To me, it is being that broker of honest information to help them make an informed decision."

GRATIFIED BY PATIENT EXPERIENCES

He is not connected to direct patient care, but satisfaction still comes full circle for Christie, often back in the state Capitol when conversations with politicians turn personal. One still resonates.

The lawmaker had been in heartrending pain for three weeks, sitting bedside watch with a friend who was dying. Still, she recognized the extraordinary compassion and clinical care her friend received at NMH.

Christie recalls, "She told me, 'I will have positive thoughts about the last days of my good friend's life because of the experience she had at your hospital.' When I hear things like that, it makes my work worthwhile, even if I am not someone who sees patients," he says. **NM**

Alumni President's Message



Dear Fellow Alumni:

The Feinberg School of Medicine's Alumni Weekend 2014, celebrated April 11 and 12,

marked another fun-filled weekend in the great city of Chicago. A wide variety of events was available to all alums, including a new family-focused offering for our members with younger children. Many attendees enjoyed campus tours that highlighted the Ann and Robert H. Lurie

M.L. Farrell, senior associate director, Alumni Relations, was introduced as Ginny Darakjian's successor. In recognition of Ginny's untiring service for more than 20 years, the medical school established the Ginny Darakjian Scholarship Fund, upon her retirement in August 2013. In addition, during Alumni Weekend Ginny received the Northwestern Alumni Service Award and became an honorary member of the Northwestern University Medical Alumni Association. Finally, my fellow classmates of 1963 were proud to observe William M. Bennett, MD, receive the Distinguished

» **Mentoring** Bonnie Typlin and her committee are seeking better data on alumni contacts, and exploring ways to broaden mentoring and networking opportunities for both students and alumni.

» The three subcommittees of Strategic Initiatives—Global Health, Physicians in Business and Industry, and Supporting our Students—are exploring innovative ideas to advance their agendas.

Our Board continues to make progress, but we need to make our community even more welcoming and robust. Please get involved by participating in our Medical Alumni Association activities and keeping in touch with us by sharing your news and updating your contact information. You are welcomed and encouraged to volunteer to serve on any of the Board's committees and to express your interest in becoming a member of the Board.

Also, always keep in mind that the Alumni Office, with M.L. Farrell at the helm, is at your service. Never hesitate to be in touch.

And finally, please remember to mark your calendars for next year's Alumni Weekend, April 17-18!

All the best,

David Winchester, '63 MD
Alumni Board President

Great engagement starts with students having a good experience.

Children's Hospital of Chicago, the school's Simulation Technology and Immersive Learning (STIL) lab, and a few of the basic science laboratories. A comprehensive Northwestern Medicine Update was presented by the medical school's own Dean Eric Neilson, MD. In addition, Rex Chisholm, PhD, vice dean for Scientific Affairs and Graduate Education, moderated a multidisciplinary panel that highlighted new paths in medicine being charted at Northwestern.

The final event of Alumni Weekend was the Dean's Reception and Reunion Ball, with a lovely reception, dinner and dance. As part of the program, Dean Neilson introduced each member of the 50-year class who attended. This year it was the Class of 1964, which was also recognized for their efforts to establish—and fully endow—the Class of 1964 Scholarship in a record time of about a month!

Alumni Award for Outstanding Professional Achievement from Dean Neilson.

In addition, your Medical Alumni Association Board had another productive meeting during Alumni Weekend, maintaining the momentum from the work of our Engagement/Communication, Mentoring, Fundraising and Strategic Initiatives committees.

» **Engagement/Communications** Paloma Toledo and Melani Shaum declared thematically that "Great engagement starts with students having a good experience." Plans were laid for new activities that will bring students and alumni together socially and professionally throughout the academic year.

» **Fundraising** Jimmy Hill and Gary Rusk are striving to increase the alumni community's awareness of giving and how it can support student scholarships.

Classmates Reconnect at Alumni Weekend 2014

WRITTEN BY: Sarah Plumridge
PHOTOGRAPHY BY: Bruce Powell

See more photos online at magazine.nm.org.



“The best day of my life was not graduating from medical school, it was the first day of medical school, which I skipped to see the World Series in 1959,” jokes William M. Bennett, ‘63 MD. “The next day I started medical school.”

Dr. Bennett, an expert in kidney transplantation, received this year’s Distinguished Alumni Award and kicked off Alumni Weekend 2014 with a keynote address at the Welcome Luncheon. He was given the award in honor of his outstanding professional achievements as a clinician, researcher and educator.

“The one thing I learned at Northwestern that I will always remember is how to be a doctor, and I mean that in the broadest sense,” Dr. Bennett says. “I’ve always valued learning and clinical teaching, and Northwestern excels in those areas. I am really honored to have this award.”

“It is nice to hear about medical education and how the student experience has changed.”

More than 400 alumni and guests attended the weekend’s events, which ran April 11 and 12. Following the luncheon, alumni gathered to hear Eric G. Neilson, MD, vice president for medical affairs and Lewis Landsberg Dean, give an update on activities at the medical school. He discussed the recruitment of a number of high-quality faculty over the past year, as well as his vision for student scholarships and the future of the new biomedical research building. “The research tower will be a critical feature of our success. We’ve run out of research space downtown and we can’t grow and be competitive like our peers until we get this building in place,” Dr. Neilson explains. “To help populate the structure, we will create new institutes for interdisciplinary science. These are very important activities that bring departments together across many

disciplines to create new ways of discovery and translation.”

The afternoon continued with Career Conversations with Students and Alumni, an event that gave alumni the opportunity to share insights about the medical profession with students and other alums.

