

Winter 2013-2014 Volume 01, Number 01

Northwestern Medicine

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

Magazine

p.18

No Patient Left Behind

Chairs of neurology and neurosurgery share patient focus

p.14

New health system focuses
on providing better care

p.25

Spotlight on 2013
accomplishments

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FIRST-YEAR MEDICAL STUDENTS MODEL THE WHITE COATS THEY RECEIVED DURING THE FOUNDERS' DAY CELEBRATION, MARKING THE START OF THE NEW ACADEMIC YEAR. A NUMBER OF ALUMNI CONTRIBUTED TO THE WHITE COAT FUND FOR THE CLASS OF 2017. (SEE STORY ON PAGE 4.)

Northwestern Medicine Magazine

WINTER 2013-14
VOLUME 01, NUMBER 01

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

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INSIDE FRONT COVER
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p. 30
Laura Brown: p. 2
Nathan Mandell: pp. 3,
26
Sarah Plumridge: p. 27

DESIGN
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02 Northwestern Medicine Leadership
Ward Rounds transitions to Northwestern Medicine Magazine.

Campus News

03 Northwestern Medicine launches Heart Institutes and celebrates Founders' Day
10 Research Briefs
New research on managing cholesterol levels, putting lupus in permanent remission, clues to controlling HIV virus, and predicting who will have chronic pain.

14 Features

Ward Rounds (Alumni) News

30 Alumni President's Message
New mission and pillars of the National Alumni Board.
36 Shirley Chi, MD '01, GME '02, shares dermatology advice on ABC7.
38 Roger E. Sheldon, MD '68, creates McNicol Flair Sheldon Scholarship endowment.
31 Progress Notes
40 In Memorium and Upcoming Events

NO PATIENT LEFT BEHIND

Krainc and Parsa share patient focus as chairs of
neurology and neosurgery

P.18

QUALITY IS
JOB ONE

New health system focuses on
providing better care throughout
all facilities

P.14

SPOTLIGHT ON 2013
ACCOMPLISHMENTS

Whirlwind of activity continues

P.25

2013

ONLINE EXTRAS: [Additional Content Online](#) [Image Slideshow](#) [Video](#)

Northwestern Medicine Leadership



If you are a regular reader of the medical school's quarterly alumni magazine, known for the past 30 years as *Ward Rounds*, you will no doubt notice a few things have changed, starting with the publication name - now *Northwestern Medicine Magazine*. Rebranding this and many of the Feinberg School of Medicine and Memorial Hospital's other joint activities under Northwestern Medicine means more than just adopting a new name, logo and color palette. These changes signal a fundamental shift in how we think about ourselves internally and present ourselves externally to our friends and alumni as new partners in an aligned academic health system. This shared identity includes speaking with one voice, working with unified goals and common culture, and developing new standards for outreach.

Northwestern Medicine embodies at its core the intertwined elements of our scientific, clinical, and education missions, and acknowledges that we can be stronger and more nimble as we work to collaborate across a complex environment that comprises our extended family.

Northwestern Medicine Magazine will showcase the superb progress being made across our academic health system. In addition to its familiar stories focused on research and traditional medical school activities, along with alumni news, now the publication will provide context and details

about the broader perspective of Northwestern Medicine. This will include more clinical content such as in the feature story on page 14 in which four leaders talk about their roles in the new health system. Future issues will include Q&A articles with a variety of teams and leaders.

Another change you'll see is with the Dean's Message, which now is entitled "Northwestern Medicine Leadership" and comprises a shared perspective; there will be times when we will write a joint message, as with this letter, and others where we may take turns offering our personal views on a specific topic more directly related to our unique positions.

Of course, the magazine is just one of several vehicles to communicate the ascendancy of medical excellence in the national marketplace of ideas. In 2010 and 2011, the medical school and hospital began communicating under the Northwestern Medicine banner internally and externally. In September 2011, we launched the weekly electronic newsletter, "My Northwestern Medicine," for alumni, faculty, staff/employees, and our partners and friends. And approximately three years ago, we started distributing Northwestern Medicine press releases to media about research findings, community outreach, clinical developments and new facilities.

These various communications will assuredly evolve as we look to expand opportunities to shine a spotlight on Northwestern Medicine. Just this past fall in Chicago we debuted newly produced television and radio commercials, billboards, and digital ads highlighting Northwestern Medicine breakthroughs that contribute to excellent care and improved outcomes, as told through patient stories. You may also have seen print advertisements on a national scale.

In 2014, we will be launching an enhanced version of our integrated website www.northwesternmedicine.org that will offer educational information about health

conditions, one Physician Finder across the health system, as well as links to information about our specialty departments and scientific and academic missions. With all these activities, there should be no doubt that we greatly value our heritage, alumni, friends, and patients.

Another highly visible element of our branding is evident in the signage for Northwestern Medicine at the recently opened outpatient facilities in Chicago's Lakeview neighborhood and the suburbs of Evanston, Libertyville, Glenview, Grayslake, Highland Park and Deerfield. In October 2014 we will also be opening the new Northwestern Medicine Outpatient Care Pavilion on the Chicago campus. This signals a change to patients and the national marketplace that we have a cohesive identity that brings together the hospital, medical practices, and the medical school. Consumers already think of the clinical, education and scientific endeavors underway at Northwestern as being completely linked; this new signage reinforces these relationships, leaving no room for doubt that we are all working together in support of an overarching mission to put "Patients First."

We look forward to sharing more momentous events as we advance a stronger, more unified Northwestern Medicine.

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



LEFT: PRASANNA KRISHNAMURTHY, PHD, RESEARCH ASSISTANT PROFESSOR IN THE FEINBERG CARDIOVASCULAR RESEARCH INSTITUTE, PRESENTS HIS WORK, "THERAPEUTIC STRATEGIES AIMED AT STIMULATING CARDIAC REGENERATION." RIGHT: DEAN M. HARRISON, PRESIDENT AND CEO OF NORTHWESTERN MEMORIAL HEALTHCARE; PATRICK MCCARTHY, MD, DIRECTOR OF THE BLUHM CARDIOVASCULAR INSTITUTE; SUSAN QUAGGIN, MD, DIRECTOR OF THE FCVRI; ERIC G. NEILSON, MD, LEWIS LANDSBERG DEAN; DOUGLAS VAUGHAN, MD, CHAIR OF MEDICINE; AND CLYDE YANCY, MD, CHIEF OF MEDICINE-CARDIOLOGY.

Heart Institutes at Northwestern Medicine Celebrated with Launch

On October 1, the first of several Institutes at Northwestern Medicine was launched with much fanfare. Comprised of the Bluhm Cardiovascular Institute and the Feinberg Cardiovascular Research Institute (FCVRI), the Heart Institutes at Northwestern Medicine represent the comprehensive approach of the Feinberg School of Medicine and Northwestern Memorial HealthCare.

"Our world-class experts at Bluhm and the FCVRI personify our commitment to fulfilling the Northwestern Medicine vision," said Eric G. Neilson, MD, vice president for medical affairs and Lewis Landsberg Dean. "Joining together, they will make the Heart Institutes at Northwestern Medicine a recognized leader in cardiovascular medicine through clinical excellence and the discovery of innovative new therapies."

The evening began with a scientific poster session showcasing the research of nearly two dozen members of the Heart

Institutes. Mazen Albaghadi, MD, a cardiovascular disease fellow, presented a groundbreaking biodegradable stent project he is conducting in the lab of Melina Kibbe, MD, Edward G. Elcock Professor of Surgical Research.

Stents, most commonly made of metal, are placed in the coronary arteries to keep them open. A number of biodegradable plastic versions are being tested across the country.

"This next-generation biodegradable stent releases nitric oxide, a natural restorative molecule in the body, to promote vascular healing," Dr. Albaghadi said. "While this project is advancing through preclinical trials, I am also engaged in clinical work with Mark Ricciardi, MD, associate professor of medicine-cardiology, testing a stent that degrades over time and is ultimately completely absorbed by the body."

The program featured presentations by Clyde Yancy, MD, chief of medicine-cardiology, who also served as emcee; Patrick McCarthy, MD, director of the Bluhm Cardiovascular Institute; Susan Quaggin, MD, director of the FCVRI; and Douglas

Vaughan, MD, chair of medicine.

"We are a Chicago-based institution and we make no small plans," said Dr. Yancy, quoting famed architect Daniel Burnham. "We believe that Northwestern Medicine is ideally suited to make a difference in health and disease by developing, introducing and perfecting leading-edge technologies that will treat the most advanced diseases."

A panel discussion featured faculty members Robert O. Bonow, MD; Charles J. Davidson, MD; Mark K. Eskandari, MD; Mark D. Huffman, MD, MPH; Donald M. Lloyd-Jones, MD, ScM; Vera H. Rigolin, MD; Neil J. Stone, MD; and Vaughan.

"We applaud the leadership of Drs. McCarthy, Quaggin, Yancy, Vaughan, and all of their colleagues for making the Heart Institutes at Northwestern Medicine a reality and ushering in a bold new era for Northwestern Medicine," said Dean M. Harrison, president and chief executive officer of Northwestern Memorial HealthCare. **M**

Roger Anderson

Founders' Day Kicks Off 155th Academic Year

WRITTEN BY: Roger Anderson

PHOTOGRAPHY BY: Randy Belice

Founders' Day 2013 video and slideshow online at magazine.northwesternmedicine.org



Carrie Wilson stood before family, friends and faculty during Founders' Day on August 16 reciting a promise that will bookend her time at the Feinberg School of Medicine.

"I solemnly pledge to consecrate my life to the service of humanity," Wilson repeated with 161 peers in the Class of 2017. "The health of my patient will be my first consideration; my colleagues will be my sisters and brothers."

The Declaration of Geneva came at the end of the ceremony that serves as the official start of the academic year. Students will also deliver this modern equivalent of the Hippocratic Oath four years from now during the graduation convocation.

"You have opened a new portal to your life's work that focuses on medicine and science very few are privileged to enter," said Eric G. Neilson, MD, vice president for medical affairs and Lewis Landsberg Dean. "There are myriad exciting times ahead for you, not the least of which is working in a medical center, teaming with world-class hospitals."

The program was the culmination of a week-and-a-half's events for new students, which included an Introduction to the Profession Module, overview of the curriculum, team-building activities, and dinners with the dean and faculty.

You are no better, no different than your patients, but you have been blessed with opportunity.

University President Morton Schapiro, PhD, urged each student to leave his or her own mark upon Feinberg. "Think of yourself as having arrived as physicians," he said. "You have all made many sacrifices to get here, so take a moment to be proud of



LEFT: ADAM DE JESUS IS PRESENTED HIS WHITE COAT BY FACULTY MENTOR FARAH ALI, MD, ASSISTANT PROFESSOR IN PEDIATRICS-KIDNEY DISEASES. RIGHT: WELDON COOKE, MD '62, IAN COOKE, A FIRST-YEAR STUDENT, AND JIM COOKE, MD '82, POSE FOR A THREE-GENERATION PHOTOGRAPH AT THE FOUNDERS' DAY RECEPTION.



yourself, but remember that the best doctors are humble doctors. You are no better, no different than your patients, but you have been blessed with opportunity."

Following Schapiro's remarks, Mary McDermott, MD, professor in general internal medicine and geriatrics and preventive medicine, delivered the keynote address.

"At this very moment, you may be more focused on your first year as medical students, perhaps thinking about the apartment you rented, what the gross anatomy lab will be like, or the characteristics of your classmates," she said. "But be certain to pursue a career in

medicine that you are passionate about. Early on, there will be many diverse clinical specialties to choose from, ranging from primary care to pathology, radiology, and neurosurgery. Remember, too, you have an opportunity to be educators, scientists, administrators, inventors and leaders within the medical profession."

McDermott charged students to practice medicine with humility, make an impact on the lives of others, and tend to their own health and personal relationships throughout the journey.

Standing alongside faculty mentors Farah Ali, MD, assistant professor in pediatrics-kidney diseases; Robert Golden, MD, assistant professor of clinical medicine-general internal medicine and geriatrics; Gary Martin, MD, vice chair of medicine; and Karin Ulstrup, MD, instructor of clinical medicine-general internal medicine and



PROFESSOR MARY MCDERMOTT, MD, RECEIVES A COMMEMORATIVE PLAQUE FROM DEAN ERIC G. NEILSON, MD, FOLLOWING HER FOUNDERS' DAY KEYNOTE ADDRESS.

geriatrics, the first-year students were given their white coats by members of the Class of 2016. In a burgeoning tradition, the coats were sponsored by 76 medical school alumni. (For full list of donors, see online story at magazine.northwestern-medicine.org.)

"There's definitely a connection with this moment, receiving our white coats, and the realization that we will now need to buckle down and really get ready to work hard," said Jordan Robinson, an incoming student from the University of Wisconsin-Madison. "I understand that I am not a doctor yet and it's easy to remain humble in that way, but there is definitely a sense of accomplishment in being at a prestigious university like Northwestern and slipping on the white coat for the first time."

Founders' Day also served as the

backdrop for numerous student honors given to members of the Class of 2016 who have made a positive impact in the community and displayed a level of leadership commended by their peers.

Third-year student Paul Devlin, president of the Feinberg Student Senate, presented Addie Boone, Maggie Wright, KJ Hansmann, Allison Ducharme-Smith, and Maximilian Meyer with the Class of 2016 Student Senate Service Awards.

Afterward, members of the Feinberg community and invited guests attended the Nathan Smith Davis Founders' Day reception. Sponsored by the Medical Alumni Association, the reception honors one of the medical school's founders and its first dean. [M](#)



Class of 2017 By the Numbers

The Class of 2017 comprises 162 MD candidates. Among the 20 students pursuing dual-degrees, 12 are entering the Medical Scientist Training Program (MSTP) and will receive both MD and PhD degrees. Six students will pursue an MD and Master of Public Health (MD/MPH), and two will pursue an MD and Master of Arts in Medical Humanities and Bioethics (MD/MA).

71 majors from 75 institutions

32 spoken languages including Chinese, French and Spanish

33 different states represented

10 represented countries

98 percent engaged in undergraduate research

50 percent have global health experience

Faculty Awards and Honors

Northwestern University nanoscientist **Chad A. Mirkin, PhD**, has been named a 2013 Thomson Reuters Citation Laureate in the annual pre-Nobel Prize “Thomson Reuters Predicts Nobel Laureates” study.



Mirkin, a world-renowned leader in nanotechnology research and its application, is being recognized for his contributions to DNA nanotechnology. He is a professor of medicine at the Feinberg School of Medicine and the George B. Rathmann Professor of Chemistry in the Weinberg College of Arts and Sciences, as well as a professor of chemical and biological engineering, biomedical engineering, and materials science and engineering. He is director of Northwestern’s International Institute for Nanotechnology.

One significant example of his work is the invention of spherical nucleic acids (SNAs), new globular forms of DNA and RNA often surrounding a nanoparticle core. These structures have enabled major advances in chemistry, materials science, biology, and medicine, and they form the basis for more than 700 products commercialized by licensees of the technology. Mirkin has created the fundamental design rules for using such structures as artificial atoms and DNA as bonds to program the formation of matter comprised of nanoparticles.

