THE GEORGE WASHINGTON UNIVERSITY SCHOOL OF MEDICINE AND HEALTH SCIENCES

Medicine - Health

SPRING 2015

Jehan El-Bayoum M.D. Dept. of Medicine

HEALTH EQUITY

Jehan El-Bayoumi, M.D., RESD '88, dedicates herself to delivering medical care for all



A NOTE FROM ROSS HALL

Leading by Example



n late fall, Anthony Fauci, M.D., director of the National Institute of Allergy and Infectious Diseases, addressed GW School of Medicine and Health Sciences (SMHS) first-year medical students. Dr. Fauci described his research into infectious diseases and the advocacy work he's led in the area of HIV/AIDS. During his talk, Dr. Fauci identified several of his biggest successes, but he was also clear to point out that despite those successes, there is much more work to be done. His encouragement left our first-year students eager to act on their curiosity, embrace the spirit of collaboration they find in the SMHS community, and start making a positive impact on the world around them.

Because of our location in the nation's capital and our connection to leading health organizations, we've been honored to host some of today's most prominent voices in health and medicine, people who lead by example – like Dr. Fauci and U.S. Surgeon General Vice Admiral Vivek H. Murthy, M.D., M.B.A., who will address graduates and their families at the 2015 M.D. Diploma Ceremony. These notable leaders demonstrate to our students firsthand, the impact that they too can make on society as researchers, clinicians, and policymakers.

In the days following his address, our students put Dr. Fauci's passion for change into action. Divided into small teams, the students, working together, honed their ideas for creating an AIDS free generation and then presented those plans to the country's top HIV/AIDS leaders at the White House. Both the medical students and the many notable leaders on hand recognized the potential for future endeavors and appreciated the fresh ideas that were presented by budding health care leaders.

The value of offering our students access to influential physicians, educators, policymakers, and mentors who lead by example is difficult to measure, but easy to see. These leaders — many of whom are making daily decisions that shape the future health of our country — value the idea of nurturing those who are following their career footsteps and provide a unique perspective for our students.

As we celebrate graduation we should recognize that it represents just the tipping point of our students' careers and future accomplishments. It is clearly just the end of their beginning. I know that our students will continue to serve as ambassadors of the GW SMHS mission and stand committed to improving the lives of those they serve — and will, like those who have taught them, lead by example.

Sincerely,

JEFFREY S. AKMAN, M.D. '81, RESD '85 WALTER A. BLOEDORN PROFESSOR OF ADMINISTRATIVE MEDICINE VICE PRESIDENT FOR HEALTH AFFAIRS DEAN, SCHOOL OF MEDICINE AND HEALTH SCIENCES

The George Washington University

NELSON A. CARBONELL, B.S. '85 Chair, Board of Trustees

STEVEN KNAPP, PH.D. President

The School of Medicine and Health Sciences

JEFFREY S. AKMAN, M.D. '81, RESD '85 Walter A. Bloedorn Professor of Administrative Medicine, Vice President for Health Affairs, and Dean, SMHS

DENNIS NARANGO, M.A., CFRE Associate Dean, SMHS, and Associate Vice President of GW Medicine Development and Alumni Relations

Medicine + Health

EXECUTIVE EDITOR Anne Banner

MANAGING EDITOR Thomas Kohout

SENIOR EDITOR Laura Otto

ASSISTANT EDITOR Caroline Trent-Gurbuz

CONTRIBUTING WRITERS Steve Goldstein, Christian Mysliwiec, and Robin Tricoles

PHOTOGRAPHY Barbara McGowan, Michael Leong, and Linnea Farnsworth, Biomedical Communications, Pete Byron, and Dale Rothenberg

ART DIRECTION Moiré Marketing Partners

Medicine + Health

is published by: Office of Communications and Marketing 2030 M Street, N.W. Suite 4024 Washington, D.C. 20036 editor@gwu.edu smhs.gwu.edu

To view Medicine + Health on any mobile device, scan this QR code.



SPRING 2015

Features



COVER STORY



BY ROBIN TRICOLES

Jehan El-Bayoumi, M.D., RESD '88, dedicates herself to delivering medical care for all

8 Intersessions

BY LAURA OTTO Students tackle real world health issues as part of the clinical public health curriculum

10 Caring for Kids

BY LAURA OTTO Stephen J. Teach, M.D., M.P.H., shares his vision as new chair of the Department of Pediatrics

12 Following the Hedgehog

BY STEVE GOLDSTEIN Cellular signaling pathway could lead scientists to a cure for cancer

14 Opening the Dialogue

BY CAROLINE TRENT-GURBUZ Students cross departmental lines to learn how to unite in their approach to health care

17 Free From Falls

BY ANNE BANNER SMHS DPT Program helps teach people with MS how to minimize their risk of falling

22 An All-Star Advocate BY THOMAS KOHOUT

- 24 Luther Brady Jr., M.D. '48, B.A. '46 BYTHOMAS KOHOUT
- 26 Striving for Surgical Excellence BY LAURA OTTO
- 27 Make No Bones About It BY LAURA OTTO
- 34 Teaching with Honors BY LAURA OTTO

Departments

- 28 Faculty News
- 36 Class Notes

On the Cover:

Jehan El-Bayoumi, M.D., RESD '88 Photo by: Michael Leong, Biomedical Communications

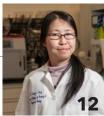
\gg

ON THE WEB

Explore additional content or back issues of Medicine + Health online using any internet-capable device.



18





MAKING THE ROUNDS









ON THE WEB Scan this QR code with any mobile device for related content – available online below the story.



MATCHED UP

"I feel excited, nervous, and anxious," said Dalya Elhady, a fourth-year medical student at GW's School of Medicine and Health Sciences (SMHS), in the minutes leading up to Match Day. Surrounded by her four children and husband, Elhady credits their unwavering love and support for her successes as a medical student. "They have been supporting me through the last four years, always cheering me on when things got tough and, most importantly, giving me time to study," she said, hoping to match in anesthesiology at her top choice, UF Health Shands Hospital at the University of Florida-Gainesville.

Students gathered in Ross Hall on March 20, surrounded by family, friends, and faculty, to celebrate the milestone – the transition between medical school and residency. At noon, they joined nearly 16,000 medical students nationwide as they simultaneously received and opened their envelopes from the National Residency Matching Program and found out where they will spend the next three to five years of their professional careers.

"I'm amazed," said Elhady, fighting back tears as she found out she matched with her top choice. "I'm relieved for me and my family, and I'm ready to take this next journey with them."

Duke University, Ohio State University Medical Center, Cedars-Sinai Medical Center, and University of Virginia are a few of the institutions SMHS students matched this year. Six students will continue their training at GW, and two will pursue training at Children's National Health System in Washington, D.C.