“It is nice to hear about medical education and how the student experience has changed. I remember having to take the tram to the children’s hospital in Lincoln Park and now the children’s hospital [Ann & Robert H. Lurie Children’s Hospital of Chicago] is right here,” says Elise Opel, ‘99 MD.

The day ended with the Nathan Smith Davis Recognition Program reception, recognizing those individuals who have generously donated their time and money in support of the school, and 11 class reunion dinners at various locations.

Throughout the weekend, alumni had the opportunity to tour the city and the Chicago campus, Lurie Children’s Hospital, Feinberg’s Simulation Technology and Immersive Learning center and other cutting-edge research labs.



CLASS OF 1959 GRADUATES AND SPOUSES UNITED AT A DINNER AT LE PETIT PARIS. PICTURED ARE (FRONT ROW) DRS. JACK AND MARY ANN FRABLE AND BILL FRY; (MIDDLE) MYRON BORNSTEIN AND LEE ROGERS, WITH WIFE DONNA; (BACK ROW) MERYL HABER AND PETER VAN VLIET, WITH WIFE AUDREY.



TOP: RICHARD DEDO AND BILL MACMASTER, BOTH GRADUATES OF THE CLASS OF 1964, RECONNECT DURING ALUMNI WEEKEND 2014. BOTTOM: THE CLASS OF 1964 GIVING COMMITTEE INCLUDED PATRICK SULLIVAN, HOWARD SCHUELE, CHARLES MAHAN, HOWARD KIDD, TIM SULLIVAN, AND MICHAEL WASSERMAN WITH THEIR SCHOLARSHIP RECIPIENT TODD WOJTANOWICZ (CENTER). NOT PICTURED ARE ALUMNI BARRY BELMAN AND RICHARD DEDO.

"It is a totally different medical school from 45 years ago," says Lou Fazen, '69 MD. "Northwestern always taught us to put patients first, but this is a better patients first. Back then we had great clinicians teaching us and a nice set of hospitals, but we did a lot of learning on our own. Now students are taught by renowned faculty members in their fields and have access to simulation education and a research enterprise."

Walking through the Method Atrium in the Ward Building brought back warm feelings for Michael Halpern, '69 MD, '75 GME.

"In the library we read books and used it to find information for class. Now students ... can look everything up on their computers," he says. "I went to the anatomy lab and it was amazing. They have the entire class of 160 students spread out in a room working on cadavers. When I was in medical school, we had about 16 students to a room and rotated through different modules."

Saturday's events included continuing medical education seminars featuring some of the medical school's top scientists, and Family Fest, an event where alumni and their children engaged in activities such as cookie decorating, crafts and games.

At the annual Commitment to Scholarships Luncheon, the Class of 1964 celebrated its 50-year reunion and was honored for creating the Class of 1964 Endowed Scholarship to help fund the education of future medical students.

The weekend concluded with the Dean's Reception and Ball at the Ritz-Carlton Hotel.



DEAN ERIC NEILSON PRESENTS WILLIAM M. BENNETT, '63 MD, WITH THE DISTINGUISHED ALUMNI AWARD.



MARY SCHRICKER, '84 MD, WITH HER 9-YEAR-OLD SON MATTHEW, ENJOYED FUN ACTIVITIES DURING THE FIRST-EVER FAMILY FEST.



NATHAN SMITH DAVIS SCHOLARSHIP RECIPIENTS AND CLASS OF 2014 GRADUATES (FROM CENTER TO RIGHT) KASSANDRA HOLZEM, SHAYAN NOURI AND ALYSSA GREIMAN, WITH SUE CHUNG AND HER HUSBAND SCOTT COOPER, BOTH MD CLASS OF 1982 ALUMNI, AND THEIR SON, TIMOTHY COOPER, '14 MD.



SOME OF THE STUDENT SCHOLARSHIP RECIPIENTS SHOW THEIR GRATITUDE AT THE COMMITMENT TO SCHOLARSHIPS LUNCHEON.

YOUNG ALUMNUS COMBINES INTERESTS IN PUBLIC POLICY AND INTERNATIONAL HEALTH

WRITTEN BY: Sarah Plumridge



Last year, **Julian D'Achille, '08 MD, MPH**, spent four days in Port-au-Prince, Haiti, with surgeons from across the country performing more than 36 operations, including hernia repairs, cyst removals and breast biopsies.

"The patients were incredibly grateful for what seemed like very minor procedures to us," he says. "The doctors and nurses eagerly absorbed the knowledge and information that we provided. In turn, they taught us a lot about practicing medicine in an environment where resources are scarce."

Dr. D'Achille attributes this passion for international health to his global health experiences at Northwestern University Feinberg School of Medicine. Following his first year of medical school, he completed a six-week clinical elective at Stellenbosch University in Cape Town, South Africa, through the Center for Global Health.

"Looking back on the experience, I realized how challenging the medical environment is in developing countries," he notes. "Here in the United States, we have virtually everything we need at our fingertips. ... The hospital in Tygerberg, South Africa, didn't have a CT scan, and X-rays were the diagnostic tool of choice."

Initially, D'Achille wanted to pursue a career in pediatrics, but he quickly became enamored with surgery.

"My experience in South Africa was my first exposure to the operating room. The first minute I stepped into a surgery, it felt like home," he explains.

D'Achille continued exploring international health as a member of the student group Northwestern University's Alliance for

International Development (NUAID). He went to Nicaragua as a fourth-year student to set up a primary care clinic and mobile pharmacy. While there, he and his peers performed checkups and exams. They also reinforced clean water practices and sanitation and shared techniques for lifting heavy objects with field workers.

CHANGING CARE THROUGH POLICY

During his general surgery residency at Tufts Medical Center, Dr. D'Achille gained an appreciation for how public health works. As a result, he enrolled in the Master in Public Health in Health Policy and Management program at Boston University School of Public Health.