Tanya Simuni, MD, the Arthur C. Nielsen, Jr. Research Professor in Parkinson’s Disease and Movement Disorders and director for the Parkinson’s Disease and Movement Disorders Center, has been awarded \$10+ million funding from the National Institute of Neurological Disorders and Stroke for a Phase 3 multi-center study of isradipine as a potential disease-modifying agent in patients with early Parkinson’s disease (PD). The five-year study, conducted in conjunction with the University of Rochester which will serve as the coordination center, will include 56 sites in North America.



This study is an example of the bench-to-bedside effort at Northwestern Medicine, as it stems from long-term collaborative work with D. James Surmeier, PhD, department chair and the Nathan Smith Davis Professor of Physiology at Feinberg, which is based upon his efforts at the Morris K. Udall Centers of Excellence for Parkinson’s Disease Research. Results of the recently completed Phase II STEADY PD study were published in the journal *Movement Disorders*. This will be the only Phase 3 trial currently being funded by the National Institutes of Health that tests disease-modifying therapies in PD.

Stephen B. Hanauer, MD, a distinguished physician-scientist and international leader in the treatment of inflammatory bowel disease, joined the Feinberg School of Medicine on Jan 1, 2014, as the Clifford Joseph Barborka



Professor of Medicine and the medical director of the Digestive Disease Center. Hanauer most recently served as the Joseph B. Kirsner Professor of Medicine, professor of clinical pharmacology, and chief of gastroenterology and nutrition at University of Chicago Pritzker School of Medicine. He also served as director of the Logan Center for Gastrointestinal Clinical Research and co-director of the Inflammatory Bowel Disease Research Center at Pritzker.

“We are delighted to welcome Dr. Hanauer to the medical school and Northwestern Medicine,” says Eric G. Neilson, MD, Feinberg’s vice president for medical affairs and Lewis Landsberg Dean. “His focus on Crohn’s disease, ulcerative colitis, and reputation as a leading scholar of digestive diseases will greatly enhance our focus in these complicated scientific disorders.”



Alfred L. George Jr., MD, a recognized leader in the field of ion channel proteins, has been named the Magerstadt professor of pharmacology and chair of the Department of Pharmacology at the Feinberg School of Medicine, effective March 1, 2014. George will also direct a new Center for Pharmacogenomics to advance Northwestern Medicine’s entry into personalized medicine.

“Al is a superb scientist with a demonstrated ability to lead and mentor the next generation of investigators in pharmacology,” says Eric G. Neilson, MD, vice president for medical affairs and Lewis Landsberg Dean. “Over the past several decades he has established his credentials in the fundamental science surrounding ion

channel biology... I look forward to his arrival at Feinberg and the expertise that he will bring.”

George was most recently the Grant W. Liddle Professor of Medicine, professor of pharmacology, chief of genetic medicine, and director of the Institute for Integrative Genomics at Vanderbilt University.



(From left) Karen Hills, MS, PA-C, president-elect of the Physician Assistant Education Association, presents Sharon A. Blattner, MEd, PA-C, director of clinical education for Feinberg’s Physician Assistant Program, with a teaching award.

Sharon A. Blattner, MEd, PA-C, director of clinical education for the Feinberg School of Medicine Physician Assistant Program, received a clinical education award from the Physician Assistant Education Association (PAEA). The award was presented at their 2013 Annual Education Forum.

“There are so many talented individuals in this field and to be chosen to receive this award is humbling,” Blattner says. “...I challenge all my PA colleagues to continue to pursue novel approaches to teaching so that our physician assistant students will be leading providers on tomorrow’s healthcare teams.”

With more than \$2.5 million in new grants, **P. Hande Ozdinler, PhD**, assistant professor of neurology, is continuing to investigate the development of amyotrophic lateral sclerosis (ALS).



the Department of Medicine. An internationally recognized gastroenterologist, Dr. Pandolfino specializes in esophageal disorders. He and his colleagues in the interdepartmental Esophageal Center have built one of the pre-eminent gastroenterology programs in the world for research and patient care.

“John has established himself as a leader in the field of esophageal disorders, and has also proven himself to be a terrific collaborator and team player,” says Douglas E. Vaughan, MD, chair of medicine. “I have no doubt that the division will thrive under his leadership.”

Kathryn Radigan, MD, instructor in Medicine-Pulmonary and Critical Care, has received an Early Career Investigator Award from the American Thoracic Society Foundation to aid her investigation into the relationship between a deficiency in the hormone leptin that regulates appetite and obesity and an increased susceptibility to influenza A-induced lung injury.



“Patients with obesity experienced significant mortality during the recent H1N1 outbreak,” Dr. Radigan says. “These studies may identify novel targets for therapeutic drug development in influenza A-infected patients. I plan to employ sophisticated genetic models to help answer mechanistic questions about leptin signaling.” **M**

John E. Pandolfino, MD, has been appointed the Hans Popper Professor and chief of gastroenterology-hepatology in



Up to the Test: Researchers adding NIH Toolbox to study designs

WRITTEN BY: Cheryl SooHoo

Chronic throat infections used to be reason enough for kids to undergo adenotonsillectomies and enjoy a week or so of ice cream therapy. Nowadays, surgeons are more likely to remove enlarged adenoids and tonsils to treat sleep apnea and other forms of sleep disordered breathing (SDB). Studies show that SDBs can result in learning and behavioral problems including ADHD. While many children often breathe easier and return to normal function after the procedure, some patients continue to experience significant cognitive difficulties.

It's the latter group that intrigues researchers at the University of Michigan. Following children ages 5 up to 13 over time, investigators Bruno Giordani, PhD, and Elise Hodges, PhD, hope to reveal the subtle problems that may be affecting the mental processes in this patient population. To assess cognition they are using the

recently released NIH Toolbox—a set of state-of-the-art tools developed by Feinberg School of Medicine's Richard Gershon, PhD. The vice chair of research and associate professor of medical social sciences led a six-year, NIH-funded study involving the collaboration of 235 scientists from nearly 80 academic

institutions in the creation of the first common measurements for neurological and behavioral health. The NIH Toolbox was unveiled Sept. 10, 2012, to hundreds of researchers at a special National Institutes of Health conference. So far, interest has been high.

"Within the first 10 months of releasing the Toolbox, we fielded 800 online inquiries," says Gershon. "Interestingly, 70 percent of them have been from clinicians looking for quick clinical assessment tools. For example, our 30-minute cognitive battery is equivalent to the traditional three-hour one."

A TOOL FOR THE AGES

Make it "quick, free, and easy to use" became the informal mantra of the NIH Toolbox team. Striving to enhance neuroscience research by improving data collection, the group of test development experts assembled by Gershon produced a compact yet powerful collection of no-cost assessment tools in English and Spanish.

The Toolbox provides a unique "common currency" across diverse research projects and populations and has been validated across the entire lifespan in subjects from ages 3 to 85. Featuring a comprehensive set of measurements, the NIH Toolbox categorizes some 45 tests into four domains: cognition, sensation, motor, and emotion. Its standardized measures allow for easy comparison from study to study—one of the primary drivers for this project. If all goes according to the NIH's Blueprint

for Neuroscience Research plan, the push to collect "big data" in clinical research will not get only bigger but also better thanks to the Toolbox.

"We need to make the most of our national investments by using the same testing instruments to help extract as much information as possible from a variety of research endeavors," says Molly V. Wagster, PhD, lead project officer for the NIH Toolbox study and chief of the NIH's Behavioral and Systems Neuroscience Branch, Division of Neuroscience, National Institute on Aging. "Going forward, the Toolbox will help the NIH as well as others to do a better job of leveraging large studies."

The NIH awarded its Toolbox project, in part, to Dr. Gershon for his expertise in computer adaptive testing (CAT). This advanced computer-based approach to test construction speeds up testing by reducing the number of questions while maintaining data collection reliability. CAT works by constantly adjusting questions to the test taker's abilities, with the same or better accuracy. Now the complete NIH Toolbox can be administered within a speedy two hours, which is a result of paring down a number of traditional "gold standard" measurements from hours to minutes.

Attention
Episodic Memory
Working Memory
Language
Executive Function
Processing Speed

Audition
Vision
Vestibular
Olfaction
Pain
Taste

GAINING ACCEPTANCE

Across the country, the best minds in neuroscience came together via countless weekly conference calls over more than half a decade to create the contents of the Toolbox. Very much a homegrown project, Gershon tapped into the expertise of more than 30 Northwestern scientists and staff.

Neuropsychologist Sandra Weintraub, PhD, professor of psychiatry and behavioral sciences at Northwestern, for

example, chaired the NIH Toolbox Cognition Battery—to date, the most popular of the measurements. She's not surprised.

"Assessing brain health is important to health in general," says Weintraub, renowned for her work in the area of Alzheimer's disease and dementia. "Often cognitive impairment is a hidden factor that can have a huge impact on clinical outcome variables. Did patients not take their medications because they forgot? Or did they take their meds and not remember they took them?"

So far the NIH Toolbox has piqued the interest of the research community and is being used in prominent studies. These include the National Children's Study, co-led by Northwestern's Gershon and Jane Holl,

Dexterity
Strength
Balance
Endurance
Locomotion

Psychological
Well-Being
Stress and Self-Efficacy
Social Relationships
Negative Affect

MD, MPH, director of the Center for Healthcare Studies, to examine the health and development of children across the country, to the Human Connectome Project, a multicenter study based at Washington University in St. Louis focused on mapping human brain circuitry.

In the case of clinical researcher Dr. Hodges, the NIH Toolbox has worked like a dream. "With something this new, I figured there would be problems," she says. "But it's been too good to be true. No problems. Really reliable and the technical support has been outstanding." **M**

4

Domains

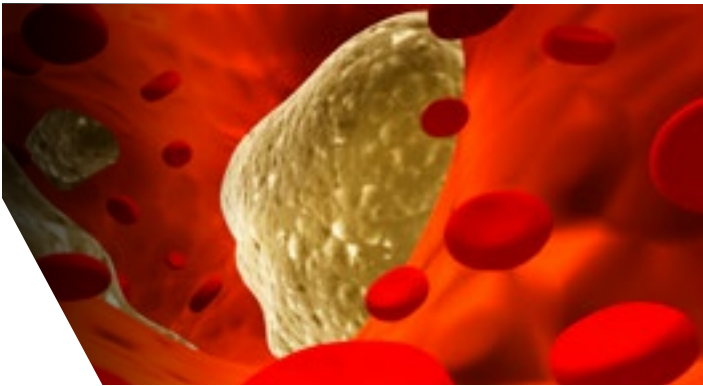
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Comprehensive
Measurements

2

Hour Completion

Research Briefs



Managing Cholesterol in People at Risk for Heart Attacks, Stroke

A new national guideline for managing blood cholesterol in people at risk of heart attacks and strokes changes the focus from aiming strictly for an ideal LDL – or, bad cholesterol level – to optimizing treatment intensity based on the individual.

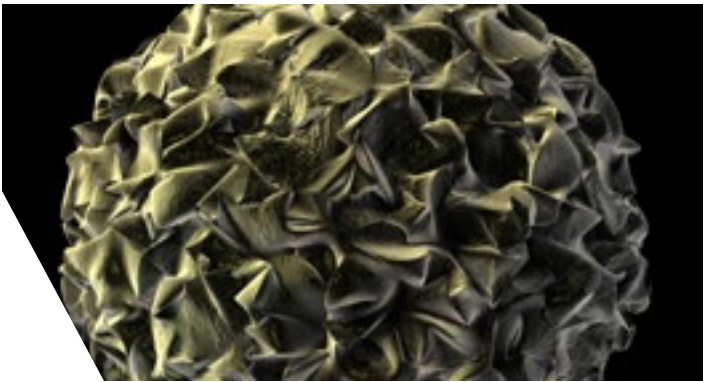
“Some people want to put statins in the water; others don’t want anybody to get a statin,” says Neil Stone, MD, the Bonow Professor of Medicine at Feinberg School of Medicine and chair of the expert panel that wrote the guideline. “Our goal is to treat more people appropriately with the right intensity of therapy.”

The cholesterol guideline to prevent atherosclerosis, hardening, and narrowing of the arteries, was published Nov. 12 by the American College of Cardiology and the American Heart Association.

Moderate- or high-intensity statin therapy is recommended for the following groups:

- » Patients with cardiovascular disease
- » Patients with an LDL level of 190 mg/dL or higher
- » Patients with type 2 diabetes between ages 40 and 75
- » Patients with an estimated 10-year risk of heart attack and stroke due to atherosclerosis (risk of 7.5 percent or higher) who are between ages 40 and 75

The panel found that statins are the most effective cholesterol-lowering drugs with the lowest rate of safety issues. Focusing on a healthy lifestyle along with a higher dose of statins eliminates the need for additional cholesterol-lowering medications. **M**



Putting Lupus in Permanent Remission

Northwestern Medicine scientists have successfully tested a nontoxic therapy that suppresses lupus in human blood samples, which may lead to a vaccine-like therapy that could keep the autoimmune disease in remission.

The study was published online in *Clinical Immunology*. Lupus is a chronic condition that causes the body to create autoantibodies that attack and destroy healthy tissue and cause inflammation, pain and damage to the vital organs. According to the Lupus Foundation of America, five million people worldwide have a form of the disease.

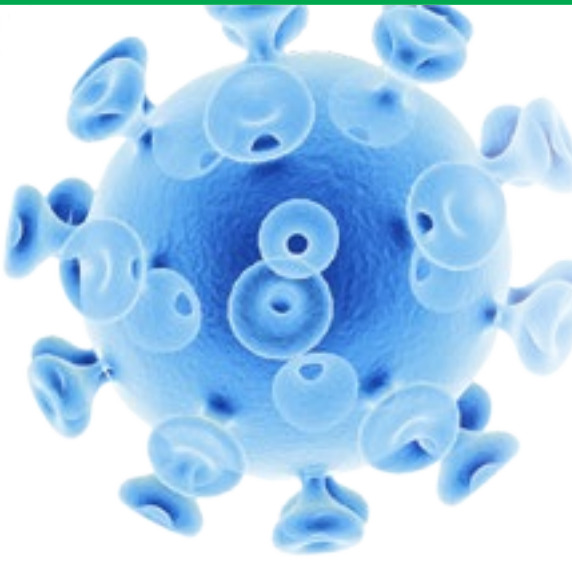
In past studies, Northwestern scientists showed that a nontoxic therapy (which uses synthetic peptides – small bits of protein – to generate special regulatory T cells) blocks lupus in mice.

For this new study, the blood samples of 30 lupus patients (10 active and 20 in remission) and 15 healthy patients were cultured with low doses of the special peptides.

“We found that the peptides could not only generate regulatory T cells, but also that they block and reduce autoantibody production to almost baseline levels...,” says Syamal Datta, MD, professor of medicine-rheumatology and microbiology-immunology at the Feinberg School of Medicine. “This shows that the peptides have the potential to work like a vaccine in the human body ... to keep the disease in remission.”