"These kids are all self-made. They represent the best of GW, the best of the country, the best of what GW does," said Peter B. Kovler, member of the GW Board of Trustees, whose son Mark matched at John Hopkins in general surgery.

Building a Pipeline to Careers in Health Care

Ingrid Rodriguez was the first in her family to attend and graduate college. She credits the GW School of Medicine and Health Sciences (SMHS) DC Health and Academic Pre Program (DC HAPP) for giving her the confidence to pursue her dream of becoming a nurse. The program offered Rodriguez the opportunity to transition from high school to college. "DC HAPP prepared me academically, as well as emotionally," she says. "English is my second language, so I was nervous about my abilities to work in the health care field." Rodriguez, who graduated from Trinity Washington University in May 2013 with a bachelor's degree in nursing, says it was the SMHS faculty and student mentors "who gave me the push I needed to succeed." Rodriguez currently works at Holy Cross Hospital in Silver Spring, Maryland.

Rodriguez, a graduate of the first DC HAPP cohort, participated in the four-week pre-college matriculation program for high school seniors graduating from Washington, D.C., public or charter schools. To qualify for the program, students must be accepted to a university, receive a recommendation from a guidance counselor or teacher at their high school, and be in need of financial support. Students are paired with SMHS medical and physician assistant students who serve as mentors.

The program, which launched in 2009, was funded for two years through a congressional grant administered through the U.S. Department of Education, but when the grant ended, so did the program. SMHS leadership, however, knew they had a successful initiative and decided to support the program's return this summer.

"I am happy to have the opportunity to restart the program," says Yolanda Haywood, M.D., RESD '87, associate dean for diversity, inclusion, and student affairs at SMHS, adding, "I am absolutely ecstatic that the GW School of Medicine and Health Sciences thinks enough of this program to put resources into revitalizing it." Haywood will oversee the program along with Grace Henry, Ed.D., director of the Office of Diversity and Inclusion at SMHS.

Haywood and her team are thrilled to restart the program that has given so many local high school seniors who demonstrate an interest in pursuing a health career the opportunity to learn what that trajectory would look like.

"Our goal is to open up the health care world to these high school



students," says Haywood. "They are talented and eager, and we want to help propel them into successful careers.

"There is excellence associated with diversity," says Haywood, adding that pipeline programs like DC HAPP are important because "if we don't look at people who are underrepresented, we are missing talent."

La Jolla partnership

Researchers at GW's School of Medicine and Health Sciences (SMHS) have partnered with La Jolla Pharmaceutical Company to address a condition called catecholamine-resistant hypotension, or CRH, in which blood pressure drops to dangerously low levels and is unresponsive to currently available treatments. Severely low blood pressure robs the body's vital organs of oxygen and nutrients, leading to life-threatening circulatory shock.

The company's new drug, LJPC-501, is a new type of angiotensin II – an extremely potent vasoconstrictor designed to narrow the muscular wall of blood vessels. The exclusive, worldwide license agreement between La Jolla and GW provides intellectual property rights covering the use of angiotensin II for the therapeutic treatment of patients with hypotension and shock.

"The discovery of novel therapies to help patients in need is at the core of the mission of the GW School of Medicine and Health Sciences," says Robert Miller, Ph.D., Vivian Gill Distinguished Research, senior associate dean for research, and professor of anatomy and regenerative biology. "We aim to bring better options to patients who face life-threatening risks associated with hypotension." SMHS provided initial support for this research project.

MAKING THE ROUNDS



DISCOVERING THE PERSON WITHIN THE PATIENT

"Tell Me More," Say Third- and Fourth-Year M.D. Program Students to Patients During National Gold Humanism Honor Society Solidarity Day **BY THOMAS KOHOUT**

Fourth-year medical student Sarah de los Santos slowly enters the warmly lit patient room at George Washington University Hospital. "Hi, my name is Sarah. Today is a very special day," she tells a patient in a wheelchair, adding, "it's what we call Solidarity Day."

Feb. 13 marked the fourth annual celebration of the national Gold Humanism Honor Society's (GHHS's) Solidarity Day for Compassionate Care. Typically held on or near Valentine's Day since 2011, Solidarity Day has been a time to show support for the importance of kindness to patients. The day also highlights a nationwide movement promoting provider-patient relationships based on caring, personalization, and mutual respect. The national event gained momentum after New Jersey Senators Cory Booker and Robert Menendez and Illinois Senator Mark Kirk successfully sponsored a resolution in 2013 and 2014 to officially recognize Solidarity Day.

In the past, the George Washington University School of

Medicine and Health Sciences (SMHS) chapter of GHHS handed out gold "humanism" wristbands. This year, SMHS students joined with GHHS chapters from across the country to participate in the "Tell Me More" program. Originally developed by the Mount Sinai Icahn School of Medicine GHHS chapter, the program helps to personalize patients for the students, the physicians, the nurses, and anyone else entering their hospital rooms. SMHS students spent time with patients, asking a few basic questions about their personal lives, such as: How would your friends and family describe you? What are you most proud of? What is your favorite sports team? What are you looking forward to most once you leave the hospital? What is your favorite place to visit? Afterward, they wrote down one or two of those responses and displayed them over the patients' beds.

"Chapters nationwide celebrate Solidarity Day through various activities," says fourth-year SMHS medical

student and GW GHHS member Sarah Zader, who managed this year's event, with the help of fellow fourth-year SMHS medical student Utsha Khatri-Chhetri. "Our chapter really liked the Tell Me More program and thought it would truly be a meaningful and interactive way to enhance patient care, so that was what we decided to do for Solidarity Day."

In the hospital, she adds, patients sometimes lose their sense of self. They become a disease or a diagnosis rather than the holder of a unique collection of qualities that make them individuals. "Today, your mission is to discover these qualities of our patients and share them with others involved in patient care," Zader told the group of participating third- and fourth-year medical students before they fanned out among the hospital wards. "Our goal is to help our patients regain their sense of selfhood during their hospitalization."

Zader adds, "The whole point of this exercise is to get to know the patients as people, not a collection of diseases. I love this part of medicine."

"People might ask, 'Why is understanding the patient story so important?'" says Suhavi Tucker, a third-year medical student at SMHS. "I think the answer lies in improving that reciprocal, doctor-patient relationship. Patients and physicians need to see each other as humans. Knowing the patient's story is important to understanding who they are, what their values are. It helps us as doctors to build trust with our patients and deliver better care. It helps to establish a more honest relationship."

She adds, "I hope I never lose the sense of excitement and joy I felt today."