"Physicians often complain about the healthcare system and how 'policy' impacts their day-to-day activities," he explains. "It's not entirely their fault. Medical education focuses primarily on clinical medicine but rarely touches on the healthcare system as a whole.

I knew that I wanted to be better prepared for the future and that I wanted to be actively involved in making a change."

As Dr. D'Achille finishes his residency, he plans to complete a fellowship in plastic surgery and stay involved in health policy.

"I'm excited to move to the next stage of my career," he says. "Ten years from now, I'll hopefully be a practicing plastic surgeon in an academic medical setting, teaching and interacting with fellows, residents and medical students. I hope to use my health policy experience to forge relationships with local and state regulatory agencies and to conduct clinical outcomes-based research or quality improvement research, focused primarily on patient safety and adverse event reduction."



JOHN LUMPKIN

WRITTEN BY:
Bob Kronemyer

Forged a Path for Emergency Medicine in Illinois

John Lumpkin, '73 BMS, '74 MD, spent Christmas Eve of his freshman year at Northwestern University Medical School working in the emergency department of nearby Oak Park Hospital, alongside a physician family friend.

"I got hooked," says Lumpkin, now 62. "I found that I was interested in everything while I was in medical school. Emergency medicine lets you do a little bit of just about every medical specialty—from orthopaedics to OB to internal medicine."

That December 1971 experience had a lasting impression on Lumpkin as he advanced through rotations. "I still wanted to do emergency medicine," he recalls. "I felt it was a way to allow me to have a broad perspective."

Northwestern also influenced Lumpkin's career choice. "The school was an early pioneer in the field," he notes. In fact, in his senior year, Lumpkin was able to do a rotation in emergency medicine, "even though at that time it was

residency-trained physicians in the entire nation.

"I feel honored to have been involved in the early days of this critical specialty," Dr. Lumpkin says. "Now, emergency medicine is one of the most popular residencies. But back then, my colleagues in medical school couldn't understand why I was going into a field that was not recognized. We were sort of viewed as outliers and cowboys."

Practicing in a city as diverse as Chicago allowed him the opportunity to treat people in acute life-threatening situations. One of his most memorable patients, while a junior resident, was a 16-year-old male who sustained a single gunshot wound to the chest.

"He took his last breath as he was moved from the ambulance cart into our resuscitation suite," Lumpkin explains. "One resident intubated the patient, another started an IV line, and I had the job of opening his chest—a crash thoracotomy. I took the scalpel to the pericardium, opened it, and a huge blood clot came out. The patient's heart started beating and he actually began waking up. If there had been a delay of a minute or two or even three, the patient would have died."

Lumpkin, who was born in Chicago and grew up in the western suburb of Broadview, attended Massachusetts Institute of Technology (MIT) his freshman year of college, with the intent of becoming a biophysicist. "However, I realized once I

arrived at MIT that I would be spending my life in a laboratory," he says.

In 1970, Lumpkin transferred into Northwestern's six-year Honors Program in Medical Education (HPME). After finishing his residency in emergency medicine, he became an instructor and then an assistant professor in emergency medicine at the University of Chicago until 1984. He also served as vice chair of the department from 1981 to 1984 and was co-director of the Chicago Emergency Medical Services (EMS) system from 1980 to 1984.

During his tenure with the Chicago EMS system, a statewide act was passed. "It completely organized the system for training EMTs and paramedics, and how ambulances and hospitals were able to interact across the state," says Dr. Lumpkin, who was appointed by the governor in 1981 to chair the advisory committee that was created by the act.

NEW FOCUS ON PUBLIC HEALTH

He returned to school in 1984 to pursue an MPH from the University of Illinois School of Public Health while working part time in the emergency department at South Chicago Community Hospital. Upon graduation, he was hired by the Illinois Department of Public Health as a deputy director, where he was in charge of regulating healthcare facilities (hospitals, nursing homes and home health agencies). In the late 1980s, the Illinois Trauma Network was created.

"This rationalized care, so if someone were injured, instead of being taken to the nearest hospital, they would be taken to a trauma center for the highest level of care," explains Lumpkin, who was instrumental in developing the vital network.

Soon afterward, in 1990, he was appointed director of the agency and became part of the governor's cabinet. In 1993, the department created a coordinated, integrated maternal and child health

system in the state, with a computer information system that was a prototype for the nation.

From 1987 to 1993, Dr. Lumpkin also served on the board of directors of the American College of Emergency Physicians, where he led the effort that designated the length of residency training in emergency medicine. In addition, from 1996 to 2004, he chaired the National Committee for Vital and Health Statistics that developed the rules for the Health Insurance Portability and Accountability Act (HIPAA).

Lumpkin remained as director of the Illinois Department of Public Health until 2003, when he became a senior vice president at the Robert Wood Johnson Foundation in Princeton, N.J., the largest foundation in the nation devoted to health and health care. Foremost among the areas of advocacy is childhood obesity.

"We've raised the level of awareness from obscurity in 2003 to it now being a national priority," he states. "In New York City, Philadelphia and even in the state of Mississippi, there have been measurable decreases in the body mass index (BMI) in children." Major inroads have also been made in improving the quality of healthcare delivery and encouraging public reporting of quality information.

"One of my good friends from medical school told me in my senior year that I was wasting my career by going into emergency medicine," says Lumpkin, who has no plans to retire soon. "I ran into her about six years later at a meeting. She had switched careers to emergency medicine."

I feel honored to have been involved in the early days of this critical specialty.



basically an embryonic field."