Dr. Datta hopes to move forward with a phase one clinical trial in humans to show the efficacy of the peptide therapy. **M**

Supported by funding from Alliance for Lupus Research (TIL grant #187305 to S.K.D.) and the National Institutes of Health (National Institute of Allergy and Infectious Diseases grant, R01AI41985 to S.K.D, and National Institute of Arthritis and Musculoskeletal and Skin Diseases, P60 AR30692 to R. R-G)



Scientists Discover Clue to Controlling HIV Virus

Scientists have been trying to solve the mystery of why one percent of people with HIV – called “controllers” – have lasting control of the virus without medications, in some cases for life. The controllers’ early defense is quickly extinguished by the virus, so how do they have long-term immunity?

Northwestern Medicine scientists have discovered a second line of defense, an extra helping of an immune protein that blocks HIV’s spread. This suggests a novel approach involving much earlier treatment that could potentially make every HIV-infected person into a long-term controller by protecting the reserves of this protein, APOBEC3G, or A3 for short.

Currently, most HIV patients need to take powerful anti-retroviral drugs daily for life. If the medicines are stopped, the virus quickly reactivates to harmful levels.

“Preserving and even increasing this defense in cells may make more HIV-infected persons into controllers and prevent HIV from rebounding to high and damaging levels when the medications are stopped,” says Richard D’Aquila, MD, director of the Northwestern HIV Translational Research Center. He is the senior

author of the study published Oct. 16 in the journal *PLOS ONE*.

Dr. D’Aquila, the Howard Taylor Ricketts Professor of Medicine at the Feinberg School of Medicine and a physician at Northwestern Memorial Hospital, is working with colleagues to develop a drug to boost A3. He began investigating AIDS in 1982, the first year it was identified, and was a key figure in the development of anti-HIV medicines and resistance testing for the virus. **M**

Funding came from grant P30 AI 54999 from the National Institute of Allergy and Infectious Diseases, National Cancer Institute, Eunice Kennedy Shriver National Institute of Child Health and Human Development, National Heart, Lung and Blood Institute, National Institute on Drug Abuse, National Institute of Mental Health, and the National Institute on Aging. Other funding was from grant UL1 RR024975-01 from the former National Institute for Research Resource, which is now done by the National Center for Advancing Translational Sciences.

Predicting Who Will Have Chronic Pain

A new Northwestern Medicine study is the first to show that brain abnormalities predispose patients to chronic pain after a lower back injury.

Based on MRI brain scans of people who had a new lower back injury, the scientists could predict with about 85 percent accuracy which patients’ pain would persist. The predictor was a specific irregularity in the axons, pathways in the brain’s white matter that connect brain cells so they can communicate.

“We’ve shown abnormalities in brain structure connections may be enough to push someone to develop chronic pain once they have an injury,” says A. Vania Apkarian, PhD, senior author of the study and professor of physiology, anesthesiology, and physical medicine and rehabilitation.

The findings provide a new view of treating chronic pain, which affects nearly 100 million Americans and costs up to \$635 billion a year to treat.



“We think the people who are vulnerable need to be treated aggressively with medication early on to prevent their pain from becoming chronic,” says Apkarian, a member of the Robert H. Lurie Comprehensive Cancer Center of Northwestern University. “Last year, we showed people who take medication early on had a better chance of recovering.” The research was published in the October

The research was supported by grant NS035115 from the NINDS of the NIH.

- 1

HOW DO SENIORS HAVE THE MINDS OF THOSE DECADES YOUNGER?
CBS EVENING NEWS - AUGUST 22, 2013 7:25 PM
“Previously it’s been thought that there was nowhere to go but down as we aged,” said Emily Rogalski, PhD, a neuroscientist at Northwestern University. “So we’re kind of trying to shift our thinking a little bit and say, ‘Maybe it’s possible to maintain optimal memory as we age.’”
Rogalski and others have found that super agers have a thicker cortex – the region of the brain responsible for thinking, attention and memory.
- 2

STUDENTS ON THE FRONTLINE OF ALZHEIMER’S BATTLE
NBC NIGHTLY NEWS - SEPTEMBER 3, 2013
Maria Shriver reports on the Buddy Program at Northwestern University that pairs Alzheimer’s patients with first-year medical students in an effort to combat the growing disease.
- 3

WHY DOES CHRONIC PAIN HURT SOME PEOPLE MORE?
WALL STREET JOURNAL - OCT. 7, 2013
Over the last five years, A. Vania Apkarian, PhD, and his team has been imaging the brains of patients with a recent back injury, looking for differences in the brain’s white matter for

those who develop chronic pain.
Collecting 3,000 brain scans, the scientists found distinct abnormalities in the participants who developed chronic pain over 12 months, with an 80% to 100% forecast accuracy. (See page 11 for more information.)

4

SHAMEKA DAVIS: RISING ABOVE
LIVING HEALTHY CHICAGO - NOV. 17, 2013
When Shameka Davis was diagnosed with epilepsy, she became inspired to pursue a career in medicine. Today, she is part of the Northwestern Medicine Scholars Program.
“This program is really designed to one, inspire the students to say yes you can do this and two, to give them a preview of what their lives may look like as physicians or PhDs,” Erica Marsh, MD, an assistant professor at Northwestern Memorial Hospital, says.

5

TEAM OF CHICAGO HOSPITALS AWARDED GRANT TO ACCELERATE STROKE RESEARCH
REUTERS - NOV. 20, 2013
“The Chicago Stroke Trials Consortium brings together the city’s leading stroke experts and top medical centers in an integrated approach to improving treatment of stroke and reducing death and disability from the disease,” said Shyam Prabhakaran, MD, MS, the principal investigator for the

consortium, who is a neurologist at Northwestern Memorial Hospital and associate professor of neurology at Northwestern University Feinberg School of Medicine.

6

HOW GROWING UP IN POVERTY MAY AFFECT A CHILD’S DEVELOPING BRAIN
SMITHSONIAN - NOV. 25, 2013
A recent Northwestern University study found a link that children with lower socioeconomic status tended to have less efficient auditory processing abilities – that is, the area of their brains responsible for processing sound showed more response to distracting noise and less activity as a result of an individual speaker’s voice.

7

RETIRED PHYSICIAN TEACHING ABOUT ALZHEIMER’S – HIS OWN
CHICAGO TRIBUNE - DEC. 1, 2013
Their interest in medicine is mutual. Jared Worthington, 25, is a first-year medical student at Northwestern University’s Feinberg School of Medicine. Daniel Winship, 80, is a retired physician with a particular interest in medical education, including a stint as dean of Loyola University Chicago Stritch School of Medicine.

8

LURIE CHILDREN’S OPENS FIRST MIDWEST GENDER AND SEX DEVELOPMENT PROGRAM
ABC 7 CHICAGO - DEC. 2, 2013
“We created this unique combined program because although these two different patient populations deal with very separate issues, their care involves the same team of specialists,” said Earl Cheng, MD, pediatric urologist at Lurie Children’s and professor of urology at Northwestern University Feinberg School of Medicine who founded the program with Rob Garofalo, MD.

9

INCREASING MARIJUANA USE IN HIGH SCHOOL IS REPORTED
THE NEW YORK TIMES - DEC. 18, 2013
A new Northwestern University study found what appeared to be lasting brain alterations in people who smoked marijuana as adolescents. Using brain imaging scans, researchers showed that those who used it daily for about three years as teens had differences in the thalamus, globus pallidus and striatum.
These regions of the brain serve as working memory, helping people to solve puzzles, remember a telephone number or quickly process information for everyday tasks. Working memory is also a strong predictor of academic achievement, said Matthew J. Smith, an assistant research professor in psychiatry and behavioral sciences at Feinberg.

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AUGUST

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SEPTEMBER

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OCTOBER

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NOVEMBER

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DECEMBER

Perkins+Will Selected as Architect for New Biomedical Research Building

WRITTEN BY: Alan K. Cabbage

The Chicago architectural firm of Perkins+Will has been selected to design a new Biomedical Research Building for the Feinberg School of Medicine on Northwestern University’s Chicago campus. The new Biomedical Research Building will be located immediately east of the Lurie Medical Research Center on the site of the former Prentice Women’s Hospital. Northwestern plans to construct approximately 600,000 square feet of research space starting in 2015, with eventual build-out of approximately 1.2 million square feet.

The Perkins+Will design features a curved glass exterior, with flexible floor plans for laboratories and a sunny “winter garden” area that will bring natural light into the building.

“Northwestern University and Perkins+Will have created a building with a unique shape that has a poetry of design and will

result in a work of beauty for the University and the community,” said Gordon Segal, who chairs the educational properties committee of Northwestern’s Board of Trustees.

The building will be adjacent to and connected on a floor-by-floor basis with the Robert H. Lurie Medical Research Center.

“The generator from day one was the lab plan for the building. It wasn’t creating a sculpture and fitting in the plan. It’s all about the research and the labs and that’s the generator of the idea,” said Ralph Johnson, design director of Perkins+Will. “When you do that, the shape of the building starts to happen.”

The new research pavilion will anchor the University’s research facilities and be the hub of a world-class research and development enterprise that attracts innovation and entrepreneurship. Thousands of jobs will be created during the construction of the new state-of-the-art center that will help find tomorrow’s cures and generate approximately \$3.9 billion in economic activity in Chicago in the coming decade.

“Perkins+Will has designed a building that will be both very

functional and will also have great internal spaces that will encourage collaboration among our researchers. It will support our research mission and will help us attract the best faculty in the country,” said Eric Neilson, MD, Northwestern’s vice president for medical affairs and the Lewis Landsberg Dean of the Feinberg School of Medicine.

Three finalists were chosen in the University’s design competition for the new facility. These architectural firms included:

- » Goettsch Partners, Chicago, and Ballinger, Philadelphia
- » Perkins + Will, Chicago
- » Adrian Smith + Gordon Gill Architecture, Chicago, and Payette, Boston

The public was invited to review the architects’ renderings, floor plans and models on display on the Chicago campus from Nov. 7 to 12 and comment on the designs. The winning design was announced December 6.

12 NORTHWESTERN MEDICINE MAGAZINE

WINTER 2013-14 13

New health system focuses on providing better care throughout all facilities.

WRITTEN BY: Cheryl SooHoo
PHOTOGRAPHY BY: Bruce Powell

Quality *is* JOB ONE

JAMES ADAMS, MD, CHAIR OF EMERGENCY MEDICINE AND CHIEF MEDICAL OFFICER FOR NORTHWESTERN MEDICINE, STILL TAKES ON SHIFTS IN THE EMERGENCY DEPARTMENT TO STAY CLOSE TO PATIENTS.

Paramedics used to routinely ignore do-not-resuscitate (DNR) orders for seriously ill or dying patients despite the protestations of family members. Even though end-of-life directives had been in place since the 1970s, they fell into a grey area outside hospital settings. In fact, a lack of legal clarity surrounding DNRs actually prevented, by each state's policy, emergency medical services (EMS) professionals from honoring them. This ethical dilemma, in part driven by a flaw in the system of care, did not serve either patient or care provider well.

So in 1992, James Adams, MD, current professor and chair of the Department of Emergency Medicine at Northwestern University Feinberg School of Medicine, conducted a state-by-state study investigating the application of DNRs in nonhospital environments. This work helped clarify the national picture, improve quality of care by expanding the scope of DNRs through legislation, and gave him keen insight into the power of enhancing systems to achieve the

best patient outcomes. This early-career experience set him on a course to focus on healthcare systems to improve quality. It has also made him uniquely qualified as the newly appointed chief medical officer (CMO) for Northwestern Medicine. His goal: To do everything better to ensure the highest quality of care.

"We can trust that the current standard of care delivered at Northwestern is the best that has ever been provided, but that's not good enough," says Dr. Adams, who has headed emergency medicine since 2000 and led its transformation from a division to a department of medicine in 2004. "This is an exciting time. We have the rare opportunity to create a high-quality, patient-centered, science-driven enterprise—Northwestern Medicine. Few institutions in the world are equipped to make the next research discoveries leading to improved therapies and apply them in one coherent healthcare organization, and we will be one of them."

ALL TOGETHER NOW

On September 1, 2013, the Northwestern Medicine partnership that was forged in 2009 between the Feinberg School of Medicine and Northwestern Memorial HealthCare (NMHC) took an important step forward. On that day, an aligned health system, called Northwestern Medical Group (NMG), was formed when the school-affiliated Northwestern Medical Faculty Foundation (NMFF) joined the Northwestern Memorial Physicians Group. With this union, NMG counts itself among one of Chicago’s largest medical practices, with more than 1,000 physicians and other healthcare professionals. As Northwestern Medicine CMO, Adams and other leaders will put in place cohesive systems and structure to ensure that this aligned organization provides optimal care, from the outpatient to the acute-care settings.

FORMATION GROUPS

- » Ambulatory Patient Experience
- » Clinical Growth
- » Quality
- » Value-Based Delivery System

- » Finance
- » Health System Optimization
- » Physician Compensation, Benefits and Incentives
- » Technology Implementation and Future Strategy

- » Communication
- » Culture
- » Leadership Development
- » Special Projects

While cultural clashes might seem inevitable when bringing together what were once longstanding independent practice groups, Dr. Adams has no worries. “The health system formation is not about a trade-off of values,” he says. “The culture is really already here to amplify and prioritize what we want and need to do to provide better patient experiences.”

Combining the clinical enterprise into one system follows the Northwestern Medicine strategic plan that was unveiled four years ago. The melding of the practice groups only further solidifies the common vision of the medical school and its affiliates moving forward. “The alignment is about becoming greater than we were as separate entities by improving quality, reducing inefficiency, and expanding the care we provide,” says Peter McCanna, named executive vice president and chief operating officer of Northwestern Medicine in September. “By forming a single health system, we truly believe one plus one can equal three, four, or even five.”

Formerly Northwestern Memorial’s chief financial officer, McCanna will now help to ensure that all divisions and affiliates operate at optimal performance: achieving patient satisfaction, employee engagement, reliability, and efficiency goals; and that Northwestern Medicine meets the challenges and opportunities of healthcare reform and other future trends.

SITTING ROOM ALWAYS

Deeply entrenched in the high-adrenaline environment of the emergency department (ED), Dr. Adams doesn’t need to theorize about the pressures of those who provide and receive care. He’s seen the chaos that can ensue when staff is short on time and patients wait in sometimes noisy and crowded conditions. At the frontlines of care, he has also benefited from process improvements. It’s this perspective that energizes other Northwestern Medicine leaders involved in the clinical formation.

“He’s not just an ivory tower thinker—he knows how to get the job done,” says Julie Creamer, senior vice president, Northwestern Memorial HealthCare. “And that’s a rare combination of skills.”

Leading a number of transition activities for the new clinical enterprise, Creamer will work closely with Adams as the alignment process initially zeroes in on quality, culture and technology implementation. In October, Northwestern Medicine created 12 formation teams that will get to the nuts and bolts of becoming a

coordinated system. Key content areas range from the ambulatory patient experience and clinical growth to communications and finance. Corporate-level functions have also been combined to create consistency across the entire health system; for example, Creamer will oversee a Business and Corporate Development group.