Expanding the Space for Research

The George Washington University (GW) recently opened the doors to its newest campus facility at the corner of 22nd and H streets: the 500,000-square-foot, multidisciplinary Science and Engineering Hall (SEH). The sparkling 14-floor building – eight floors above ground and six below located across the street from Ross Hall doubles the amount of space available to GW's science and engineering disciplines on the Foggy Bottom campus and serves as a technological hub for the university. When the top two floors are completed in 2016, the \$275 million facility targeting LEED Gold certification will house state-of-the-art cancer research labs that will be run by the School of Medicine and Health Sciences (SMHS). The building will bring together faculty from GW's Columbian College of Arts and Sciences, the School of Engineering and Applied Science, the SMHS, and the Milken Institute School of Public Health.

"The SEH opens the door to even greater opportunities for research and discovery in health and medicine at GW," says Jeffrey S. Akman, M.D. '81, RESD '85, Walter A. Bloedorn Professor of Administrative Medicine, vice president for health affairs, and dean



of SMHS. "In the new space, SMHS will expand its research capabilities in the area of cancer and translational science, building bridges between the lab and the clinic to deliver novel therapies to patients."

Among the wet and dry laboratories, teaching labs, common areas, and administrative and faculty office space, researchers in the facility will share four specialized labs: a three-story "high bay" for large-scale experiments; a nanofabrication lab, which is a Class 100 clean-room environment used to develop and test devices including the next generation of transistors and state-of-the-art biosensors for cancer detection; a climate-controlled rooftop greenhouse; and an imaging suite equipped with microscopes capable of viewing objects at resolutions better than one-billionth of a meter.

Roughly 85 percent of the power used in the SEH is generated by a green co-generation utility plant located in Ross Hall, which recycles steam to generate electricity and heat for both buildings. The new power system will cut the facility's carbon dioxide emissions by more than 8,100 metric tons each year; this is equal to taking nearly 1,500 vehicles off the road.

Preparation Is Key

When disaster inevitably strikes, The George Washington University (GW) School of Medicine and Health Sciences (SMHS) will ride in prepared, thanks to a \$1.3 million Continuing Training Grant (CTG) from the U.S. Department of Homeland Security's Federal Emergency Management Agency (FEMA).

SMHS hosts one of the first emergency medical services degree programs in the nation, and the new funding – with Geoff Shapiro, director of emergency medical services and tactical/operational medicine, at the wheel – will allow GW to develop training programs and resources that focus on medical readiness and victim care at mass casualty events.

"Since the 1980s, GW has been a leader in providing training and education to our nation's first responders," said Joseph Bocchino, Ed.D., M.B.A., senior associate dean for health sciences at SMHS. "GW's emergency response professionals and clinicians are highly regarded experts in developing training programs, and through this grant, they will develop training programs that better prepare responders to act swiftly and effectively in emergency situations involving mass casualties."

MAKING THE ROUNDS



Innovation on Display

For future emergency medicine physician Travis Hase, educating health care providers about the devastating impact of prescription opioid misuse, overdose, and addiction is a true passion.

"Emergency physicians play an important role in recognizing trends that have public health implications and alarming those who have an interest and can take preventative action," said Hase, a third-year medical student at the GW School of Medicine and Health Sciences (SMHS).

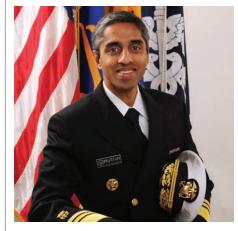
Hase's poster was one of the more than 280 presented at the university's 20th annual health and medicine-themed GW Research Day. The event highlights the partnership among GW's Office of the Vice President for Research, SMHS, the School of Nursing, the Milken Institute of Public Health at GW, and Children's National Health System, and focuses on the health and wellness of local, national, and global communities.

The scope of research presented by this year's crop of medical students, health sciences students, residents, and fellows ranged from basic science research projects to translational efforts seeking to convert more fundamental discoveries into patient-focused applications to human-subject investigations exploring the effectiveness of new therapies and practices.

Research is a critical component of SMHS and GW, explained Robert Miller, Ph.D., Vivian Gill Distinguished Research, senior associate dean for research, and professor of anatomy and regenerative biology at SMHS.

Miller was struck by "the remarkable breadth of the research and the talent and sophistication" of this year's pool of young investigators. "We need to encourage and support that activity."

U.S. Surgeon General Addresses Class of 2015



Vice Admiral Vivek H. Murthy, M.D., M.B.A., will address M.D. graduates at the George Washington University School of Medicine and Health Sciences (SMHS) M.D. Diploma Ceremony May 17. As the 19th U.S. Surgeon General, Dr. Murthy is an example of how physicians and other health care providers can go beyond the clinic to make history. His background as a clinician, educator, public health advocate, researcher, and innovator is an inspiration to the SMHS community.



Labor and Deliver

Any minute now, an expectant mother is set to give birth in the Clinical Learning & Simulation Skills Center. The patient, a Victoria birthing simulator from the Gaumard Scientific Company, will help teach GW School of Medicine and Health Sciences students how to care for mother and child during delivery and how to address complications. The Victoria birthing simulator has a patented life-like delivery and birthing mechanism that births a full-term baby with sophisticated monitoring capabilities. The state-of-the-art simulation system features comprehensive clinical scenarios, including shoulder dystocia and postpartum hemorrhage.







2015 Follies: A Bite of the Golden Apple

The 2015 Follies, an annual event of song, dance, and parody by first-, second-, third-, and fourth-year medical students, as well as physical therapy (PT) and physician assistant (PA) students, was a smash on March 27 with hit skits like "The Rosswives of George Washington" and "Tell Us How You Really Feel." During the event, students also presented the Golden Apple Award to their professors who made a significant impact on their education: David Diemert, M.D., associate professor of medicine; Norman Lee, Ph.D., professor of pharmacology and physiology and professor of biochemistry and molecular medicine; Babak Sarani, M.D., associate professor of surgery; Jim Scott, M.D., professor of emergency medicine and professor of physician assistant studies; Jennifer Halvaksz, DPT, academic director of the Johns Hopkins/GW Orthopedic Residency Program and assistant clinical professor of physical therapy and health care sciences; and Margaret Plack, Ed.D., DPT, director of admissions and professor of physical therapy and health care sciences.

DC Center for AIDS Research Established

An interdisciplinary, city-wide consortium of researchers led by Alan E. Greenberg, M.D. '82, M.P.H., professor and chair, Department of Epidemiology and Biostatistics at Milken Institute School of Public Health (Milken Institute SPH) at GW, has received a grant from the National Institutes of Health (NIH) to fund the newly established District of Columbia Center for AIDS Research (DC CFAR). Greenberg will serve as the director of the new DC CFAR, and Gary Simon, M.D., Ph.D., Walter G. Ross Professor of Medicine and director of the Division of Infectious Diseases at GW School of Medicine and Health Sciences (SMHS), will serve as the co-director.

The consortium includes nearly 200 academic HIV investigators from three GW schools – Milken Institute SPH, SMHS, and the Columbian College of Arts and Sciences and five major Washington, D.C. research institutions – Georgetown University, Howard University, American University, the Children's National Health System, and the Veterans Affairs Medical Center.