To the best of Lumpkin's knowledge, he was the first African American residency-trained emergency physician in the country, and when he completed his residency at the University of Chicago in 1978 there were only about 200

Progress Notes



'40s

Quentin Young, '48 MD, of Chicago, national coordinator of Physicians for a National Health Program and chairman and co-founder of Health and Medicine Policy Research Group, recently published his memoir, "Everybody In, Nobody Out: Memoirs of a Rebel Without Pause." A new documentary film, "The Good Dr. Young," is seeking Kickstarter funding to tell the story of Dr. Young, a civil rights and universal healthcare activist who treated such icons as Martin Luther King, Studs Terkel and former Chicago Mayor Harold Washington. He was also inducted into the Alpha Omega Alpha (AOA) medical honor society in March.



Cardiovascular Journal and a past president of the American College of Cardiology released "Houston Hearts: A History of Cardiovascular Surgery and Medicine at Houston Methodist Hospital" on May 14. The book chronicles the history of the institution and the accomplishments of Drs. Michael DeBakey, Denton Cooley, Henry McIntosh, Antonio Gotto and many others. It is also available electronically on Amazon and Kindle.

Robert V. Pierre, '54 MD, '60 GME, of Glendale, Calif., and his wife Jane are doing well. He writes, "I had an internship at Wesley Memorial and residency in internal medicine and hematology at the VA Research Hospital on campus. I remained at Northwestern, except for two years in the Army Medical Corps, until 1967, when I joined the Mayo Clinic in Rochester, Minn. I retired from Mayo in 1992 and accepted a professorship at USC Medical School in Los Angeles, which I retired from in 2000. I continued to do hematology consultations for a commercial reference laboratory in Los Angeles until 2012, when I completely retired at the age of 84. Sorry I could not make the 60th reunion, maybe the 70th. Would enjoy contact from any of my 1954 classmates."

Edward J. Fesco, '55 MS, '56 MD, of La Salle, Ill., is 82 years old and continues his medical practice half time after various operations for "health maintenance." After carpal tunnel, cataract and knee joint replacement surgeries, Dr. Fesco is able to drive, swim, walk and stand, but he no longer performs surgery.



Robert W. Boxer, '56 MD, of Wilmette, Ill., recently retired after 51 years as a practicing allergist in the Chicago suburbs. After graduating from Northwestern, he interned and was a resident at Cook County Hospital. He had an allergy fellowship at the University of Illinois in Chicago, and taught there for seven years. He writes, "I enjoyed practice and frequently found disorders not conventionally considered allergic respond to treatment for inhalants and foods. A number of patients went into medicine, especially allergy. I was on the Chicago Medical Society's Physicians Review Committee for over 20 years, and the Illinois State Medical Society's Public Relations Committee for several years. I served on multiple committees at Advocate Lutheran General and NorthShore University HealthSystem-Skokie Hospitals. I am an emeritus fellow of the American Academy of Allergy and Immunology and The American College of Allergy and Immunology. I now enjoy spending more time with Marsha, my wife of 47 years, and our two children and three grandchildren (their creative, athletic and musical activities keep us busy). Marsha and I enjoy concerts at Ravinia and Lyric Opera and Northwestern's musical productions. I see classmate G. Steve Scholly, '56 MD, frequently at Lutheran General Hospital Grand Rounds."

Bill Ziering, '56 MD, of Carmel, Calif., will be participating in the USAT Nationals this year as the oldest invite in the age group Olympic



Triathlon. Dr. Ziering is also on his church board, heading up health and wellness, and running a prison ministry for the families left behind. He writes, "Loved medicine, love retirement, too."

Richard Elesh, '59 MD, of Glenview, Ill., writes, "We returned from our winter in Key Largo on May 3. It would be nice if alumni weekend were in early May, so that we may be able to attend our 60th reunion. I am retired after 41 years of working at Wesley and Evanston hospitals and teaching OB-Gyn to the Northwestern University students and residents. All time well spent, in addition to my busy private practice. I am forever thankful for my great residency with George Gardner et al. at Wesley and NU, and the path training with Ronny "Gyne" Greene, tops in his field nationally. My relationship with our residents was outstanding and extremely rewarding, and something that I will always cherish."

'60s

John J. Beck, '65 MD, is now retired from the practice of medicine. Dr. Beck continues to live just north of Sturgeon Bay, Wis., and spends time with his family and dog and enjoys the Learning in Retirement programs at the University of Wisconsin, astronomy and committee work.

Joe Zerella, '66 MD, is retired from pediatric surgery in Phoenix and is president of the Arizona Firearm Injury Prevention Coalition, which tries to prevent firearm injuries in children under age 21 statewide through education, community awareness and by distributing free gunlocks. Dr. Zerella is married and has three children.

'70s

James E. Bourdeau, '73 MD, '74 GME, of Tulsa, Okla., is transitioning to a new career after a more than 16-year partnership with Nephrology Specialists of Oklahoma. He is now focused on furthering kidney

transplantation in Tulsa. He is also doing medical consulting work and serving as a member of the American Board of Internal Medicine's Subspecialty Board on Nephrology. Last year, Dr. Bourdeau was named a top doctor by U.S. News & World Report.

Richard Berlin, '76 MD, of Richmond, Va., had his poem, "Playing in the Band," selected as the winning entry in the health provider category for The Cancer Poetry Project's second anthology, and donated the cash award to the new cancer treatment center at Berkshire Medical Center. A performance of his poem can be seen at: <http://www.youtube.com/watch?v=7Pyr2cabYMO>.



Charles E. Miller, '77 MD, of Bannockburn, Ill., performed live telesurgery to the National Academy of Future Physicians and Medical Scientists, an institution for students who want to enter the STEM fields. 7,000 people were in attendance and others viewed it online, live tweeting the event.