Creamer has significant experience managing complex initiatives for Northwestern Medicine. She co-led the development of the strategic plan and its implementation through annual shared goals between the medical school and NMHC. “Tapping into diverse expertise across campus has been key to our success,” she says. “Hundreds of individuals have participated in the strategies and goals, and we will replicate this approach as we form the health system. The talent and energy of the Northwestern community is an incredible asset, and together we will continue to achieve important outcomes.”

In his own sphere of influence, Dr. Adams has looked for ways to change processes to deliver excellent care. For him and those who follow his lead in the ED, listening to patients is essential to that mission. “Listening can improve the diagnosis, which can help us, for example, avoid unnecessary testing,” he explains. “Also, informed patients are happier patients who know what to expect and are better able to participate in their own care.”

However, giving patients the opportunity to speak requires a system that allows time for physicians to have this type of interaction. If achieving productivity levels gets in the way of delivering patient-centered care, then perhaps efficiencies need to be adopted, according to Adams.

“It’s important to make sure the right tools are in place to achieve what you value as an organization,” he says. “In the ED, we make it a priority to listen to our patients by physically sitting down in the exam room. At the most basic level that may mean making sure there is a chair to sit on.”

In practice, quantifying quality that drives patient outcomes will result from collecting lots of data. Adams plans to use national care metrics, scientific

evidence-based findings, and internal processes to develop standards to raise the quality bar. The ongoing feedback of patients, nurses, physicians and others involved in the clinical enterprise will provide reality checks.



JAMES ADAMS, MD, JULIE CREAMER, PETE MCANNA, AND DAVID MAHVI, MD, ARE MANAGING VARIOUS ASPECTS OF THE HEALTH SYSTEM ALIGNMENT.

CULTURAL MIX

A primary care physician receives the results of a patient’s test: blood in the urine. Is it a contaminant? Repeat the test? Order a CAT scan? Involve a urologist? Which one? Today, these questions may arise for doctors practicing within the recently formed Northwestern Medical Group. In the future, as the health system alignment ramps up, quality systems will be implemented that will yield a much more efficient, best-of-care scenario. Based on quality models, that same physician might be advised to order a CAT scan and refer the patient to a specific clinic where an urologist who subspecializes in such abnormalities can quickly address the problem. At least, that’s what David Mahvi, MD, James R. Hines Professor of Surgery and chief of gastrointestinal and oncologic surgery, envisions in his new role as NMG president.

“Throughout all the practice groups, there was a bit of dis-coordination of services. It wasn’t always easy to figure out who at NMFF, for example, might be the perfect specialist for your patient’s situation or which hospital you should send your patient to for treatment,” says Dr. Mahvi. “The clinical alignment will allow us to better coordinate care and grow our entire enterprise.”

His passion for healthcare system development as well active leadership with NMFF made Mahvi the right candidate to lead the

NMG. Now with one practice group on the same “best patient experience page,” the work begins for him and other system leaders to encourage everyone to think about quality. From his experience helping to integrate Lake Forest Hospital’s surgeons and surgical services into the Northwestern Medicine family in 2010, Mahvi learned an important lesson. “As long as our missions are aligned, everything works out great.”

“He’s not an ivory tower thinker—he knows how to get the job done.”

At the end of the day, being at the top of industry performance will offer patients the latest diagnostic and treatment options. Examining inefficiencies and duplicated services will lead to more cost-effective, value-based care. (Already the wheels are in motion to implement one electronic medical records system, EPIC, in the ambulatory setting, which will allow for patients to receive one bill and facilitate communication among clinical care teams.) And truly listening to those who seek health services—from the routine checkup to the latest therapy for a complicated condition—will focus all clinical efforts toward patient-centered care.

But Dr. Adams wants to take this vision even further, delivering service to patients and humankind. “At Northwestern Medicine, we need to go beyond how we see ourselves in the everyday care of our patients, which is still vitally important and valued,” he says, “to becoming a place where individuals with complicated diseases turn to for hope that is real and accessible.”



PATIENT BEHIND

Dimitri Krainc and Andrew Parsa had only heard of each other before they came to Northwestern Medicine. Now they share a vision as new leaders for the academic and clinical missions in neurology and neurosurgery.

WRITTEN BY: Martha O'Connell
PHOTOGRAPHY BY: Bruce Powell

With global acclaim, both men had other options before them, but came to Northwestern because the medical school and hospital share their drive to provide the best possible care. They emphasize that they really do come to work thinking about every patient—from people with common to rare disorders—whose only hope rests on novel thinkers who advocate for them and find treatments.

Dimitri Krainc, MD, PhD, is the new chair of the Ken and Ruth Davee Department of Neurology and Aaron Montgomery Ward Professor. Andrew Parsa, MD, PhD, chairs the Department of Neurological Surgery and is the Michael J. Marchese Professor. However, they think beyond Northwestern's walls to improve care for patients throughout the world.

They are well aware that exemplary professionals made their departments among the top in the nation, well before they arrived at Northwestern. Both men say they want to give their people optimal conditions and support to move forward in research, student/resident education and patient care. Increasing collaboration between disease specialists and surgeons to find new therapies is one of the key initiatives they started at the Feinberg School of Medicine.

"We will expand our portfolio for research and patient care," Dr. Krainc insists. "We will also focus on incurable diseases that have proven especially challenging from the standpoint of drug development. We owe this to our patients and their families."



DRS. ANDREW PARSA AND DIMITRI KRAINC UNDERSTAND THE IMPORTANCE OF NEUROLOGISTS AND NEUROSURGEONS WORKING TOGETHER TO SOLVE NEUROLOGICAL DISEASES.

AN INTERNATIONAL OUTLOOK

It would seem that Krainc was at the top of his game after 21 years at Harvard Medical School, where he achieved international prominence in the field of neurodegenerative diseases. A native of Slovenia, he completed his research and clinical training, including residency and fellowship, at Massachusetts General and Brigham and Women’s hospitals. As a Harvard faculty member, he continued as a practicing neurologist at Massachusetts General, where he was named a 2013 Research Scholar and given five years of

unrestricted funding to pursue projects that may lead to unexpected discoveries. He loved Boston and the smart people there who pushed him to his full potential as a physician-scientist; however, Northwestern presented an option to lead one of the nation’s top neurology departments and collaborate with experts throughout the University. (Even before he officially started at Northwestern, Dr. Krainc began partnering with faculty from the Robert R. McCormick School of Engineering and Applied Science and Richard Silverman, PhD, from the Weinberg College of Arts and Sciences, who developed the chemical marketed as the drug Lyrica.) Since traditional drug development in neurology has stalled, Krainc says the opportunity to work with experts in nanotechnology, medicinal chemistry, and biomedical

engineering was extremely important to him in order to use novel technologies to discover therapies for devastating diseases such as Parkinson’s, Huntington’s, ALS, and Alzheimer’s. “Northwestern Medicine is one of the few places in the country that has an upward trajectory in these challenging times for healthcare,” Krainc says. “That was very appealing to me. It is a combination of visionary leadership and a good business model, along with recent changes that enable the seamless integration of clinical care with biomedical research.” Dr. Krainc maintains strong European connections, supported by his global research partnerships and multi-lingual background. As part of education programs at Harvard Medical International, he participated in the development of medical education curricula and faculty training programs around the world.

He says the experience taught him to “listen first to understand their approach and their culture, then try to help” a credo he operates by to this day. “As a father of two wonderful teenage daughters, Talia and Maya, I have learned once again that listening is preferred to unsolicited advice,” he adds.

HIT THE GROUND RUNNING

In his laboratory, Krainc investigates neurodegenerative diseases and is distressed by pharmaceutical companies downsizing or eliminating neuroscience programs because they are difficult business models. Meanwhile, the number of people with Alzheimer’s disease, the most common form of dementia, is expected to dramatically increase in the next decade, creating a major problem to care for these patients.

“You have some pharmaceutical companies bailing out, but patients are not bailing out. They want treatments now more than ever,” he says. “As part of an academic medical center, I feel that we should step up and take the lead, increasing our efforts to find cures for these terrible diseases. We should also advocate for more collaborations between academic centers, NIH and industry to mobilize all available resources.”

As part of this vision, Krainc will establish a Center for Rare Neurological Diseases, bringing together scientists and physicians to find targeted therapies by exploring links between rare and common disorders. He and others have observed that children who suffer from rare genetic

disorders exhibit brain tissue pathologies resembling those found in common neurodegenerative diseases. Studying these similarities is essential for drug development. If investigations are successful, efforts could lead to treatments for rare conditions like neuronopathic Gaucher’s disease, an often fatal children’s disorder caused by an enzyme deficiency, and common diseases such as Parkinson’s, in which the loss of dopamine cells in the brain affects the adult nervous system. Specifically, Krainc is studying brain pathology in children afflicted with rare genetic forms of diseases involving

center under the supervision of Shyam Prabhakaran, MD, associate professor of neurology. Supported by a \$2 million NIH grant, the consortium facilitates participation in national clinical trials for stroke prevention, treatment and recovery and fosters home-grown trials. In one initiative, PI Andrew Naidech, MD, MSPH, associate professor and medical director of the ICU, and his team proposes a clinical trial this spring for the drug desmopressin to control acute intracranial hemorrhage, an extremely debilitating stroke caused by a blood vessel rupture in the skull. No FDA-approved therapy exists to treat it.

I feel that we should step up and take the lead, increasing our efforts to find cures for these terrible diseases.

lysosomes, the “recycling centers” that rid cells of toxins and debris. When lysosomes weaken due to enzyme deficiency, nerve cells are unable to recycle correctly and brain function diminishes. A substantial portion of his research focuses on pinpointing methods to reactivate the enzyme, which could result in the first targeted therapy for these disorders, both in children and adults.

“This approach is different because we are focusing on the molecular targets that have already been validated in patients with rare and common disorders,” he explains. “Using specific drugs, we are trying to activate these targets and measure molecular activity to see what works. This strategy will hopefully lead to less expensive clinical trials because we will quickly determine which drugs are effective.”

Collaborating with teams of fellow neurologists and neurosurgeons, Krainc, with assistance from Parsa, has already enhanced care and laid the groundwork to improve treatment for stroke patients.

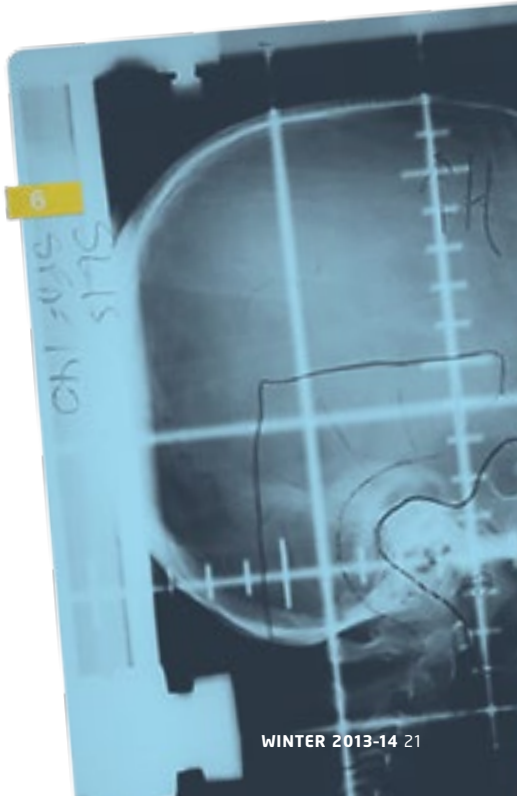
Physicians from seven Chicago-area hospitals recently formed the Chicago Stroke Trials Consortium, with Northwestern Medicine as the regional coordinating

INNOVATIVE TEACHING

At Northwestern, Krainc is a mentor on several fronts, including grantsmanship strategies, and back-to-basics education and patient care. A scientist with diversified public and private funding, he encourages faculty to develop projects that also appeal to private investors.



FROM RIGHT TO LEFT: DIMITRI KRAINC, MD, WITH WIFE MILLIE AND DAUGHTERS TALIA, 14, AND MAYA, 12, AT HIS INVESTITURE.



“Many people are interested in contributing to research, but they are looking for innovative strategies. Philanthropists are very sophisticated and they do not appreciate approaches that have not

technology that does not always enhance patient care. He wants to refocus students on adept examination and diagnostic skills, and strong doctor-patient bonds.
“Students and residents tend to rely too



AS CHAIR, DR. KRAINC DIVIDES HIS TIME BETWEEN THE CLINICAL AND RESEARCH ENVIRONMENTS. HERE HE CHECKS IN WITH RESEARCH FELLOW LENA BURBULLA IN THE LAB.

worked in the past. They want novel solutions for patients at all levels, from basic science to clinical care,” he says.
For some, technology defines progress, but Krainc is exasperated by too much

much on technology and have less and less time to talk with patients!” he says. “I want to promote fundamental knowledge that brings doctors back to the patient’s bedside.”

INDEFATIGABLE SURGEON-SCIENTIST

Dr. Parsa’s management style is highly personal: he prefers face-to-face meetings rather than emails, and constantly acknowledges the good efforts of colleagues and staff. He prides himself on knowing the names of everyone he works with—from the security guards in his office building to the entire OR staff. He gives his cell phone number to patients so they can reach him if conventional channels fail. He’s at Northwestern Memorial Hospital (NMH) seven days a week and even takes his daughters Julia and Micheline, 9, and son, Ismail, 6, on rounds to meet his patients and staff because he believes everyone benefits.
Prior to joining Northwestern, Parsa was professor and vice chair in the department of neurological surgery at the University of California, San Francisco (UCSF).
“Coming here was an outstanding

opportunity to grow a department that was already clinically excellent. When I looked at metrics such as patient volumes, growth capacity, research infrastructure and administrative support, there really was no place like Northwestern,” he says.
When it comes to top U.S. training programs and busy medical centers, Parsa has seen plenty. He earned his bachelor’s degree at Yale College in molecular biophysics and biochemistry. He returned to his birthplace, Brooklyn, for his medical degree and doctorate in immunology and cell biology from SUNY Downstate Medical Center, working at Kings County Hospital Center, one of the nation’s largest county hospitals.
During his residency at Columbia University, he met his wife, Charlotte Shum, MD, who was appointed associate professor of orthopaedic surgery at Feinberg last fall. She was a hand and upper extremity specialist for more than a decade at Permanente Medical Group in Oakland, Calif.
Building on his ideas from UCSF and empowering Feinberg specialists to move forward, Parsa is intensifying collaboration between surgeons and neurologists to enhance care.