The mission of the DC CFAR is to expand the multi-institutional effort to support research that contributes to ending the HIV epidemic in Washington, D.C. and beyond, in partnership with government and community.

The NIH CFAR program emphasizes interdisciplinary and translational collaborations between basic, clinical, prevention, and behavioral investigators, with an emphasis on the inclusion of women and minority investigators.



Intersessions

BY LAURA OTTO

t the start of the 2014-15 academic year, incoming M.D. program students in the GW School of Medicine and Health Sciences (SMHS) began a rigorous journey that will ultimately lead them to careers in medicine. Highlighting that path to clinical practice is a new element of the school's recently revised curriculum that helps expose students to the advantages of being in the nation's capital; the integration of clinical public health into physician training. To help accomplish that goal, a new multiday intersession workshop has been added to the end of the fall and spring semesters to offer students realworld, Washington, D.C.-based experiences to prepare for their expanded scope of practice.

"GW students will continue to graduate as excellent clinicians, but they will practice in a health care system that is changing dramatically," says Lawrence "Bopper" Deyton, M.D. '85, M.S.P.H., senior associate dean for clinical public health and professor of medicine at SMHS. "In order to be successful clinicians and leaders in that changing environment, GW students must expand their scope of practice to include clinical public health. They must know how to use the principles and practices of public health and population health. And we must teach them how to do that."

At the conclusion of the fall 2014 semester — and immediately after their infectious disease/immunology and virology coursework — first-year M.D. students embarked upon an intensive multi-day clinical public health workshop, titled "How Physicians Can Help Create an AIDS-Free Generation." The seminar concluded with a White House event featuring top government and public health HIV/AIDS leaders, where student working groups presented communitybased plans to improve the HIV care continuum. The inaugural clinical public health intersession workshop was designed to introduce medical students to the HIV care continuum and their role as practicing physicians to help end the HIV/AIDS epidemic. The goal was not just to identify what needs to be done to improve the HIV care continuum, but also to identify how to do it at the community level.

"Dramatic progress has been made in the last generation to turn HIV infection from a uniformly fatal disease to a chronic, treatable condition. However, at the community level there continues to be obstacles that impede efforts to reduce new HIV infections and AIDS cases," says Deyton. He explains that the HIV care continuum is a sequence of actions used by clinicians, public health, and policy leaders to reduce community obstacles that perpetuate a preventable cycle of HIV infection. A successful continuum will lead to an AIDS-free generation. The goal of the multi-day exercise, Deyton adds, "was for the students to propose how to correct a problem, not just define a problem."

To jump-start the workshop, local and national HIV/ AIDS experts including Anthony Fauci, M.D., director of the National Institute of Allergy and Infectious Diseases, addressed the current HIV landscape and the latest scientific advances, treatment, and prevention programs.

"Since the start of the AIDS epidemic, more than 78 million people have been infected with HIV, almost 40 million deaths, 35 million people living with HIV, and it's still ongoing, and it's out of control in many respects," says Fauci. He opened the course with his talk, "Ending the HIV Epidemic: From Scientific Advances to Public Health Implementation."

Over the remainder of the workshop, students received access to community experts, as well as the opportunity to visit Washington, D.C.'s Whitman-Walker Clinic to meet with staff and patients to gain firsthand perspectives about barriers to care. Students made site visits throughout the community, conducted research, and brainstormed to create innovative proposals that were both science-based and community-oriented.

For first-year SMHS medical student Michael Kahn, having this opportunity and access to policymakers is unique to being in Washington, D.C. "I think it's one of the draws of this medical school; it's one of the reasons I chose to come here," he said.

Fauci, an active clinician, immunologist, and researcher noted for his leadership in the development and implementation of significant legislation in the fight against HIV/AIDS, warned that although "we have accomplished a lot and have a lot to be proud of as a nation, as scientists, as clinicians, there is still work to be done." In the United States, he says, detailing the gravity of the ongoing epidemic, "there are 1.2 million people living with HIV, of whom 14 to 16 percent are



Making the most of the George Washington University's location in Washington, D.C., School of Medicine and Health Sciences M.D. program students visited the United States Holocaust Memorial Museum as part of a medical ethics discussion. During the visit, students studied the early 20th-century eugenics movement and discussed how responsible physicians could allow medicine to be used to infringe upon basic human rights.

unaware of their infection." He encouraged the future physicians to take an active role in policy work and focus on "hot spots" or specific communities rather than think about "onesize-fits-all" prevention plans.

"The end of the HIV/AIDS pandemic is a feasible goal; however, there is still much to do," insists Fauci. "Now is not the time for a victory lap, but the time for racing ahead. This is particularly relevant for you in this class, because it's going to be up to you to bring this over the goal line."

Maggie Czarnogorski, M.D., RESD 'o6, FEL '08, M.P.H. '14, senior policy advisor at the Office of National AIDS Policy at the White House, also took the stage to discuss the HIV care continuum. "When we talk about the care continuum, this is what we are talking about: it's a framework for looking at people from the time they are infected through their course of treatment to that ultimate health outcome, which is viral load suppression."

Ron Valdiserri, M.D., M.P.H., deputy assistant secretary for health for infectious diseases and director of the Office of HIV/AIDS and Infectious Disease Policy at the U.S. Department of Health and Human Services, rounded out the discussion, describing the evolution of HIV/AIDS testing, treatment, and prevention programs.

On day two of the program, students were asked to define challenges, identify successful best practices, facilitate discussion, and propose areas for immediate research as they pertain to the HIV care continuum. The students canvassed the city, speaking with community leaders and experts in the field to aid their research efforts.

The program culminated at the White House with a presentation of public health recommendations by each group before a panel of HIV/AIDS experts including Czarnogorski; Douglas M. Brooks, director of the White House Office of National AIDS Policy (the AIDS Czar); Laura Cheever, M.D., associate administrator for HIV/AIDS at the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA); Deborah Parham-Hopson, Ph.D., assistant surgeon general and senior advisor for HIV at HRSA; and Greg Millett, M.P.H., vice president and director for public policy at the American Foundation for AIDS Research. The students offered their policy recommendations on HIV/AIDS testing, screening, prevention, and access to antiviral drugs in the District of Columbia.

"The tools are out there; it's just about getting the

correct information out there and making everyone aware that these tools exists," says Haydee Del Calvo, first-year SMHS medical student, reflecting upon what she learned over the course of the exercise.

"As a dean of a medical school who sees himself, along with Dr. Deyton, as an HIV/AIDS activist and physicianactivist from the '80s, to sit here and see you guys investing your time, energy, creativity, and brilliance in helping us come to an AIDS-free generation is really overwhelming," says Jeffrey S. Akman, M.D. '81, RESD '85, Walter A. Bloedorn Professor of Administrative Medicine, vice president for health affairs, and dean of SMHS.