'80s

Michael Kron, '80 MD, '83 GME, of Washington, D.C., a Jefferson Science Fellow, was assigned to the State Department as a senior science adviser to the Bureau of East Asian and Pacific Affairs' Office of Economic Policy in August. The fellowship ends in September, when Kron will return to his post as professor of medicine in the

infectious diseases section and director of the Global Health Pathway Program at the Medical College of Wisconsin.

Alicia Brooks Armstrong, '81 MD, lives in the Washington, D.C., metropolitan area and is currently a reproductive endocrinologist, director of clinical services, and the associate fellowship director of the Combined Federal Fellowship in Reproductive Endocrinology and Infertility at National Institutes of Health. She is an associate professor at Uniformed Services University of the Health Sciences and Howard University School of Medicine. Prior to joining the NIH, she was chairman of the Department of Obstetrics & Gynecology at Walter Reed Army Medical Center. Dr. Armstrong received an NIH Merit Award for her contributions in the areas of clinical



and basic science research, clinical care and medical education. She gave a recent presentation to Joanie Girl's Heart, a mentoring program for young women in Chicago Public Schools interested in health careers, during their visit to NIH. She is also a watercolor artist.



Ada Paskin Kahn, PhD, '82 MPH, of Evanston, Ill., is president of the Rotary Club of Evanston for 2013-14. In spring 2012, Kahn served as team leader of a group study exchange sponsored by Rotary District 6440 (northern Illinois) and the Rotary Foundation. Her team visited schools, hospitals and factories in Taiwan.

Ernie Kaminski, '83 MD, of Riverside Ill., has accepted a medical director position for HCSC in Chicago (Blue Cross/Blue Shield) for the states of Illinois, Texas, Oklahoma, New Mexico and Montana. His wife of 20 years, Mary, is retiring as a school district speech pathologist.

George Quill, '84 MD, of Louisville, Ky., enjoyed seeing many classmates at the 30th reunion in April. He writes, "Great to catch up. Really miss my former roommate, classmate and orthopedic colleague, **Alan Yasko, '84 MD.**"

Christina Clay, '85 MD, of Wayne, Pa., writes, "My oldest daughter, Ellen, recently graduated from Bienen School of Music. She will stay in Chicago and try to make her way in the theater world. Proud mother of the next generation of Wildcats."

William D. Yates, '85 MD, FACS, of Oak Park, Ill., has established himself as an expert in scarless and robotic hair surgery. He is known for his use of innovative technologies and up-and-coming procedures. Dr. Yates specializes in Follicular Unit Extraction and utilizes ARTAS Robotic Hair Transplant technology, which allows him to perform procedures more accurately and quickly. In addition, he offers new non-surgical treatments such as Platelet Rich Plasma Therapy and low-level laser light therapy. He has treated thousands of satisfied patients, restoring hair and confidence for people of all genders, races and ages.



John Shaird, '87 MD, is currently the medical director of Brookside Surgery Center in Battle Creek, Mich. He devotes his time to the practice of pain management, and has been retired from his clinical anesthesia practice for about 10 years. Dr. Shaird's wife of 38 years, Christene Shaird, passed away in February after a long battle with breast cancer.



at Kansas City School of Medicine and Bioscience.

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.

John W. Chang, '97 MD, of Weston, Fla., is a cosmetic and venous surgeon practicing in Coral Gables and Weston at SolunaMD Aesthetic Center, where he is the medical director. He trains physicians and medical professionals on cosmetic procedures such as SmartLipo, Botox, Fillers and Vein Sclerotherapy for his company, Cosmetic Medical Training. His practice is a sponsor of the Miami Heat. He was featured in the VH1 reality series "Basketball Wives" performing his SmartLipo Ultra procedure. He and his wife, Tina, have a son, Hunter, 11, a daughter, Isabella, 5, and two boxers, Bella and Dexter.

David Sutherland, '87 MD, of Bourbonnais, Ill., an internal medicine and gastroenterology physician, joined the Silver Cross medical staff in New Lenox, Ill.

'90s

Thomas O'Connor, '90 MD, of Bourbonnais, Ill., a gastroenterology and internal medicine physician, joined the Silver Cross medical staff in New Lenox, Ill.

Jay Herrmann, '91 MD, '95 GME, is a dermatologist with the DuPage Medical Group, practicing and living in Wheaton, Ill. He is also a clinical assistant professor of dermatology at the Feinberg School of Medicine and the current president of the Chicago Dermatologic Society. His wife, **Maureen Herrmann, '91 MD, '94 GME**, is staying at home raising their three children. Their oldest son, Andrew, will be attending medical school in fall 2014

Sandeep Dave, '99 MD, '01 GME, of Chapel Hill, N.C., is associate professor and director of the molecular genetics and genomics program in the Duke Cancer Institute at Duke University. He was elected to the Lymphoma Research Foundation's scientific advisory board. His work focuses on identifying new therapeutic targets as well as markers for diagnosis and prognosis in patients with leukemias and lymphomas.

Shelly Vaziri Flais, '99 MD, '02 GME, of New Lenox, Ill., joined the Feinberg School of Medicine faculty last year as an instructor of clinical pediatrics. In addition to her private practice, she also served as a contributor and technical reviewer for the American Academy of Pediatrics' 2013 "Sleep: What Every Parent Needs to Know." Her husband, **Michael Flais, '00, '02 GME**, is



an allergist and asthma specialist in private practice in the Chicago area. They are the proud parents of four children, including twins.

'00s

Ronney Abaza, '00 MD, of Dublin, Ohio, is the editor for the first textbook, "Robotic Renal Surgery," devoted to robotic kidney surgery, published by Springer.



Adebukola A. Onibokun, '01 MD, of Glenview, Ill., joined Northwestern Medicine Lake Forest Hospital as a neurosurgeon in Jan.