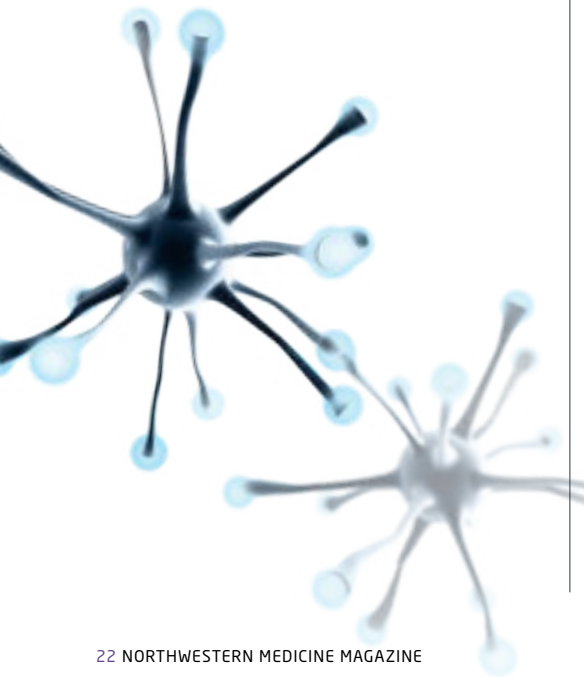


AS HE DOES DURING EVERY FACULTY INVESTITURE, DEAN ERIC NEILSON PLACES THE HONORARY MEDALLION AROUND DR. ANDREW PARSA’S NECK.

For instance, he supported expansion of the Telestroke program to remote Chicago-area hospitals outside the NMH network.

(The network includes Chicago and Lake Forest hospitals and a free-standing emergency room in Grayslake.) Telestroke rapidly connects these institutions with NMH neurologists and neurosurgeons via the Internet for time-critical stroke assessment and treatment guidance, which are essential to prevent patients from becoming disabled. If needed, patients can be transferred to an NMH hospital. Richard Bernstein, MD, PhD, professor of neurology and director of the Stroke and Telestroke program, implemented the program last fall at Norwegian American Hospital on Chicago’s West Side and at Northwest Community Hospital in suburban Arlington Heights this spring. Other locations are being considered.
In another neurology-neurosurgery initiative, Dr. Parsa is working to increase use of stereotactic electroencephalography (EEG) procedures to pinpoint causes and locations of brain seizures. Stereotactic EEG is a potentially less-invasive and more precise method than traditional approaches to assess patients with epilepsy.
SWEATING THE SMALL STUFF
Since 2002, Parsa’s laboratory has focused on understanding how the immune system can be used to fight brain cancer. He is study chair for the largest randomized brain tumor vaccine trial ever funded by the National Cancer Institute. Coordinators plan to enroll more than 200 patients with recurrent glioblastoma that can be surgically removed. A vaccine made from the patient’s tumor is administered to induce an immune response that kills remaining tumor cells and extends survival.
The Phase II data supporting clinical trial was recently published in the journal Neuro-Oncology. Parsa plans to meet with the FDA in early 2014 to discuss the ongoing trials and submission requirements for drug approval.
“It has been 10 years since I started this, and my goal has always been to take it as far as I could,” he explains. “Moving something from the experimental phase to a standard of care is a complicated process that requires multiple teams of devoted scientists and clinicians. We are doing everything we can to facilitate approval of

HUMAN NEURONS DERIVED FROM SKIN FIBROBLASTS OF A PATIENT WITH PARKINSON’S DISEASE ARE USED TO EXAMINE DISEASE MECHANISMS AND TEST POTENTIAL NEW THERAPIES.





this drug, which has shown promising results to date."

His outlook that no patient should be forgotten drives him to seek better treatments for rare types of brain tumors, particularly understudied skull base tumors. Usually benign, these tumors located behind the eyes, nose and ears press on nerves and blood vessels, destroying body functions. Accessing and

WORK AND FAMILY LIFE INTERTWINE IN DR. PARSA'S WORLD. SON ISMAIL, 7, AND TWINS JULIA AND MICHELINE, 9, JOIN THEIR FATHER ON WEEKEND ROUNDS, MEETING PATIENT JULIE OLSON.

AN IMPERFECT LEADER

Parsa has one candid message to his trainees and neurosurgical colleagues: "I have made plenty of mistakes."

He believes one of the most important things a chair can do is to share his or her

to mold students and residents in his image. He seeks to understand what motivates them about neurosurgery and steers them to that interest.

"My philosophy for my residents is basically this: Tell me where you want to be in 10 years and we'll get you there in a way that makes us very proud of what you do."

STAYING ON TOP

Drs. Krainc and Parsa are quick to say that neurological diseases cannot be solved unless neurologists and neurosurgeons work well together. And the chairs are resolute about maintaining Northwestern Medicine's position among the nation's top neurology and neurosurgery programs.

"If I have one clear message, it is that I am very patient-oriented and that's what gets me up every morning," Krainc says. "I want the best delivery of care, I want top-notch research. We should have a sense of innovation and collaboration. If we do all of these things, we have fulfilled our promise to the people we care for."

As an in-demand surgeon who leads a high-powered department, a father of three young children, and a scientist, Parsa continues full-speed ahead with an unwavering focus.

"I don't see much separation between my work and my family. My work is one continuous stream of people I care about," he says. "I have been going this way since I was a resident in 1996. I don't know any other way to do it than to be fully involved on both sides." **M**

Moving something from the experimental phase to a standard of care is a complicated process that requires multiple teams of devoted scientists and clinicians.

surgically resecting them can be challenging. Parsa is pursuing an adaptive hybrid approach combining radiation with resection to minimize disease and maximize tumor control.

"I see many patients from all over the world with skull base tumors, and I think there is a great opportunity to develop a better understanding about the different pathophysiologies, the best treatments, and the best management paradigms. It is important not to treat all tumors with one approach of only radiation or only aggressive surgical resection; the complications of the latter can be devastating," he says.

In spring 2014, Parsa will be a lead PI in a multi-center trial for adaptive hybrid surgery using software that helps surgeons determine how much tumor they have removed and identify optimal radiation targets for what remains.

errors so others don't repeat them.

Among his prime lessons: Don't take on too much, too soon before infrastructure is set up. "Otherwise, what happens is that you do everything in an average way but not as well as you would like to. With so many great things going on at Northwestern, it is tempting to take on too much."

His frank communication style earned him many teaching awards at UCSF. He was twice awarded the Harold Rosegay Resident Teaching Award in the department of neurological surgery. In 2010, he was named Mentor of the Year for the medical school. He continues to take pride in mentoring, and speaks weekly with former residents and students.

However, he is not dogmatic about what his trainees should do in neurosurgery. As someone who performs about 300 surgeries annually while conducting research and clinical trials, he does not try



WRITTEN BY: Sarah Plumridge & Michele Weber
OPENING PHOTO BY: Randy Belice

SPOTLIGHT ON

2013

ACCOMPLISHMENTS

WHIRLWIND OF ACTIVITY CONTINUES

During Dean Eric Neilson's second full year as leader of the medical school, he continued to oversee progress on a number of different fronts. From the commitment of Northwestern Medicine entities to donate \$1 billion to research at the University to the selection of an architectural firm to design the new biomedical research pavilion on the Chicago campus (see pages 12 and 13), in addition to many other education, clinical and research activities, the past year showcased an outstanding time of growth and success at the Feinberg School of Medicine.

"The medical school had an exceptional year in 2013," said Eric G. Neilson, MD, vice president for medical affairs and Lewis Landsberg Dean. "We enhanced the strength of the Northwestern Medicine brand by integrating our clinical organization, established a number of innovative institutions and centers, made great strides in medical science and recruited more high-quality faculty. I anticipate another year of groundbreaking research, institutional growth and academic excellence as we begin 2014."

NEW CENTERS/ INSTITUTES LAUNCHED

INSTITUTE WILL BOOST FIRST-IN- HUMAN AND EARLY-PHASE STUDIES FOR CANCER PATIENTS



Northwestern University established a major new initiative in May, the Developmental Therapeutics Institute, with an initial \$10 million investment. Led by Frank Giles, MD, the institute brings more early-stage clinical studies of new anti-cancer approaches to Chicago. This program aims to develop much needed new therapies for cancer and other diseases based on Northwestern's preclinical and translational research.

LEADERSHIP/ ALUMNI APPOINTMENTS

CLEMENTS TO CHAIR FAMILY AND COMMUNITY MEDICINE

In February it was announced that Deborah Clements, MD, nationally recognized for her contributions to education policy, was joining Feinberg as a professor and chair of the



health. "The CCH offers a bold new vision for engagement that will enable Northwestern to emerge rapidly as a national epicenter for research that improves the health and healthcare of Chicago and beyond," said center director Ronald Ackermann, MD, MPH.



ACCLAIMED SURGEONS TO JOIN FEINBERG

Andrew T. Parsa, MD, PhD, an internationally renowned neurosurgeon specializing in complex tumors of the brain and spine, was named chair of the Department of Neurological Surgery. His wife, Charlotte Shum, MD, a hand and upper extremity specialist, was named associate professor of orthopaedic surgery. (See feature on pages 18 - 24.)

DISEASE SPECIALIST TO HEAD NEUROLOGY

Dimitri Krainc, MD, PhD, a distinguished investigator who has had an impact in the area of neurodegenerative diseases, was named chair of the Ken and Ruth Davee Department of Neurology and director of the newly established Center for Rare Neurological Diseases. (See feature on pages 18 - 24.)



PANDOLFINO APPOINTED CHIEF OF GASTROENTEROLOGY AND HEPATOLOGY

In September, John E. Pandolfino, MD, professor of Medicine, was appointed the Hans Popper Professor and chief of Gastroenterology-Hepatology. An internationally recognized gastroenterologist, Dr. Pandolfino specializes in esophageal disorders. (See page 7 for details.)

ION CHANNEL EXPERT TO HEAD PHARMACOLOGY

In October, Alfred L. George Jr., MD, an internationally regarded leader of diseases caused by the dysfunction of ion channels, was named the Magerstadt Professor of Pharmacology and chair of the Department of Pharmacology, effective March 2014. (See page 6 for details.)

Department of Family and Community Medicine. In this role, she leads the department in the creation of clinical and educational programs that will impact primary care nationally, including the development of a new Family Medicine residency program at Northwestern Lake Forest Hospital.

IPHAM LAUNCHES CENTER FOR COMMUNITY HEALTH

As one of eight centers in the Institute for Public Health and Medicine, the Center for Community Health facilitates multi-disciplinary, partnered efforts to envision and investigate a frontier of medicine that integrates public policy and population



HANAUER TO HEAD DIGESTIVE DISEASE CENTER

In November it was announced that Stephen B. Hanauer, MD, a distinguished physician-scientist and international leader in the treatment of inflammatory bowel disease, would join the medical school as medical director of the Digestive Disease Center. (See page 6 for details.)



LUSHNIAK NAMED ACTING SURGEON GENERAL

Alumnus Boris Lushniak, MD '83, MPH, became "The Nation's Doctor" in July, accepting the role of acting surgeon general following the departure of Vice Admiral Regina Benjamin, MD, MBA. In his new position, Rear Admiral Lushniak provides citizens with the best scientific information available on how to improve their health. He also oversees the operations of the U.S. Public Health Service Commissioned Corps, the 6,700 uniformed health officers who serve around the world.

STATE & NATIONAL RANKINGS

LATEST RANKINGS KEEP FEINBERG AMONG ELITE MEDICAL SCHOOLS

The medical school strengthened its position among the top research-oriented



institutions, while maintaining its spot at No. 18 on the 2014 *U.S. News & World Report* rankings. Among specialty rankings, women's health is 11th, and AIDS and pediatrics are both 14th.

NORTHWESTERN MEMORIAL CLIMBS ON BEST HOSPITALS LIST

Northwestern Memorial Hospital climbed six places to land at No. 6 as part of *U.S. News & World Report's* Best Hospitals 2013-14 Honor Roll. It was the only hospital in Illinois to make the list. NMH was also recognized for its high performance in 14 of 16 medical specialties.

MEDICAL EDUCATION/ TRAINING

HONORS DAY TRADITION BEGUN AT FEINBERG



Honors Day was created to recognize outstanding faculty and students. Seventeen awards were presented to students and faculty at the inaugural event in May.

FIRST-YEAR MEDICAL STUDENTS ARRIVE, JUMP INTO CLINICAL EXPERIENCES

In August, the Class of 2017 arrived on campus and before entering the classroom, learned about the curriculum, interviewed patients and shadowed healthcare professionals during the Introduction to the Profession Module. At week's end, they attended the Feinberg Student-Faculty Dinner, to meet the professors and administrators they will be interacting with over the next four years.



SCHOLARSHIP GIVING

Nearly 1,100 friends of Feinberg donated more than \$4.03 million in fiscal year 2013 for medical student scholarships. Of the total, nearly \$974,000 was provided for current-use scholarships and more than \$3.06 million for endowed funds. Seventeen new endowed scholarships were added. In 2013, Dean Neilson announced his vision for "A Tuition-free Medical School," to enable the very best candidates with diverse backgrounds and experiences to attend Feinberg without the burden of tuition. Over time, this will require \$600 million in additional endowment funds.

TALENTED GROUP OF NEW PHD STUDENTS ARRIVES ON CAMPUS



More than 70 PhD students arrived on the Chicago campus to join the Driskill Graduate Program in the Life Sciences, Northwestern University Interdepartmental Neuroscience Program, Medical Scientist Training Program, Clinical Psychiatry PhD program, Doctor of Physical Therapy/PhD program, and the Health Sciences Integrated PhD Program.

MAJOR FACULTY ACHIEVEMENTS

FACULTY ELECTED TO PRESTIGIOUS SOCIETIES AT JOINT MEETING

In May, Xunrong Luo, MD, PhD, associate professor in Nephrology, Microbiology-Immunology and Surgery-Organ transplantation; Gokhan M. Mutlu, MD, associate professor in Medicine-Pulmonary; and Puneet Opal, MD, PhD, associate professor in Neurology and Cell and Molecular Biology, joined the more than 3,000 physician-scientists elected to the

American Society for Clinical Investigation. Susan Quaggin, MD, Charles Horace Mayo Professor of Medicine, director of the Feinberg Cardiovascular Research Institute and chief of the Division of Medicine-Nephrology, joined more than 1,200 active members in the Association of American Physicians.

NARAHASHI, FOUNDED FATHER OF MODERN PHARMACOLOGY, REMEMBERED FOR SIX DECADES OF RESEARCH



Known as a leader in neurotoxicology and the father of cellular neuropharmacology, Toshio Narahashi, PhD, John Evans Professor of Pharmacology, was remembered for his dedication to mentoring, scientific accomplishments and well-developed sense of humor. Narahashi joined Feinberg in 1977, assuming the chairmanship of the Department of Molecular Pharmacology and Biological Chemistry. During 17 years in this role, he elevated the department to one of the most active in the country.

AFFILIATE NEWS

FEINBERG, RIC ANNOUNCE EXPANDED COLLABORATION



A new agreement between the medical school and the Rehabilitation Institute of Chicago (RIC) establishes the RIC as the clinical venue for Department of Physical Therapy and Human Movement Sciences faculty, expands clinical education experiences for students, creates a joint Northwestern-RIC physical therapy residency program and allows Feinberg

and RIC researchers the ability to better pursue investigative questions and develop innovative science-based devices, technologies and treatments.