For Kahn, exposure to the nation's policymakers and change-agents was invaluable. "Getting the chance to see a microcosm of the process, from having an idea, to brainstorming with your peers, to having the opportunity to present your plan to the people who can make change gives us the idea that maybe someday down the line we can do this on a much larger scale."

A second clinical public health intersession will begin at the conclusion of the spring 2015 semester (after press time). Following the students' classes on pulmonary medicine and immunology/allergy this session will challenge students to "Eliminate Childhood Asthma in Washington, D.C." Leading the second workshop is Stephen J. Teach, M.D., M.P.H., professor and chair of the SMHS Department of Pediatrics, as well as director and principal investigator of IMPACT DC, a pediatric asthma clinic based at Children's National Health System.

"The District of Columbia and many similar urban environments constitute a perfect storm of adverse circumstances for diseases such as asthma," explains Teach. "In the District, we have genetic and epigenetic factors contributing to very negative environmental factors including poverty, poor housing, and inadequate access to primary care. We all are excited to hear how our future physicians want to tackle these complex community health problems. We need them to succeed."



ON THE WEB

Scan this QR code with any mobile device for related content – available online below the story.



Caring for



BY LAURA OTTO

or more than two decades, most of which has been spent on the faculty of clinical partners Children's National Health System (Children's National) and GW's School of Medicine and Health Sciences (SMHS), Stephen J. Teach, M.D., M.P.H., has devoted himself to the health and well-being of children. Since 1997, as professor of pediatrics and emergency medicine at SMHS, Teach has addressed chronic illnesses among the urban, and largely minority, child and adolescent populations of Washington, D.C. His leadership as director and principal investigator of IMPACT DC (Improving Pediatric Asthma Care in the District of Columbia), as well as his role as principal investigator for the NIH/NIAID-funded Inner City Asthma Consortium, has led to many awards and honors, including the Environmental Protection Agency National Environmental Leadership Award in Asthma Management. The renowned researcher, patient advocate, and author was recently appointed chair of the SMHS

Department of Pediatrics in collaboration with Children's National. As chair, Teach will focus on cultivating research initiatives, fostering faculty development, and preparing the next generation of pediatricians for clinical excellence.

Q: Who or what attracted you to the field of pediatrics?

A: I always felt drawn to the optimism and resilience of children. They are powerful motivators. It just felt right to care for them.

Q: What's the biggest change or challenge you have seen in pediatrics? A: The emergence of chronic disease in childhood; we have seen a generation of children survive previously fatal, early life challenges and become dependent, in many cases, on long-term therapies and medical technology. As we have

become better at managing the complications of prematurity and of diseases like diabetes, cancer, sickle cell disease, asthma, and cystic fibrosis, patients with these disorders are living much longer lives, often with a much higher quality of life. Lots of work remains, however, to reduce their morbidity further, especially their dependence on medical technology. **Q**: Why has asthma become such a big problem in the District of Columbia?

A: The District of Columbia and many similar urban environments constitute a perfect storm of adverse circumstances for diseases such as asthma. In the District, we have genetic and epigenetic factors contributing to very negative environmental factors, including poverty, poor housing, and inadequate access to primary care. Asthma is a good example of a condition for which we are now able to bring so many children under such brilliant control that they are able to fully participate in childhood activities, both academically and athletically. Today, there is very little that needs to restrict a child with asthma, whereas years ago that was not the case. **Q:** Describe the relationship between Children's National and SMHS.

A: It's an evolving relationship that continues to be strengthened on many fronts. We are building upon that relationship through a host of collaborations centered on research and advocacy with initiatives such as the Clinical and Translational Science Institute, which is funded by a Clinical and Translational Science Award from the National Institutes of Health. This was an award initially given as the base of a collaborative effort between Children's National and GW, and it has been a great success. We have long taken pride in being the primary pediatric teaching institution for SMHS medical students. The beauty of the experience is that our students are able to see a range of inpatients and outpatients who suffer from a wide variety of common and rare disorders. I always like to point out to students that it's by studying patients with rare disease and pathophysiology that you really understand how organs and systems are meant to work.

Q: What is the biggest challenge the next generation of pediatricians face?

A: I've become convinced that the biggest challenge young doctors will face is balancing their career aspirations with the reality of their personal financial circumstances. Young physicians are graduating from medical school with extraordinary amounts of debt, and I'm increasingly concerned that debt will drive both their career choices and their ultimate practice decisions. Unfortunately, I feel it deters them from pursuing primary care careers and forces them into specialty care and, more importantly, away from at-risk communities.

0: What's your vision for the department?

A: It's pretty simple. My vision is to find and foster excellence in our medical students, trainees, and faculty through a very personal approach that stresses the unique interests and strengths of each individual.

Q: What are the strengths as you see them within the department, and how do you plan to leverage them?

A: This department is distinguished by a diversity of strengths in the multiple domains of modern medicine, specifically clinical care, research, education, and patient- and familycentered advocacy. More and more, we are recognizing the multidimensional nature of the health challenges in front of us. They require a very multidisciplinary and multipronged



ON THE WEB

Scan this QR code with any mobile device for related content – available online below the story.

approach. For example, we make the most inroads against asthma morbidity by recognizing that we need to deliver care in a more efficient way, which includes using research to improve the next generation of care; advocating and influencing policy to ensure that children who need care are receiving it; and educating clinicians to optimally care for them.

Q: What part will research play?

A: Increasingly, we are conceptualizing research as the need to be able to create new knowledge and to translate our findings in a more concrete, meaningful, and patient-centered way to improve care and outcomes. We want to take the lessons that we learned from our research and become thought leaders. We want to be able to implement our findings within the context of our programs and initiatives that improve our patients' lives.

Q: What areas of emphasis within the department have you identified to build upon?

A: We need to better integrate our somewhat siloed approaches toward research, education, advocacy, and clinical care to make them more synergistic. In our approach to a problem, such as premature birth, we need to address it as a medical, societal, and health policy problem. We need to ask ourselves: Are there systems in place to make sure that these moms are receiving optimal care to deliver the healthiest possible infants?

I always felt drawn to the optimism and resilience of children. They are powerful motivators. It just felt right to care for them.



FOLLOWING THE **HEDGEHOG**

CELLULAR SIGNALING PATHWAY COULD LEAD SCIENTISTS TO A CURE FOR CANCER

BY STEVE GOLDSTEIN

ust a decade removed from her days as a doctoral student at the University of Illinois at Urbana-Champaign, Xiaoyan Zheng, Ph.D., assistant professor of anatomy and regenerative medicine at GW's School of Medicine and Health Sciences (SMHS), boasts a depth and experience with her subject that extends well beyond her years. Her research, funded by a grant from the National Institutes of Health, focuses on an oddly named cellular signaling pathway, the Hedgehog pathway, that transmits critical information to embryonic cells in order to direct their proper development and regeneration.