Sandi K. Lam, '02 MD, of Houston, joined Texas Children's Hospital in Houston as a pediatric neurosurgeon and the Baylor College of Medicine as an assistant professor in the Department of Neurosurgery in December 2013.

Dave Drelicharz, '07 MD, of Chicago, is a pediatrician at Town & Country Pediatrics. He is married to Jennifer Lavin.



Keri Christensen, '08 MS, is living in Chicago and working for Medical Home Network as a project manager, helping to connect people to their medical homes.



Ronak M. Patel, '08 MD, '13 GME, started his sports medicine fellowship at the Cleveland Clinic and provides orthopaedic care to athletes ranging from the weekend warrior to the professional athletes of Cleveland

sports. In August, he will return to Chicago to join the Illinois Bone and Joint Institute, where he will practice sports medicine, with particular interest in cartilage restoration and complex ligament reconstructions of the knee. He will teach University of Illinois orthopaedic surgery residents as well as conduct clinical outcomes research.

Arjun Venkatesh, '08 MD, MBA, recently finished a fellowship at Robert Wood Johnson Foundation. Dr. Venkatesh started in July as the director of Quality and Safety Research and Strategy in the Department of Emergency Medicine and a faculty member in the Center for Outcomes Research and Evaluation at Yale.

Nafis Ahmed, '09 MD, of Arlington, Va., is finishing his first year as an attending in emergency medicine. He married Katherine Frank in Denver in May.

Mark Vogel, '09 MD, lives in St. Louis with his wife Sarah and daughter Olivia (almost 17 months). He is starting his last year of general cardiology fellowship at Barnes Jewish Hospital.



'10s

Ronald Kall, '11 MD, of Glendale, Calif., completed an internal medicine residency at the University of Southern California and accepted a faculty position there as an assistant professor of clinical medicine and as a hospitalist with teaching duties at the USC Keck School of Medicine in July.

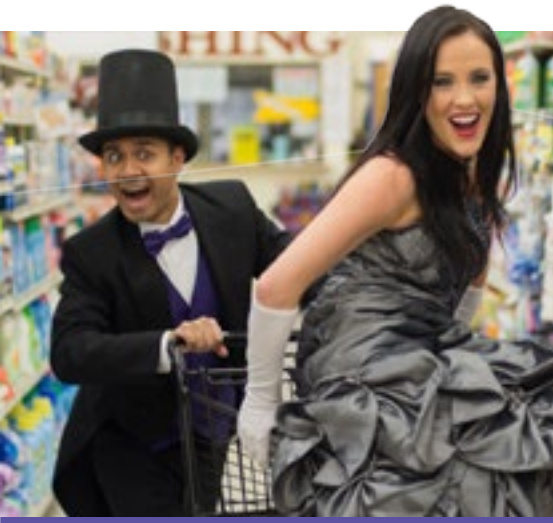
Kathryn G. Kinner, '11 MD, of Chicago, married Justin P. Hufmeyer in Lewiston, N.Y., in August 2013.

Kenneth M. Vaz, '12 MD, of San Diego, is a resident in orthopaedic surgery at the UC San Diego Medical Center. On April 26th he

married Catherine Anne Strzelczyk, vice president for real estate strategy at JP Morgan Chase.

GME

Thomas Garside, MD, '67 GME, of Bettendorf, Iowa, retired at the end of April from Vera French Community Mental Health Center where he was a psychiatrist and former medical director.



NAFIS AHMED, '09 MD AND HIS WIFE, KATHERINE FRANK

Timothy J. Kennedy, MD, '05 MBA, '06 GME, of New York City, married Kate Rinaldi, in Washington, D.C., in Oct. 2013. He is an assistant professor of surgery at Albert Einstein College of Medicine, specializing in gastrointestinal surgical oncology.

Scott C. Wickless, DO, '07, '08 GME, was appointed clinical assistant professor of dermatology at the University of Texas Southwestern in Dallas, where his wife, Heather W. Wickless, MD, MPH, is also a clinical assistant professor of dermatology. He is also a dermatopathologist with Clay J. Cockerell of Cockerell Dermatopathology.



Progress Notes

Awards and Honors

'50s

Thomas Starzl, '52 MD, '82 DSc (honorary degree), of Pittsburgh, Pa., was selected to receive the 2014 Baruch S. Blumberg Prize, the highest scientific honor conferred by the Hepatitis B Foundation, for his pioneering work in organ transplantation. He has also been elected to membership in the prestigious National Academy of Sciences (NAS). Election to the Academy recognizes distinguished and continuing achievements in original research. Although he retired from clinical and surgical service in 1991, Dr. Starzl still devotes his time to research and is active as the Distinguished Service Professor of Surgery at the University of Pittsburgh.



'70s

David Skorton, '74 MD, of Ithaca, N.Y., president of Cornell University, and former president of the University of Iowa, was appointed secretary of the Smithsonian Institution where he will become the first physician to lead the organization. Dr. Skorton will assume his new position June 30, 2015.



'80s

Richard A. Lewis, '78 MD, of Sacramento, Calif., ophthalmologist and incoming president of the American Society of Cataract and Refractive Surgery, was appointed to the scientific advisory board at Aerie Pharmaceuticals.

Michael S. Parmacek, '81 MD, '87 GME, of Bryn Mawr, Pa., has been appointed chair of the Department of Medicine at the University of Pennsylvania Perelman School of Medicine. He currently is the Herbert C. Rorer Professor of Medicine, chief of the Division of Cardiovascular Medicine and director of the Penn Cardiovascular Institute. Over the course of his career, he has made multiple seminal discoveries, which have impacted the understanding of the molecular and genetic basis of congenital heart disease, atherosclerosis, aortic aneurysm and dissection, and heart failure.