CLINICAL OPERATIONS COMPLETE INTEGRATION AGREEMENT



In March, the various hospital- and medical school-affiliated as well as associated private physician practices announced plans to integrate their clinical operations under one unified organization and branded as Northwestern Medicine. In September, the primary faculty practice for Feinberg, Northwestern Medical Faculty Foundation, officially joined Northwestern Memorial Physician's Group and Chicago Lakeshore Medical Associates to form Northwestern Medical Group, one of Chicago's largest medical practices, with more than 1,000 physicians and other healthcare professionals. The health system will be able to better organize care across the inpatient, diagnostic and physician office environments. "Integrating our clinical organizations will allow us to maximize resources to support bold new endeavors in treatment, research and academic pursuits," said Eric G. Neilson, MD, vice president of Medical Affairs and dean of Feinberg, who chairs the NMG Board of Directors.

RIC BREAKS GROUND ON NEW REHABILITATION HOSPITAL
On July 1, RIC broke ground for a \$550

million research hospital to be called the Ability Institute of RIC. Central to the new 1.2-million-square-foot facility, which is projected to open in early 2017 two blocks south of its current location, will be five Innovation Centers that leverage core expertise in brain, spinal cord, neuro-musculoskeletal, pediatric and cancer research and recovery. The hospital will have 242 beds with 900,000 square feet dedicated to clinical and research programs.

SIGNIFICANT RESEARCH AWARDS/ DISCOVERIES

NEW METHOD FIRST TO PREDICT BRAIN CANCER OUTCOME

In January, Northwestern Medicine researchers developed a new method to predict an individual patient's brain tumor growth. This tool could be used by physicians to quickly identify how well a tumor responds to a particular therapy. Senior author Kristin Swanson, PhD, professor and vice chair of research for Neurological Surgery, said the method will advance brain tumor treatment by helping to optimize treatment plans on a patient-by-patient basis.

USING GOLDEN NANOPARTICLES TO KILL LYMPHOMA WITHOUT CHEMOTHERAPY

A new study by C. Shad Thaxton, MD, assistant professor in urology, and Leo

Gordon, MD, Abby and John Friend Professor of Oncology Research, showed that synthetic HDL nanoparticles killed B-cell lymphoma, the most common form of the disease, in cultured human cells and inhibited human B-cell lymphoma tumor growth in mice. The study was published in the journal *Proceedings of the National Academy of Sciences*.

NORTHWESTERN MEDICINE TO INVEST \$1B IN RESEARCH



Leaders of Northwestern Medicine made a commitment of more than \$1 billion toward creating a leading medical research enterprise on Northwestern University's Chicago campus. Constructing additional research space and attracting top scientists to Northwestern will create more opportunities to discover breakthroughs in such areas as neuroscience, heart disease, diabetes and cancer.

NEW CHEMO DRUG FOUND TO BE GENTLER ON FERTILITY, TOUGH ON CANCER



In March, Northwestern Medicine scientists developed a new, gentler chemotherapy drug that is less toxic to fertility. Consisting of nanoparticles, this is the first cancer drug tested while in development for its effect on fertility using a novel in vitro test. "Our overall goal is to create smart drugs that kill the cancer but don't cause sterility in young women," said Teresa Woodruff, PhD, a co-principal investigator of the study and chief of Fertility Preservation.

BUILDING A HUMAN KIDNEY

Within the next few decades, getting a new kidney could be as simple as having a doctor order an engineered organ that will be developed with a patient's own cells. In April, international experts gathered at Feinberg for a brainstorming session on kidney regeneration. The conference, "Building a Kidney: From Stem Cells to Organ," was sponsored by Northwestern University, the Simpson-Querrey Center for Regenerative Nanomedicine at IBNAM and Cellular Dynamics International.

PROMISING NEW ALZHEIMER'S 'DRUG' HALTS MEMORY LOSS

A new class of experimental, drug-like small molecules showed great promise in targeting a brain enzyme to prevent early memory loss in Alzheimer's disease. Developed in the laboratory of D. Martin Watterson, PhD, John G. Searle Professor of Molecular Biology and Biochemistry, the molecules halted memory loss and fixed damaged communication among brain cells in a mouse model.

NORTHWESTERN PART OF NEW BIG TEN CANCER RESEARCH CONSORTIUM

Meant to transform cancer research, a group of 11 schools formed a collaboration to leverage the scientific and clinical expertise of individual institutions. Newly developed clinical trials will be linked to molecular diagnostics, enabling researchers to understand what drives and what might be done to stop cancer growth. The consortium will also leverage geographical locations and existing relationships among cancer centers.

STUDY SHOWS POSITIVE RESULTS FOR NEW MS THERAPY



A phase 1 clinical trial for the first treatment to reset the immune system of multiple sclerosis patients showed that the therapy was safe and dramatically reduced immune system reactivity to myelin by 50 to 75 percent, according to co-senior author Stephen Miller, PhD, the Judy Gugenheim

Research Professor of Microbiology-Immunology.

NEW TEST MAY HELP REVEAL EARLY-ONSET DEMENTIA

Simple tests that measure the ability to recognize individuals such as Albert Einstein, Bill Gates or Oprah Winfrey may help doctors identify early dementia in those 40 to 65 years of age. The study, published in the August issue of *Neurology*, was conducted by lead author Tamar Gefen, a doctoral candidate in neuropsychology at the Cognitive Neurology and Alzheimer's Disease Center.



NORTHWESTERN JOINS CONSORTIUM TO DEVELOP WAYS TO TREAT MACULAR DEGENERATION

Northwestern University scientists became part of a multi-institutional, interdisciplinary consortium that aims to develop new treatments for exudative age-related macular degeneration (AMD). Awarded a \$6.2 million grant over five years from the National Eye Institute, the consortium will leverage its diverse scientific expertise to characterize and test novel therapies in animal models using cutting-edge approaches that combine signal transduction and physiology, chemistry, nanoparticles and novel imaging technology.

OVERHAULING CONFUSING PRESCRIPTION MEDICINE INSTRUCTIONS

Northwestern Medicine, Walgreens, the Alliance of Chicago community health centers and Merck collaborated on a study to provide clear instructions on prescription medicine labels to simplify daily medications and decrease patient mistakes. Michael Wolf, PhD, MPH, professor of Medicine, led the project. The results could help launch a new national standard in the way prescription labels are written. **M**

Alumni President's Message



Dear Fellow Alumni:

Welcome to the inaugural issue of *Northwestern Medicine Magazine*! You will note

that the joint message from Eric Neilson, MD, and Dean Harrison establishes the rationale for a new branding that is consistent, with a firm integration foundation. There will still be ample space for an alumni section that is being named "Ward Round News." I encourage each of you to read this and to contribute updates about your personal and professional lives.

Another disappointing Northwestern football game loss aside, your Alumni

foster, among its members, a spirit of loyalty, professional interaction, mentoring and philanthropy so as to help ensure the continued success of the School as a leader in education, patient care and research."

As a retreat follow-up and to help us realize our vision, Vice Dean Alan Krensky, MD, and staff presented new directions for our alumni that identified a construct of four pillars, which are taking the form of four committees and subcommittees:

» *Engagement*, headed by Paloma Toledo and co-chaired by Melani Shaum, will broaden the base of alumni involved in the life of the medical school, with a focus on diversity, specialty-targeted

need for dramatically expanded philanthropy to support the long-term goal of a Tuition-Free Medical School.

» *Mentoring*, led by Bonnie Typlin and medical student co-chair Paul Devlin, will evaluate and improve current programs, build on the problem-based learning educators program, organize peer networking meetings and conduct regional outreach to identify interested mentors in a variety of specialties and work situations, such as entrepreneurs and non-clinical settings.

» *Strategic Initiatives*, under Bruce Scharschmidt, will be challenged to determine and achieve volunteer buy-in for Global Health under Jeff Lawrence and Paul Bonucci; Support Our Students with Doug Carr, Patricia Merwick and Howard Schuele; and MD's in Business/ Industry Relations with Carla Hightower, Bruce Scharschmidt and Jim Kelly.

I realize that this is an ambitious vision, but I am confident that with our Boards' outstanding talent and dedication, and with your support, we can succeed. We welcome participation from other alumni to help infuse our activities with new ideas and opportunities.

All the best,

David Winchester, MD '63
Alumni Board President

outreach and young alumni. Specific strategies will include hosting regional meetings, redesigning Alumni Weekend to increase attendance and utilizing our publications and website.

» *Fundraising*, chaired by Jim Hill and co-chaired by Gary Rusk, is charged with increasing alumni giving and identifying prospects with the potential for major gifts. This will be accomplished by increasing present donor contributions, participation in planned gifts and emphasizing the

I am confident that with our Boards' outstanding talent and dedication, and with your support, we can succeed.

National Board had a congenial and fruitful weekend of activities Nov. 15 and 16. Our Board attended a reception for the late **Cliff Raisbeck, MD '53**. We bid a fond farewell to Ginny Darakjian and later enjoyed *In Vivo*, the annual medical student comedy/variety show that has been in existence at the medical school for 35 years.

We got down to business on Nov. 16 with our Board meeting. I reported to you in my last message that our Executive Committee held a retreat last August. The product of that retreat was an agenda for our Board meeting focusing on new directions. We observed that our by-laws were outdated and developed a mission statement and strategic objectives.

Our new mission: "The purpose of the National Alumni Board of the Northwestern University Feinberg School of Medicine is to

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MEDCOMMUNICATIONS.EDU SO WE CAN KEEP IN TOUCH

Progress Notes

'50s

William P. Marineau, MD '53, of Spokane, Wash., retired from insurance consulting in January 2013 and is now officially retired at the age of 85. Dr. Marineau writes, "I have had a wonderful life, both as a medical practitioner and as an insurance executive and consultant. I am sorry that my present physical condition does not permit me to travel to Chicago, as I really enjoyed the many reunions I was able to attend over the years. I send my heartfelt greetings to all my classmates and hope to see you on the other side sometime in the future!"

Edmond Eger, MD '55, of Tiburon, Calif., along with two other anesthesiologists, edited a 944-page book, "The Wondrous Story of Anesthesia." It contains the component and collective histories of anesthesia as told by Dr. Eger and 100 other authors. Published by Springer (copyright 2014), the book can be purchased through Amazon.



Ronald Coburn, MD '57, of Philadelphia, is professor of physiology at the University of Pennsylvania School of Medicine. He is performing research and publishing papers while also working with human rights organizations.

Edwin Arthur Larson, MD '58, is retired and lives at the Presbyterian Senior Homes in New Richmond, Wis., the city of his birth. He says, "You write, I reply!"

'60s



Paul Young, MD '67, is partially retired, working three days a week as professor of pediatrics at the University of Utah. Dr. Young writes, "I had a great lunch several months ago with **Jay Mall, MD '67, GME '68; Harry Genant, MD '67, GME '68; and Tom Winter, MD '67, GME '68**, who are all doing great in the San Francisco Bay area. I made it to the top of Mount Kilimanjaro last year before spending six weeks teaching in a Physician Assistant program at the College of Health and Well Being in Kintampo, Ghana."

Bernard Gore, MD '64, is retired from his San Francisco OB-GYN practice after 35 years and is now living in Scottsdale, Ariz. His retirement activities include desert gardening, fly fishing, bridge, and traveling with his wife. Dr. Gore writes, "I am looking forward to our 50th reunion in April 2014!"

Stephen Seagren, MD '67, GME '68, of La Jolla, Calif., has been a cancer program surveyor for the Commission on Cancer for the past six years. Dr. Seagren writes, "The Commission and the National Cancer Database are located in the American College of Surgeons Building in Chicago, close to the Feinberg School of Medicine. I was doing surveys in Kansas recently, among them, the Via Christi Hospital in Pittsburgh, Kan. The surgeon and chairman of their cancer committee is classmate **Bob Huebner, MD '67, GME '73**. Bob grew up in the area and came home after medical school and surgical residency in Chicago. Small world!"

Kenneth Wayne, MD '67, recently moved to Clive, Iowa, and entered part-time practice in pulmonary and sleep disorders at the Unity Point Clinic in Ankeny. His wife, Joyce, is a practicing pediatric psychiatrist with the Mercy Health System in Des Moines. Dr. Wayne spends his free time at the YMCA playing racquetball, working out, reading, gardening, as well as taking care of "honey-do" tasks around the new home. Ken and Joyce enjoy domestic and international travel and are always trying to find time to visit four daughters and one grandson in such disparate places as New York, Arizona, and California.

After 38 years in the private practice of child psychiatry, **Richard Merel, MD '68**, is retired. Dr. Merel and his wife, Ellen, live near the beach in Hermosa Beach, Calif., in a home they built 14 years ago. Dr. Merel writes, "Our four grandchildren aren't far, in Seattle and Santa Monica. I am teaching at Harbor-UCLA, where I trained in psychiatry

» Ward Rounds is a federally registered trademark of Northwestern University.



Marty Gallo, MD '86, GME '90, and seven other graduates of the Class of 1986 have been meeting annually since getting together at their 10-year reunion. They formed the Northwestern University Medical School Research Council (NUMSRC) and meet to discuss personal and professional interests, share some good cheer, and play a few rounds of golf. They take turns hosting the event each fall. In 2013, they met in late October in Austin, Texas. The other members of the NUMSRC are: **Gordon Downie, MD '86; Dave Winchester, MD '86, GME '92; Sar Dougherty, MD '86; Todd Graham, MD '86, GME '90; Scott Glaeser, MD '86; Gabe Kind, MD '86, GME '94; and Dave Jansen, MD '86.**

and I am in a one-year training program to be a docent at the Los Angeles County Museum of Art. So far, I don't miss the psychiatric practice!"

'70s

After 24 years as medical director, education and system initiatives, at Billings Clinic in Montana, **Doug Carr, MD '78**, is now with PeaceHealth Medical Group as vice president and medical director of the Oregon West Region.

'80s

Ada P. Kahn, MPH '82, PhD, is president of the Rotary Club of Evanston, Ill., for 2013-2014. In 2012, she was the team leader for a Rotary Foundation-sponsored group study exchange to Taiwan.

Andrew Lazar, MD '82, GME '87, attended the Northwestern vs. Ohio State football game in October 2013 after a three-year absence and sat in the same row as **Ed Traisman, MD '81, GME '84**. Dr. Lazar writes, "It was great to see my friend and my children's former pediatrician, though I did not enjoy the last 10 minutes of the game!

Also sitting next to me was Arthur Veis, PhD with his daughter, Sharon. Dr. Veis' late wife, Eve, was the point person for the HPME program."

Todd K. Rosengart, MD '83, is the DeBakey Bard Chair of Surgery at Baylor College of Medicine in Houston. Previously, he was the chair of surgery at Stony Brook University.

Mahlon Bradley, MD '85, recently began a new hospital-affiliated practice called Central Vermont Orthopaedics at Central Vermont Medical Center in Berlin. Dr. Bradley writes, "It is a general orthopaedics practice taking care of the very active Vermonters and those that visit the beautiful mountains here. I have started, during the gorgeous "leaf-peeping" season, to look forward to the winter outdoor activities of downhill and cross country skiing and snow shoeing. My wife and I plan to retire in the area so that our family center will become central Vermont where we can all appreciate the good life."