Hedgehogs are peculiar enough creatures in nature, spiky hairballs that curl up when threatened. So why name such a crucial pathway after the odd little animal? The explanation, as well as the roots of the research, extends back into the 1980s when scientists were studying gene mutations in *Drosophila*, or fruit flies. Rather than the typical pattern of alternating bald and hairlike strips in the larvae, scientists found that Hedgehog pathways in the mutant larvae tended to be short and stubby with dense lawns of denticles — small pointy projections — resembling the namesake mammal. From her second-floor lab in Ross Hall, Zheng is studying the regulation of cell-to-cell interaction along this pathway; her research may one day lead to a cure for cancer.

The Hedgehog signaling pathway is one of the key regulators of animal development and is present in all animals with bilateral symmetry, that is, those that have a front and back,

In Xiaoyan Zheng an Polans of Anatomy d Napatise Biology Hedgehog pathways in the mutant larvae tend to be short and stubby with dense lawns of denticles – small pointy projections – resembling the namesake mammal.



as well as an "up" side and a "down" side. Different parts of the embryo have different concentrations of Hedgehog signaling proteins. Malfunctions of this pathway have been associated with several diseases, including cancer.

"So, I study the mechanism of how the Hedgehog proteins can have this effect," explains Zheng. "The cells sense the Hedgehog with a receptor, and that receptor interacts with other 'downstream' proteins, telling the cells what to do.

"We already know that abnormal Hedgehog pathway activity causes cancer," she continues. "What we don't know is how to effectively interrupt this pathway to stop the development of cancer." The flip side is that if you stop the Hedgehog signaling completely, it may affect the cell's other normal functions.

From December 2005 until December 2011, Zheng was a postdoctoral fellow with Philip A. Beachy, Ph.D., first at Johns Hopkins and then at Stanford University. Beachy is a pioneer in the field, and his lab studies the mechanism underlying Hedgehog signal transduction.

"My primary research is in identifying target genes regulated by the Hedgehog signal and thus [understanding] the molecular mechanisms employed by the Hedgehog signaling pathway in regulating cell-to-cell interactions," Zheng says. If she can identify more of the proteins regulated by the Hedgehog signal, she may have more new targets for affecting the signal. "Through my research, I hope to identify new genes that are controlled by the Hedgehog signal, and these genes are potential drug targets for curing cancer."

Zheng is also interested in developing novel reagents and experimental approaches combined with cutting-edge imaging technologies to study the biochemical and cell biological principles governing a critical, yet poorly understood, step of Hedgehog signal transduction: trafficking of Hedgehog pathway proteins in different subcellular domains. "We use photoconversion assays to study ciliary trafficking of Hedgehog pathway proteins," explains Zheng. By using a fluorescent protein tag, Zheng and her team are able to study the "ciliary entry and exit of the Hedgehog signaling proteins in individual cells." Both studies will go a long way toward helping researchers better understand pathway dysfunction and could lead to therapeutic solutions for modulating pathway activity, either to stimulate regeneration or to block malignant growth.

Zheng arrived at SMHS in January 2013, and with the help of her team — two postdoctoral assistants, a lab technician, and three undergraduate assistants — got the lab up and running. Since then the team's research progress has steadily picked up speed, and now Zheng is preparing an application

From her second-floor lab in Ross Hall, Zheng is studying the regulation of cell-to-cell interaction along this pathway that one day may eventually lead to a cure for cancer.

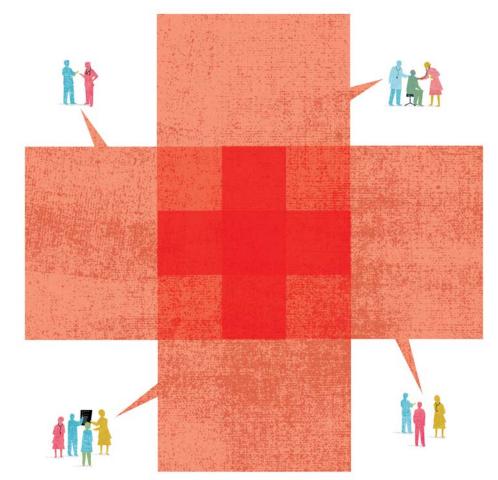
for a new National Institutes of Health Ror grant. "We're still in the beginning stage of the research, but [we've been] gradually making progress during the past two years. I believe our progress in the next two years will be more dramatic," she says confidently.



ON THE WEB

Scan this QR code with any mobile device for related content – available online below the story.

OPENING THE DIALOGUE:



Communication and Teamwork in Interprofessional Education

BY CAROLINE TRENT-GURBUZ

n the alphabet of educational strategies and associations, the George Washington University (GW) School of Medicine and Health Sciences (SMHS) is adopting what is quickly becoming vital: IPE, or interprofessional education.

"IPE is critical," says Matthew Mintz, M.D. '94, RESD '97, FACP, assistant dean for preclinical education and associate professor of medicine at SMHS, "because our evolving health care system will rely on interprofessional health care teams, which will manage the health of groups or patients."

The idea behind interprofessional education is that communication between medical workers — physicians,

specialists, nurses, physician assistants (PA), and physical therapists (PT), for example — improves the quality of care delivered, increases patient satisfaction, and contains costs, which is at the heart of health care reform and improvement.

With that shift to a patient-centered, team-based approach to health care in mind, Richard J. Simons, M.D., senior associate dean for M.D. programs at SMHS, believes SMHS is uniquely positioned to shape its medical education with the IPE movement.

"I think that we should be a leader in this area," Simons says. "We have so many different kinds of health profession students here at GW, we have a real opportunity to set the standard nationally for IPE best practices."

On an accreditation level, the Liaison Committee on Medical Education, as well as accrediting bodies for other health care fields such as the Commission on Accreditation in Physical Therapy Education, has added interprofessional activity as a standard for evaluation. Despite it being a requirement, however, Simons says that SMHS programs would incorporate interprofessional activity anyway.

"It's a requirement from our accrediting bodies," Simons says, "but it's the right thing to do regardless of that because it's so important to provide patient-centered care."

For Howard Straker, PA-C, M.P.H., assistant professor of physician assistant studies and assistant professor of preven-

interprofessional education through role-playing. Prior to the class, each student was assigned to a health profession other than his or her own; each then had to explore the "footwork," as Straker says, or the scope of practice, training, and schooling of the area. After meeting with those in the assigned profession, students broke into groups and analyzed case studies from the perspective of their assumed role.

"The students seemed to enjoy meeting each other," Straker says, "and getting to know the roles of other professions."