James P. Kelly, '83 MD, FAAN, of Centennial, Colo., director of the National Intrepid Center of Excellence at Walter Reed National Military Medical Center, and **Boris Lushniak, '83 MD, MPH, RADM**, of Rockville, Md., acting U.S. Surgeon

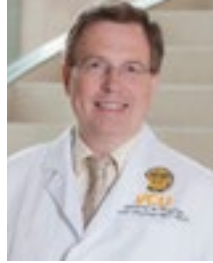


General, were both inducted into the Alpha Omega Alpha (AOA) medical honor society in March.

Todd K. Rosengart, '83 MD, FACS, recently moved to Houston to become chair of the Michael E. DeBakey Department of Surgery, and has been enjoying working with other alums like **Scott LeMaire, '92 MD**, of Pearland, Texas, the vice-chair for research. He welcomed fellow alumni **William (Bill) Gunnar, '83 MD**, of Potomac, Md., chief of the VA National Surgical Service Line, as a recent visiting professor, and met with **Mark Talamonti, '83 MD, '89 GME**, of Glencoe, Ill., chair of surgery at NorthShore University Hospital, during the recent American Surgical Association meetings in Boston. Dr. Rosengart writes, "Looking forward to meeting up with any other alums in the Houston region."



Charles V. Clevenger, '86 PhD, '87 MD, of Henrico, Va., professor and chair of Pathology at Virginia Commonwealth University/Medical College of Virginia in Richmond, was invested as the Carolyn Windgate Hyde Professor in Cancer Research. In addition to his R01 breast cancer research that has been continuously funded by the NIH for 22 years, Dr.



Clevenger is currently spearheading major expansions of faculty and space in cancer biology and genomics at the school.

R. Samuel Mayer, '86 MD, of Pikesville, Md., associate professor and vice chair for education in the Department of Physical Medicine and Rehabilitation at Johns Hopkins University School of Medicine, has been named the 2014 Distinguished Clinician by the American Academy of Physical Medicine and Rehabilitation. This award honors individual physiatrists who have achieved distinction on the basis of their superb teaching skills and their outstanding performance in patient care activities. Recipients are also selected for their significant contributions to the Academy and to the advancement of the specialty.

Earl Cheng, '88 MD, '94, '96 GME, of Elmhurst, Ill., was appointed division head of urology at Ann & Robert H. Lurie Children's Hospital of Chicago, after serving as the interim division head since July 2013.



'90s

Ernani Sadural, '92 MD, of East Hanover, N.J., clinical chief of the Department of Obstetrics and Gynecology at St. Barnabas Medical Center, received the Burton L. Eichler Award in Dec. 2013 for his efforts to help the underserved around the world.

Julie Beyer Schuller, '92 MD, MPH, of Elm Grove, Wis., currently executive vice president and vice president of clinical affairs at Sixteenth Street Community Health Center, was appointed president of the Medical Society of Milwaukee County in March.

Keith J. Kaplan, '96 MD, of Waxhaw, N.C., was named chief medical officer of Corista, a medical imaging company headquartered in Concord, Mass.

'00s

James Dolan, '09 PhD, of Glenview, Ill., associate director on the life sciences strategy team at Navigant, was named one of the "Rising Stars of the Profession" by *Consulting Magazine*, which recognizes outstanding talent under the age of 35.

GME

Glynn J. Elliott, MD, '96 GME, of Lincolnwood, Ill., medical director of the internal medicine residency program, was promoted to chairman of the Department of Medicine at Presence St. Francis Hospital in Evanston, Ill.

Claudia B. Perez, MD, '10 GME, was appointed surgical director of the Sister Sheila Lyne Comprehensive Breast & Women's Healthcare Center at Mercy Hospital & Medical Center in Chicago. She will also continue practicing as a breast surgeon at Loyola University Health System.

PT

John Wagner, '79 PT, of Carroll, Ohio, has worked 31 of his 35 years since graduation in pediatric physical therapy, 17 of which were at Forest Rose School serving children with special needs. This center-based program is part of the Fairfield County Board of Developmental Disabilities in Lancaster, Ohio. In March, Wagner received their highest honor, the Distinguished Service Award, for developing a training program with power wheelchairs for the more severely involved children.

Thanking those
who give so
generously

2014 Reunion Giving Honor Roll
Available Online September 17, 2014

Online Report Lauds Reunion Giving Participants

The medical school's inaugural **Reunion Giving Honor Roll** will be available September 17, 2014, at <http://feinberg.alumni.northwestern.edu/aw2014-reunion-giving-honor-roll>.

This report features all MD alumni who celebrated a 5th through 60th Reunion in 2014 and made gifts to their class's reunion giving initiatives during the past fiscal year (Sept. 1, 2013, through Aug. 31, 2014). All reunion gifts directly support our medical students.

Please note that as of September 1, 2014, reunion giving for MD classes ending in 4 and 9 is officially closed, and for MD classes ending in 0 and 5, it is officially open. If you have questions, please contact Lisa Dutton at l-dutton@northwestern.edu or 312-503-1091.

Many thanks to our inspiring supporters!

In Memoriam

Robert M. Addison, '53 MD, of Great Falls, Mont., died March 8, 2014.

Thomas A. Bairnson, '61 MD, of Sarasota, Fla., died May 1, 2014.

John R. Bates, '86 MD, of Westfield, Ind., died March 13, 2014.

James R. Daggy, '51 MD, of Richmond, Ind., died Oct. 20, 2013.

John R. Bates, '86 MD, of Westfield, Ind., died March 13, 2014.

Jennifer A. Daru, MD, '00 GME, of Kentfield, Calif., died March 23, 2014.