William Yates, MD '85, of Oak Park, Ill.,

performs hair transplants robotically. Dr. Yates writes, "This method does not require a long scar and is minimally invasive."

Peggy A. (Bittle) Mulcahy, MD '86, GME '90, is retired and lives with her husband, Tim, in Green Valley, Ariz. She has been busy touring the country with him and their cat, Rosie, in their RV. They recently traveled to Paris for their 25th anniversary. Dr. Mulcahy also enjoys spending time in the glass studio and painting.

Mark Johnson, MD '88, of Venice, Fla., writes that 2013 was a busy year. His elder son, Colin, who completed his undergraduate degree at Northwestern, is in his second year at New York University Law School and looking for internships. His younger son, Will, is graduating from Emory University and will be applying for admission to medical schools in 2014.

'90s

Bill Townsend-Pico, MD '90, completed his ophthalmology residency at University of California at Los Angeles/Jules Stein Eye Institute in 1994. He then completed a fellowship in vitreoretinal surgery at the Cleveland Clinic and a second vitreoretinal

fellowship at the Kresge Eye Institute in Detroit, Mich. He is currently practicing in an all-retina group in San Juan, Puerto Rico. Dr. Townsend-Pico is married with two children: one is in high school and the other is a freshman at the University of Notre Dame.

Michael Safir, MD '91, GME '97, is currently the president of the Los Angeles Urologic Society and is certified in the new specialty of female pelvic medicine and reconstructive surgery. He lives in Los Angeles and practices reconstructive surgery in the San Fernando Valley. Dr. Safir and his wife, Robyn, have been married for 18 years and have two teenage children, Julia and Jack.

John McGuire, MD '93, GME '96, '99, is associate professor of pediatrics and adjunct associate professor of pathology at the University of Washington. In July 2013, he was appointed as division chief of

John, his wife Lauren, and two children, Eleanor, 13, and Peter, 10, enjoy hiking, bicycling, and skiing in the beautiful Pacific Northwest.

'00s

Nora Royer, MD '05, has joined a newly established collaborative practice of surgeons from the University of Iowa Hospitals and Clinics, who are now providing coverage for trauma, acute care, and elective general surgery at Mercy Medical Center in Cedar Rapids, Iowa. Dr. Royer writes, "My family and I love becoming part of the community here and growing this great practice. Our family has expanded to three children, now ages 8, 4, and 2."



Jennifer Lee, MD '00, of Kirkland, Wash., is a physician with the Washington Pacific Eye Associates. She won first place for her entry, "One Girl and Two Boys" at the Jazz Dance Film Festival. Dr. Lee is the "One Girl" featured and helped choreograph the video. It can be viewed online.

pediatric critical care medicine at Seattle Children's Hospital and the University of Washington. His laboratory work is focused on improving the understanding of the mechanisms that regulate resolution of pulmonary inflammation and is funded by grants from the National Institutes of Health and the Cystic Fibrosis Foundation.

Ahmad Aref, MD '06, is assistant professor of ophthalmology at The Illinois Eye and Ear Infirmary, University of Illinois at Chicago Department of Ophthalmology and Visual Sciences.



Jennifer Hobbs, PhD '07, became the director of training grant support and postdoctoral affairs at Northwestern University in July 2013.

In this role, Dr. Hobbs provides support of postdoctoral training through the Office of Postdoctoral Affairs (a population that includes 850 postdoctoral fellows across all disciplines; more than half of which work within the Feinberg School of Medicine). Dr. Hobbs writes, "Through the Training Grant Support Office, I will provide guidance and assistance with proposal development to faculty members leading training grants and programs, the majority of which are located within the Feinberg School of Medicine. Additionally, in 2013 I became a member of the board of directors of the National Postdoctoral Association, a member of the Post-doctorate Leaders Section Steering Committee within the Association of American Medical Colleges, and an Associate Board Member for the Brain Research Foundation. I also continue to serve on the editorial board for *Ward Rounds*."

Seth Cohen, MD '07, completed his surgical internship at the University of California, San Francisco in 2008. He anticipates completing his urology residency at the University of California, San Diego in June 2014. He will then start a two-year fellowship in female urology, reconstructive surgery, and urodynamics at the University of California, Los Angeles. He met his wife, Hadar, in San Diego, and they got married in 2011. Impressed with the number of Northwestern alumni who have played a local role in his specialty's development, he recently authored an article about the history of urology in San Diego in the journal *Urology*.





SETH AND JOSH COHEN VISITED CHICAGO WITH THEIR WIVES DURING HOMECOMING.

Joshua Cohen, MD '07, completed his residency in obstetrics and gynecology at the University of California, San Francisco in 2011. He married Jaclyn Cohen, Medill '06, in 2009 in Pittsburgh and they now live in Los Angeles. Dr. Cohen is currently a gynecologic oncology fellow at the University of California, Los Angeles and Cedars-Sinai Medical Center. He completed his fellowship as well as a certificate program in the Clinical and Translational Research Institute at UCLA in June 2014.

Eleanor Ross, MD '07, GME '13, completed a fellowship in pediatric cardiology at Ann & Robert H. Lurie Children's Hospital of Chicago in June 2013. She is now an attending cardiologist at The Heart Institute for Children at Advocate Children's Hospital in Oak Lawn, Ill. Her area of interest is echocardiology, including transthoracic, transesophageal, and fetal echocardiograms.

Eric Ferkel, MD '08, recently moved to Boston to begin a fellowship in orthopaedic surgery sports medicine at New England Baptist Hospital and Boston Children's Hospital.

Paul Jansson, MS '13, graduated from the Master of Science in Healthcare Quality and Patient Safety graduate program at the

Feinberg School of Medicine in June and was selected as the graduation speaker. He is currently a medical student at Feinberg in the Class of 2015.

GME

Steven Brown, MD, GME '84, completed his 27th year in pulmonary, critical care, and sleep medicine in Milwaukee. Dr. Brown writes, "I'm looking to change it up in the future. I've played all the levels of this video game."

Maria I. Weffer, MD, GME '84, is the chief of the neurology fellowship program at Carabobo University Medical School in Valencia, Venezuela.

Jennifer Normoyle, MD, GME '85, is a senior physician with the Permanente Medical Group in the San Francisco Bay area. Dr. Normoyle writes, "I have one husband, two daughters, four cats, and 23 years later, I'm still at a practice mainly devoted to routine gynecology and urogynecology. I am passionate about helping my patients achieve healthy intimate relationships and getting them to appropriate resources when relationship abuse has impacted their lives and their health. I have retired from obstetrics but otherwise have no plans to retire."

Virginia Bishop, MD, GME '89, is an assistant professor in preventive medicine at the Feinberg School of Medicine. Dr.

Bishop writes, "This is the 10-year anniversary of the Taste of Clemente, a fundraiser for the Youth Empowering Strategies, or Y.E.S. Program in Chicago. This is a program I started that trains urban youth to become health educators and advocates. We focus on violence, pregnancy prevention, nutrition, and physical activity education."

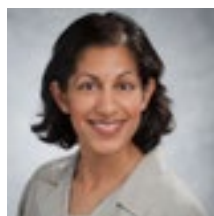
Alan Zunamon, MD, GME '89, completed a master's degree in medical informatics in June 2013 at Northwestern University School of Continuing Studies. Dr. Zunamon is the senior attending physician in cardiology at NorthShore University HealthSystem.

Sapna Patel Vaghani, MD, GME '07, '12, '13, completed her fellowship in pediatric dermatology at Ann & Robert H. Lurie

Children's Hospital of Chicago in June 2013 after completing prior residencies in pediatrics and dermatology at Northwestern. She is the first pediatric dermatologist for Advocate Children's Hospital and is now practicing at their Park Ridge and Naperville, Ill., campuses. She lives in Naperville with her four-year-old daughter and her husband, **Ankur Vaghani, MD, GME '10**, who is the section head of neuroradiology at Edward Hospital in Naperville.

PT

Kajal Patel Jindal, MPT '00, DPT '02, is a practicing physical therapist in Dallas. She keeps busy and entertained with her 20-month-old daughter, Alina.



Progress Notes Awards and Honors

'60s

Nirmal S. Mann, MS '69, GME '69, of Sacramento, Calif., works full time as professor of medicine and gastroenterology and senior consultant gastroenterology/hepatology at the University of California, Davis Medical Center in Sacramento (UCDMC). He is also director, gastroenterology/hepatology at UCDMC-Folsom Campus. He was named a Master in the American College of Physicians in 2007, Master in the American College of Gastroenterology in 2011, and was recently named a Fellow of the Royal College of Physicians, Edinburgh and London. Dr. Mann and his wife, Surinder K. Mann, MD, FACP, FACG, who is also a professor of medicine and gastroenterology at UCDMC, have two daughters. Neel K. Mann, MD, is a staff gastroenterologist at Cedars-Sinai Medical Center in Los Angeles. Sheel K. Mann, JD, also lives in Los Angeles.

'70s

Roderic Eckenhoff, MD '78, is the principal investigator on a multidisciplinary, multi-institution research program at the University of Pennsylvania's Perelman School of Medicine that is working to unravel the mysteries of anesthesia. The research team in September 2013 received \$8.6 million over the next five years in renewed grant support from the National Institutes of Health.

'80s

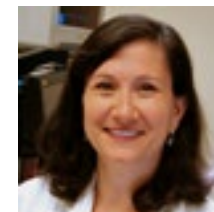
Elliot Roth, MD '82, GME '85, '86, the Paul B. Magnuson Professor and chairman of Physical Medicine and Rehabilitation at the Feinberg School of Medicine, was honored by the American Congress of Rehabilitation



Medicine with the Edward Lowman Award in Nov. 2013. He was recognized for an energetic promotion of the spirit of interdisciplinary teamwork in rehabilitation. Dr. Roth writes, "I am in my 19th year as chairman of PM&R at Northwestern, and I have published more than 130 papers. My son, Howard, is completing his PhD in organic chemistry and my daughter, Jessica, is completing medical school, now applying for residencies in internal medicine. 'Hi' to all fellow classmates!"

'90s

Diane Wayne, MD '91, of Wilmette, Ill., received the Leader in General Internal Medicine award from the Society of General Internal Medicine Midwest Region in Sept. 2013. The award recognizes research and education contributions to the field of general internal medicine. Dr. Wayne, the Dr. John Sherman Appleman Professor of Medical Education at the Feinberg School of Medicine, was recognized for innovative educational programs and mentorship of others in general internal medicine. She was nominated by Feinberg alumni, **Jeff Barsuk, MD '99, GME '02, MS '11**, and **Aashish Didwania, MD, GME '06**.



Erik K. Alexander, MD '97, associate professor of medicine at Harvard Medical School, has been elected to the Board of Directors of the American Thyroid Association.

'00s

Julian D'Achille, MD '08, graduated from the Boston University School of Public Health

in May 2013 with a master's in public health with a concentration in health policy and management and a specialization in health policy. While at Boston University, he received the school's Allan R. Meyers Memorial Prize for Excellence in Health Policy and Management as well as the Upsilon Phi Delta national academic honor society for students in healthcare management and policy.

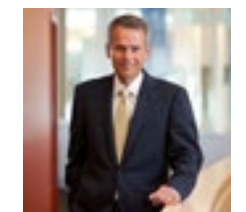
Eduardo Moioli, MD '12, is a dermatology resident at the University of Chicago. He was named the 2013 Intern of the Year at MacNeal Hospital.

GME

Deborah Gaebler-Spira, MD, GME '85, professor in physical medicine and rehabilitation at the Feinberg School of Medicine, was awarded the Pathways.org Pioneer Award. She was recognized for making a difference in children's physical medicine and rehabilitation. Pathways.org works to empower health professionals and parents with knowledge of early detection for children's sensory, motor, and communication development.



Harold L. Paz, MD, GME '85, '86, chief executive officer, Penn State Hershey Medical Center and Health System, Penn State's senior vice president for health affairs, and dean of Penn State College of Medicine, was elected chair of the board of directors of the Association of Academic Health Centers at its annual meeting in Sept. 2013.



ADVOCATING FOR PATIENTS ONE

NEWS SEGMENT

AT A TIME



WRITTEN BY: Sarah Plumridge

When the recession was in full swing, Shirley Chi, MD '01, GME '02, was giving talks in the Los Angeles community about how to save money on skincare products at the drugstore. Word got out to one of the evening news anchors and the medical producer at a local ABC News affiliate. They thought saving money on skin care was something of interest to their audience.

When they first called, Chi thought there had to be a mistake. "After all, I was just a clinical dermatologist focused on patient care," she says. "My office was in Arcadia, a family-friendly community far from the glamour and caché of Beverly Hills or Newport Beach. But, they assured me that I was the one they were looking for."

Her first story, finding inexpensive yet effective over-the-counter acne treatments, ran in 2009.

Walking down the aisles at her local drugstore, Dr. Chi talked about what ingredients to look for and what to avoid in skin and hair care products, ranging from acne treatments to shampoo to anti-aging regimens.

"It felt strange to be followed around by a camera crew with a microphone clipped to my clothes and discussing patient concerns with a reporter whom I had only seen before on television," Chi explains. "Afterward I went back to work like any other clinic day, not knowing that the story would garner such a positive response from their viewers, that we would tape more segments, and even do a 30-minute special down the road."

Since then, this board-certified dermatologist and dermatologic surgeon has become an on-air advocate for patients, doing stories on topics ranging from sunscreen protection and bug bites to skin diseases.

"The experience is like a patient visit, but with millions of people at a time," she says. "It is a gift to be able to get a message out to people who may not be able to afford a dermatologist or may not know they need to see one."

Chi also has the opportunity to share information about available therapies, including a recent segment about the pros and cons of a relatively new laser treatment for psoriasis.

"What I really love about ABC7 is their commitment to 'tell it, not sell it.' In other words, although they receive a lot of pitches to do stories promoting new skincare products, lasers, or treatments, if I don't feel that the science behind it is sound or evidence-based,



I will advise them not to pursue it," she admits.

BALANCING ACADEMICS AND PRIVATE PRACTICE

Dr. Chi believes this opportunity to impact such a large number of individuals would not have presented itself if she hadn't attended the Feinberg School of Medicine. After graduating from the Honors Program in Medical Education (HPME) she completed a residency in dermatology at the McGaw Medical Center of Northwestern University and at Chicago's Cook County Hospital, serving as chief resident during her final year.

"I had the right background – Feinberg taught me not just how to be a physician, but also how to be a good communicator," she explains.

During one of her favorite medical school courses, Patient, Physician and Society, she learned communication skills and ethical reasoning, as well as proper attitude and conduct in the physician-patient relationship.

his other responsibilities and says that's something she strives for in her life.

"I have been able to maintain that balance of academics and private practice that was modeled by my teachers at Northwestern," she says. "Now that I have a beautiful one-year old son, life balance becomes even more important. I feel truly blessed to be able to maintain a busy clinic along with all my family responsibilities."

Chi notes fourth-year rotations as another highlight of medical school. One particularly memorable experience occurred when the internal medicine team was baffled by a patient with a mysterious rash and requested a dermatology consult. She witnessed a dermatologist give a diagnosis without expensive lab tests or heavy equipment.