At the spring workshop, focus tightened on clarity and respect in interprofessional communication. The students, Straker says, were given a case to study prior to the workshop.

With that shift to a patient-centered, team-based approach to health care in mind, Simons believes SMHS is uniquely positioned to shape its medical education with the IPE movement.

tion and community health at SMHS, the accreditation is becoming "more and more standardized."

"Health care has gotten more complex," Straker says. "There is a need for interprofessional teamwork."

Teamwork is integral to patient care not just for quality purposes, Straker explains, but also for patient safety. When physicians maintain contact with nurses and pharmacists, he says, medical errors, such as a wrong dosage or medication, are far less likely. In order to keep those channels open, however, there must be an understanding across fields. That shared decision-making and communication is where GW's extensive resources come in.

"The beauty with George Washington is that everybody is right here on the campus," Simons says.

"Everybody," he explains, refers to all students pursuing health-related careers, from medicine to speech pathology. Bringing the students and schools together is no small task, given the logistical challenges of conflicting schedules. "You have to find ways to overcome those logistical challenges to get this done," Simons adds.

Recently, more than 300 first-year medical and PA students, second-year PT students, and speech-language pathology and registered nursing students gathered for two workshops, one in fall 2014, the other the following spring. The goal, says Jennifer Halvaksz, DPT, academic director of the Johns Hopkins/GW Orthopedic Residency Program and assistant clinical professor of physical therapy and health care sciences at SMHS, was "getting students to think about other professionals and how this team notion could synthesize and synergize into better overall health care."

At the fall workshop, students were introduced to

Faculty, likewise from a range of health professions, played the role of patients with multiple sclerosis (MS), for small student groups. The students, who had varying degrees of knowledge of MS, were tasked with gathering patient histories and discussing plans of action. They also incorporated the SBAR strategy.

"[SBAR] stands for 'situation,' 'background,' 'assessment,' and 'recommendations' for dealing with a clinical scenario," Simons says. "It's analogous to what happens in the airline industry, using these standardized checklists."

The workshop concluded with peer evaluations, a key tool for participants to assess their performances and communication skills with others.

Judging by anecdotal evidence, both Straker and Halvaksz say the workshops were a success, both for imparting information and allowing students to strengthen their interprofessional competency. Plans are underway to continue IPE and expand the workshops, with some changes.

"We will likely modify these sessions based on feedback from faculty and students," Mintz says. "For example, the spring session presented a case that was role-played by faculty. Hopefully, for next year, we will utilize standardized patients to portray the case. In addition, we will continue to look for IPE opportunities at our shared clinical sites when our students are on their clinical assignments."



ON THE WEB

Scan this QR code with any mobile device for related content – available online below the story.

hale N/2 10yr hx of MS. She presents to the thindry Care clinic W/3-twes worshing uss & Acaethiness. She is uncorned, about her meds & possible MS relapse

THE EVALUATION EQUATION

BY STEVE GOLDSTEIN

hen it comes to the importance of teamwork and trust, no area of education rivals the clinical health care setting. At GW's School of Medicine and Health Sciences (SMHS), executive coaching and simulation have worked to promote the interprofessional education of health care students. Now research is underway to find metrics that can effectively evaluate the way interprofessional health care teams learn and perform.

In 2012, Ozgur Ekmekci, Ed.D., interim chair and associate professor of the department of clinical research and leadership, who had joined the department five years earlier, led a group of colleagues in applying for a grant from the Office of Medical Education to explore whether executive coaching could be used to increase leadership and teamwork skills among students through interprofessional education interventions. Both educators and students seemed locked into their own disciplines and had little opportunity to learn and practice with members of other programs, says Ekmekci, whose own specialty is organizational identity.

"I realized there is a strong professional identity in these students that makes it difficult, when they graduate, to work with others in a clinical setting as part of a team," he says. The study program placed 12 GW undergrads in three teams each with a physician, nurse, physician assistant, and physical therapist — who participated in role-playing scenarios that were analyzed by an executive coach and then repeated.

The result was a "significant increase in teamwork and leadership" after executive coaching and simulation. A paper on the Interprofessional Education Project (IPEP) was published in the Journal of the Allied Health Professions in 2013.

Ekmekci previously worked in the private sector as a systems analyst, and he believes his non-medical background has helped in his current research. "I'm a systems guy with a varied multidisciplinary background," he explains. "I look at things objectively."

To build on the research, Ekmekci and his team applied for and received a second grant so they could develop a method to evaluate learning and performance in interprofessional teams. "We wanted an instrument to measure how these teams were improving," says Ekmekci.

The new study was conducted over a 12-month period, divided into three phases of equal length: 1) a panel of 25 experts helped identify measurable team attributes and behavior that could potentially influence team learning and team performance; 2) researchers used the findings from Phase 1 to develop an initial draft of the Interprofessional Team — Learning and Performance (IPT-LAP) instrument; and 3) the instrument was validated and refined with a cohort of 27 GW students going through simulations with standardized patients and faculty members.

Among the preliminary findings of the most influential factors for team performance at the individual level were clear communication, appreciating team members' professional identities, inviting contributions from others, being respectful, and behaving in an ethical manner. At the group level, respect was foremost, followed by effective communication and developing a climate of trust.

Once the results are published, Ekmekci hopes the team "will be able to squeeze into the busy SMHS curriculum a formal learning opportunity for these students. Long term," he adds, "what I hope to do is line up competencies learned in the classroom with what takes place in the clinical setting."

Ekmekci says the students "are very receptive and enjoy" working with other disciplines. The benefits for the patient are also significant, he notes, because "once the team works together, they have a better understanding of the patient experience."

Free From Falls

BY ANNE BANNER

eing "Free From Falls" is something that most of us take for granted on a daily basis; however, for some people, particularly those who have diseases that make it difficult to walk or stay balanced, learning how to avoid a fall is critical. In 2014, the GW's School of Medicine and Health Sciences (SMHS) Doctorate of Physical Therapy (DPT) Program and the National Capital Chapter of the National Multiple Sclerosis (MS) Society teamed up to offer a program called "Free From Falls" that teaches people with MS how to minimize the risk of falling.

The program, which is held on GW's Foggy Bottom campus, is a national initiative designed by the MS Society to offer people with MS an eight-week curriculum that meets for two hours per week consisting of one hour of Fall Awareness classroom instruction and one hour of Building Better Balance exercises.

The "Free From Falls" program also serves as an additional opportunity for students to work with people with MS and practice the skills they have learned in class. "It was a really great experience to work with the participants directly and get their perspective of the day-to-day challenges they have to deal with — seeing it in real life was helpful," said Samantha Shook, a second-year student in the DPT program. Since students were paired up one-on-one with participants, the Building Better Balance exercises could be tailored to each individual's needs and abilities.