Sarah (Johnston) Defren, '03 DPT, of Mount Jackson, Va., died May 6, 2014.

Richard H. Ettinger, '48 MD, '50 GME, of Bend, Ore., died April 3, 2014.

Steven W. Fitzgerald, MD, '89 GME, of Buffalo Grove, Ill., died March 17, 2014.

Gerald J. Kavanaugh, '54 MD, of Fargo, N.D., died March 1, 2014.

Cynthia McIntosh, '72 BSM, '76 MD, of Media, Pa., died March 17, 2014.

David L. Murphy, '61 MD, of Las Vegas, died March 26, 2014.

Edgar A. Newfeld, '62 MD, of Dallas, died Feb. 24, 2014.

Robert E. O'Brien, MD, '02 GME, of San Francisco, died April 21, 2014.

Frank T. Padberg, Sr., '42 MS, '43 MD, '52 GME, of Little Rock, Ark., died March 5, 2014.

Wesley L. Peterson, '48 MD, of Sarasota, Fla., died April 26, 2014.

Wilbert E. Scott, Jr., '41 MD, of Amarillo, Texas, died Feb. 27, 2014.

Robert G. Siekert, '48 MD, of Rochester, Minn., died March 4, 2014.

George Gayle Stephens, '52 MD, of Birmingham, Ala., died Feb. 20, 2014.

Arthur Sweet, MD, '51 GME, of Decatur, Ill., died March 4, 2014.

Upcoming Events

AUG

AUGUST 21, 2014
[Endocrinology Grand Rounds](#)
Robert H. Lurie Medical Research Center, Baldwin Auditorium
303 E. Superior St., Chicago.
For more information, call 312-695-4066.

AUGUST 26, 2014
[Infectious Diseases Lecture](#)
Robert H. Lurie Medical Research Center, Hughes Auditorium
303 E. Superior St., Chicago.
For more information, call 312-503-5602.

AUGUST 28, 2014
[IRB Brown Bag Session - Genetic and Genomic Research](#)
Rubloff Building, Room 750
420 E. Superior St., Chicago.
For more information, call 312-503-3259.

SEP

SEPTEMBER 10, 2014
[Global Health Poster Session](#)
Ward Building, Method Atrium
303 E. Chicago Ave., Chicago.
For more information, call 312-503-8836.

SEPTEMBER 17, 2014
[15th Annual Ben L. Boynton Lecture](#)
Rehabilitation Institute of Chicago, Magnuson Auditorium
345 E. Superior, Chicago.
For more information, call 312-503-3636.

SEPTEMBER 19, 2014
[5th Annual Integrative Medicine for Mental Health Conference](#)
Prentice Women's Hospital, 3rd Floor
250 E. Superior St., Chicago.
For more information, call 312-503-2800.

SEPTEMBER 22, 2014
[8th Annual Oncofertility Consortium Conference](#)
Prentice Women's Hospital, 3rd Floor
250 E. Superior St., Chicago.
For more information, call 312-503-2800.

OCT

OCTOBER 2, 2014
[10th Annual Midwestern Hospital Medicine Conference](#)
Northwestern Memorial Hospital, Feinberg Pavilion, 3rd Floor Conference Ctr
251 E. Huron, Chicago.
For more information, call 312-926-5893.

OCTOBER 9, 2014
[16th Annual Lynn Sage Breast Cancer Symposium](#)
The Fairmont Chicago
200 N. Columbus Dr., Chicago.
For more information, call 312-908-5250.

OCTOBER 13, 2014
[Illinois Symposium on Reproductive Sciences 2014](#)
University of Illinois at Chicago, Chicago.
For more information, call 847-467-2280.

NOV

NOVEMBER 8, 2014
[Cancer Connections](#)
Northwestern Memorial Hospital, Feinberg Pavilion, Conference Room A
251 E. Huron St., Chicago.
For more information, call 312-908-5250.



More events at magazine.nm.org



Lurie Children's Hospital in U.S. News' Top Ten

Ann & Robert H. Lurie Children's Hospital of Chicago ranks 8th in the *U.S. News & World Report* Best Children's Hospitals Honor Roll for 2014-15. The national Honor Roll recognizes children's hospitals with high scores in at least three specialties.

Lurie Children's has five specialties in the top 10, including gastroenterology (2nd), neurology/neurosurgery (4th), urology (5th), cancer (6th), and kidney disease (9th). In this year's rankings, additional weight was given to patient outcomes and other performance data.

U.S. News introduced the Best Children's Hospitals rankings in 2007 to help families of sick children find the best medical care available.



Dental School at Northwestern? Read about it in the History Blog

Involved in the education and training of many different health professionals throughout the decades, Northwestern University once had affiliations with a pharmacy school (1891-1917), a woman's medical school (1892-1902), nursing programs (1979-1990), and a dental school (1891-2001), in addition to the medical school.

Galter Health Services Special Collections Librarian Ron Sims shares more information and photos about the dental school in the online version of *Northwestern Medicine Magazine*. Go to magazine.nm.org and click on "History Blog" in the top menu.



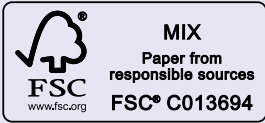
Answering the call - again

As part of an upcoming Veterans Day tribute to current and former members of the armed services, this summer we asked alumni to write in about their military service. We were blown away by the response and have received so many submissions that we will likely spread them out over the Progress Notes section in both the fall and winter issues of the magazine. Many thanks to those patriots who have served our country!

There will also be profile pieces on a few alumni who shared special stories about their service.

One alumna pointed out—and rightly so—that we left out the other uniformed services. We will be asking for submissions from alumni who have served in these non-military branches in the near future.

More at magazine.nm.org



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