"The dermatology team strode in like a scene from a Western film," she recalls. "They examined the patient and made the diagnosis of Reiter Syndrome (a form of arthritis that can cause inflammation and pain in the joints, skin, eyes, bladder, genitals and mucus membranes) right on

It is a gift to be able to get a message out to people who may not be able to afford a dermatologist or may not know they need to see one.

The faculty member leading the course, former chair of neurological surgery Leonard Cerullo, MD, also served as her mentor. Chi remembers admiring Dr. Cerullo's ability to balance teaching with

the spot. I was so taken by their ability to recognize a disease and diagnose an internal condition by looking at the skin that I quickly made up my mind that this was the specialty for me."

MENTORING RESIDENTS

Dr. Chi maintains a private practice in Arcadia, Calif., and teaches as a volunteer faculty member at the University of California, Los Angeles.

"I always tell my students that they make me smarter," she admits. "They are always studying and reading journals on the latest research. Just by being around them, I learn and stay on top of new information in my field."

She also serves as the director of dermatology-resident education at Olive View-UCLA Medical Center. For her dedication to teaching future doctors, Dr. Chi received the President of the United States Volunteer Service Award in 2007.

"I realized with each class and with each rotation at Northwestern that my teachers were all leaders at the forefront of their respective fields," she says. "That sort of environment encouraged me to do my best and to try to become a leader in my profession and in my community, not just through teaching young dermatologists, but by being an outspoken advocate for my patients, as well."



Dr. Chi has also been an advocate for Northwestern, beginning to support the medical school's scholarship program after completing her residency training.

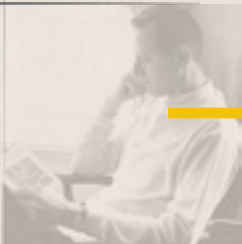
"In the past I've often directed my contribution to the scholarship fund, in the hopes that we can continue to educate the best and brightest future physicians, regardless of their economic background," she says.

NEONATOLOGIST

HONORS THE PAST,

PROVIDES FOR THE FUTURE

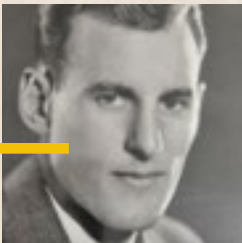
WRITTEN BY: Bob Kronemyer



MERREL D. FLAIR



GORDON MCNICOL



What goes around, comes around. When [Roger E. Sheldon, MD '68](#), was applying for medical school, one of the staff who interviewed him at Northwestern University Medical School was Merrel D. Flair, EdD, then assistant dean and director of admissions. "Dr. Flair helped select me as a recipient of a full-tuition scholarship," Dr. Sheldon recalls. The administrator also recruited the young man to lead the bass section of the Flair family's church choir in Oak Park, for \$10 a week.

Now, nearly 40 years later, Dr. Sheldon and his wife, Carol V. Sheldon, MD, have provided an endowment of \$100,000 to the Feinberg School of Medicine for the McNicol Flair Sheldon Scholarship, in honor of his maternal uncle, [Gordon McNicol, MD '34](#), who also received scholarships to attend medical school, but died a year after graduation from complications of an ear infection; and Dr. Flair, who also died relatively young.

Both men greatly influenced his path, each in their own way. Even though he never met his uncle, Dr. Sheldon considered Dr. McNicol a role model who "set an example of a possible career path that I might follow." Similarly, Dr. Flair "was enthusiastic about my admission to Northwestern and eased my way by sincere friendship. While a freshman, I had dinner with his family on several occasions."

The first recipient of the McNicol Flair Sheldon Scholarship, selected at the beginning of the 2013-2014 academic year, is [Michael Patlajan](#), Class of 2017.

SAVING BABIES

During his lengthy career, Dr. Sheldon practiced newborn intensive care or neonatology. The pediatric folks at Northwestern got me interested in pediatrics and the newborn folks at Boston Children's Hospital (where he completed a three-year residency in pediatrics) got me interested in newborns," he says. "I was particularly drawn to the field of neonatology because acute care could make such a vast difference in an infant's life."

He points out that "approximately 15 to 20 percent of the children who end up in the ICU will die, but nearly 100 percent would die if they were not treated in an ICU.

"Neonatology is a life-saving specialty. It is also a lot of fun,

plus there has been a huge increment in growth and knowledge," he notes. "It wasn't really a specialty in the early 1960s. I was fortunate to get in on the ground floor."

After his residency, Dr. Sheldon spent two years in the Army as a pediatrician at William Beaumont General Hospital at Fort Bliss in El Paso, Texas. That was followed by a one-year fellowship in pediatric lung disease and a two-year fellowship in newborn intensive care, both at the University of Colorado in Denver.

Sheldon and his family moved to Oklahoma City in the summer of 1979, at which point he became a section chief for newborn intensive care at the University of Oklahoma, where he remained for 31 years until retiring in 2010.

IMPROVING CARE

Looking back, Dr. Sheldon is proud of the training he provided to expand the duties of neonatal nurse practitioners, both in Denver and Oklahoma City, due to a shortage of interns and residents. These nurses learned how to do tracheal intubations and insert umbilical catheters and chest tubes. He describes many of these procedures in a book he co-authored in 1983 entitled, "The Expanding Role of the Nurse in Neonatal Intensive Care."

Through the years, the father of two also devoted a considerable amount of time to developing fast, efficient newborn transport, "a crucial part of care. These children are born all over the place and you need to move them to the various newborn ICUs in the region." Nurses would

stabilize the patient for transport by helicopter or ambulance to the nurseries. "We prefer to move the mother, but sometimes you have to move the baby instead," Dr. Sheldon says.

Besides attaining a full professorship in pediatrics, with an emphasis in fetal physiology and newborn intensive care, Dr. Sheldon served for more than 20 years as assistant dean of continuing medical education at the University of Oklahoma. He was also closely involved in teaching doctors and nurses at smaller hospitals around Oklahoma about newborn issues, including stabilization and transport.

"I always followed the rule: Don't short-change the clinical care. That's what keeps your juices flowing," he asserts.

Dr. Sheldon and his wife Carol were married during his sophomore year at Northwestern and this year they celebrate 48 years together. The couple now lives in Golden Valley, Minn., and has six grandchildren.

Carol earned her medical degree from the University of Colorado in 1979 and became a resident in radiology at the University of Oklahoma. "Carol put me through most of medical school in Chicago by doing computer programming, and I put her through school in Colorado," he explains.

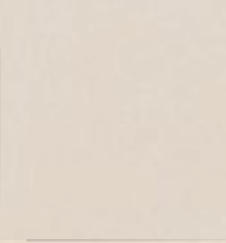
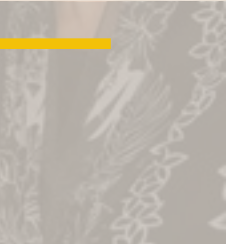
By creating the McNicol Flair Sheldon Scholarship, "Carol and I hope, in some small way, to repay the scholarship support that was given to us," Dr. Sheldon says.



MICHAEL PATLAJAN



DR. SHELDON AND HIS WIFE
CAROL V. SHELDON, MD,



In Memoriam

Selim El-Attrache, MD, GME '62, of Mount Pleasant, Pa., died July 24, 2013.

Roy Arpad Earle Bakay, MD '75, of Chicago, died September 5, 2013.

John W. Barnes, MD '52, of Middletown, Ohio, died August 28, 2013.

William O. Beavers, MD '44, of Greensboro, N.C., died August 10, 2013.

Martin L. Block, MD '75, of Scottsdale, Ariz., died October 28, 2013.

Alfred W. Bull, MD '54, of Geneva, Ill., died May 31, 2013.

Nancy Cassady, CERT '40, of Ames, Iowa, died September 9, 2013.

Elwin W. Donnelly, MD '55, GME (year unknown), of Saint Simons Island, Ga., died October 26, 2013.

Kelly H. Gubler, MD '45, of Tooele, Utah, died October 2, 2013.

Richard D. Liechty, MD '54, of Centennial, Colo., died September 12, 2013.

Vernon F. Lightfoot, MD '46, of Santa Rosa, Calif., died October 31, 2013.

David A. Lucks, MD '81, GME '84, of Conifer, Colo., died October 16, 2013.

John H. Muehlstein, MD '53, of Chicago, died August 30, 2013.

Wilbur A. Nimmer, Sr., MD, GME '71, of Somers, Wis., died September 20, 2013.

Terry D. Oberley, PhD '73, MD '74, of Madison, Wis., died October 15, 2013.

Hermon T. Price, Jr., MD '53, of Tucson, Ariz., died July 25, 2013.

Julius Wenger, unknown '48, MD '49, of Atlanta, died August 24, 2013.

Palmer H. White, MD '63, of Novato, Calif., died September 4, 2013.

William A. Wolfe, MD '46, of Medina, Wash., died July 13, 2013.

Upcoming Events

FEB

FEBRUARY 20, 2014
Pediatric Pearls: Hot Topics
The Doubletree Hotel Oak Brook
1909 Spring Rd., Oak Brook.
For More Information, Call 312-227-7432.

FEBRUARY 28, 2014
ASH Updates: Current Trends in Leukemia, Lymphoma and Myeloma
Prentice Women's Hospital,
Conference Room L
250 E. Superior St., Chicago.
For More Information, Call 312-695-1391.

MAR

MARCH 6-8, 2014
Vestibular Rehabilitation: Theory, Evidence, And Practical Application
Rehabilitation Institute Of Chicago
345 E. Superior St., Chicago.
For More Information, Call 312-238-6042.

MARCH 7, 2014
The Arthur C. Nielsen, Jr. Vascular Symposium: A Clinical Update On Vascular Medicine And Surgery
Prentice Women's Hospital
250 E. Superior St., Chicago.
For More Information, Call 312-503-8533.

MARCH 7, 2014
Gastrointestinal Malignancies: 2014 Update of Clinical Care
Northwestern Memorial Hospital,
Feinberg Pavilion
251 E. Huron St., Chicago.
For More Information, Call 312-695-1391.

MAR

MARCH 10-11, 2014
The Leadership And Operational Tool Box For Managing In Rehabilitation
Rehabilitation Institute Of Chicago
345 E. Superior St., Chicago.
For More Information, Call 312-238-6042.

MARCH 20-21, 2014
Walk The Walk: Locomotor Training For Patients With Stroke Or Incomplete Spinal Cord Injury
Rehabilitation Institute Of Chicago
345 E. Superior St., Chicago.
For More Information, Call 312-238-6042.

MARCH 27, 2014
Pediatric Pearls: Infectious Disease
The Hilton Rosemont
5550 N. River Rd., Rosemont.
For More Information, Call 312-227-7432.

APR

APRIL 10-11, 2014
Prognosis, Progress, And Practice In Stroke Rehabilitation: Adapting To Changes In Healthcare
Rehabilitation Institute Of Chicago
345 E. Superior St., Chicago.
For More Information, Call 312-238-4251.

APRIL 22, 2014
Pediatric Pearls: Spring
The Hyatt Regency Schaumburg
1800 E. Golf Rd., Schaumburg.
For More Information, Call 312-227-7432.



More at magazine.northwesternmedicine.org



October 4 Proclaimed NBTI Day in Chicago

In recognition of its commitment to care and cutting-edge research, Mayor Rahm Emanuel proclaimed Oct. 4 Northwestern Brain Tumor Institute (NBTI) Day in Chicago, coinciding with the fifth anniversary of the institute's main fundraising event, the Minds Matter Benefit.

The NBTI is a nationally recognized leader in the fight against brain and spinal cord tumors, and includes experts from across Northwestern Medicine. As the highest ranked neurology program in Illinois, the NBTI serves and treats approximately 7,000 brain and spinal cord tumor patients each year.

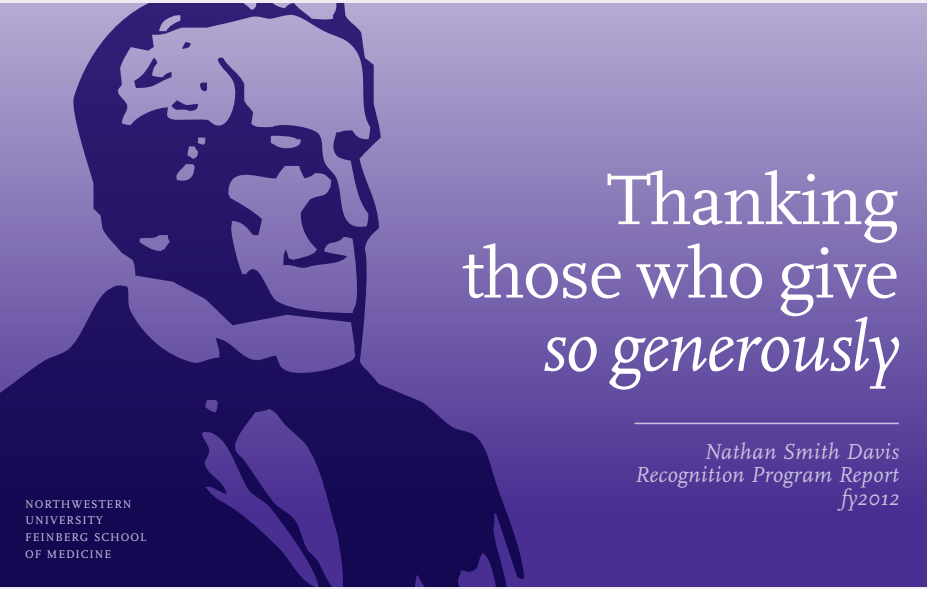
"Millions of people and families representing all ethnic backgrounds and income levels are affected by brain and spinal tumors and (these) tumors can occur at any age and at different sites in the brain," Emanuel said. "The Northwestern Brain Tumor Institute maintains a manifest mission based in finding cures for brain and spinal tumors while training neuro-oncology researchers and clinicians to meet the highest of standards."

Celebrating 35 Years of Student Sketch-Comedy Show - In Vivo

For more than three decades, Feinberg medical students have written, directed and acted in the annual In Vivo show, which has taken many forms as a venue to showcase their artistic talents. Singing, dancing, and acting are among the many skills exhibited while students also poke fun at medical school life. Ticket proceeds from the show are donated to a different charity each year. Special Collections librarian Ron Sims shares more In Vivo background (and photos!) in the *Ward Rounds History Blog*.



More at magazine.northwesternmedicine.org



Online Report Lauds Supporters of the Medical School

The medical school's 2013 Nathan Smith Davis Recognition Program Report is available online at <http://www.feinberg.northwestern.edu/nsdreport/2013>. We are incredibly grateful for your support and service over the past fiscal year (Sept. 1, 2012, through Aug. 31, 2013).

We hope you enjoy reading about six groups of inspiring supporters that have made philanthropic gifts and provided volunteer service to our school.

Please note that gifts made on or after Sept. 1, 2013, will be reported in next year's Nathan Smith Davis Recognition Program report. If you have questions, please contact Rita Kisielius at r-kisielius@northwestern.edu or 312-503-3459.

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