"Free From Falls" is not only a great opportunity for the students, but the program at GW is also supported by a robust team of six faculty members who have taken the curriculum and





goals and added a research component. The team is working to collect data from pre- and post-test outcome measures to determine the effects of the "Free From Falls" program with aims to publish in an academic journal later in 2015.

"Upon the initial meeting with the National Capital Chapter of the MS Society, we knew that this was a perfect opportunity for collaboration," said Sue Leach, Ph.D., PT, assistant professor of physical therapy and health care sciences at SMHS, and one of the leads of the partnership. "With the MS Society providing the 'Free From Falls' program and the connections to potential participants, and with the DPT program providing the space and faculty and student resources, this was an ideal situation to work with people with MS to prevent falls."

Steve Nissen, M.S., CRC, senior director for Employment and Community Programs at the National Capital Chapter of the National MS Society, agrees with Leach and noted that "the partnership was mutually beneficial for everybody." Nissen hopes that the students who participated in the program will consider working with people with MS later in their careers.

"It was a great experience; everyone felt fortunate to be a part of the program. It was great to hear from the participants that they were seeing progress as they worked through the eight weeks," said Shook. "There is nothing more beneficial for students than getting hands-on experience and the ability to practice our skills."



ON THE WEB Scan this QR code with any mobile device for related content – available online below the story.



Health Equity

Jehan El-Bayoumi, M.D., RESD '88, dedicates herself to delivering medical care for all

BY ROBIN TRICOLES

ehan El-Bayoumi, M.D., RESD '88, holds an iPhone flush to her left ear. She has just emerged from her office, and she's listening to the latest message that has rolled in. She smiles, extends her right hand, and introduces herself to a visitor. "Hi! I'm Gigi." El-Bayoumi ushers her guest into her office, which is dotted with photos of people, colorful throw rugs from her travels, medical textbooks, and late-afternoon sunlight.

She says she likes to make her office a comfortable place. "It's part of my heritage," she says, referring to her Egyptian roots. "When someone comes to your home for a visit, you make sure they're taken care of."

El-Bayoumi is a general internist and associate professor of medicine at GW's School of Medicine and Health Sciences (SMHS), where she completed her residency 30 years ago. "When I walked through the doors of GW, I fell in love with it," she says. "It was my number one choice for my residency, and I was thrilled that I matched here." Today, El-Bayoumi is more dedicated than ever to medicine. That means giving her patients the best care possible, teaching residents and medical students what good care is and how to provide it, and working with community organizations so more people can get the care they need.

El-Bayoumi is the daughter of academics, her father a physical chemist and her mother an anthropologist. One of three children, she was born in Tallahassee, Florida, and raised in Michigan, where she also attended medical school in Ann Arbor. She says she is not "one of these people who knew since she was young that she wanted to be a doctor." Instead, she decided to go into medicine when she was a junior in college. "I have so many interests. I thought about being a journalist or writer. I love languages. I love math and science. I wanted to do something that involved service, so medicine made the most sense. It's all there."

And when she visited Washington, D.C., for the first time, she fell in love with the city — and its people. "One thing you need to know about me is that I chose to come to Washington," says El-Bayoumi. "I had fallen in love with it because it reminded me of Paris, my favorite city. I really loved the people of D.C., and it

struck me that D.C. is a tale of two cities, like many urban areas. So, it was really important that I do something for the people of D.C. And how do I show love to others? Through service."

Medical Care for All

El-Bayoumi has dedicated her career to providing expert medical care for all, no matter their socioeconomic status. "I have taken an oath," she says. "I do not pick and choose my patients. I take care of people. I don't care what their socioeconomic background is. I take care of homeless people. I take care of colleagues. I take care of people from all parts of the city and all parts of the world."

She also cares for some of Washington's political luminaries. El-Bayoumi says some people might think it's tough taking care of VIPs, but she says that's not the case.

"They don't want you to be overly deferential," she explains. "You're their doctor. You're giving them advice. They want to be spoken to like anybody else." Still, when treating government officials or even public figures, she says she has to be mindful of things she wouldn't normally think about, like security concerns or Secret Service agents milling about. "But really, other than that it's pretty much the same," she says.



Last fall, El-Bayoumi received a certificate of appreciation from the White House for providing expert care to members of the White House staff, including cooks, gardeners, and chiefs of staff. Although some White House staff receive care from military physicians, others come to GW. "If a member of the president's cabinet or White House staff gets sick, they come here," she says. "[As we would with] any other patient, we focus on them, not their jobs." Another of El-Bayoumi's patients with a close connection to the White House was Hillary Rodham Clinton's mother, the late Dorothy Howell Rodham. "I was friends with Mrs. Rodham," says El-Bayoumi. "When she would come to the clinic, she would sit in the waiting room like anyone else. She was a really neat lady and a formidable woman. Probably one of the smartest people I've ever met. She was very interested in health, health issues, and health disparity. We actually had conversations about starting a health institute."

Making Things Happen

And that's exactly what came to pass. "After she [Rodham] died, it crystallized in my mind that the institute would be a way to honor her," says El-Bayoumi. In 2013, El-Bayoumi became founding director of the Rodham Institute, whose goal is to achieve health equity in Washington, D.C. The institute, housed within SMHS, aims to cultivate and train the next generation of community health care providers to improve health for all.

One of the ways to accomplish that, says El-Bayoumi, is to keep clinician learners, medical students, residents, and faculty connected to the community. "It doesn't have to be seeing people in the clinic," she says. "It could be educating people about diabetes or their blood pressure. Or it could be exposing kids to health professions, kids who otherwise might not have much connection to health care providers or medicine."

Merissa Zeman had been a patient of El-Bayoumi's just once, a few years ago when she returned home to Washington, D.C., during a break from her undergraduate studies in Michigan. Now a second-year medical student at SMHS, Zeman heard about the Rodham Institute and went to meet with El-Bayoumi to learn more about it. Zeman says she didn't think the doctor would remember her from that single office visit. But she did, says Zeman, with a laugh. What's more, El-Bayoumi got her hooked on the institute.

"I went to meet Dr. El-Bayoumi and talk about the Rodham Institute, and the way she described it made me fall in love with its philosophy," she says. "It was exactly what I had been searching for."

Zeman says her goal is not only to help patients but also to make a bigger impact on the community at large and help change the way medicine is practiced. "It's not hard to find people who believe that, but it's hard to find people who practice that," she says. "Dr. El-Bayoumi is the kind of doctor I want to be."

Taking Up Residents

Jeffrey Zweig, M.D., a chief resident in internal medicine at SMHS, echoes that feeling. Zweig met El-Bayoumi when he was a fourth-year medical student at SMHS. "I was doing a visiting rotation, and my first impression of Dr. El-Bayoumi



was, wow!" says Zweig. "She's incredible — outgoing, caring, warm, and inclusive."

He says one of the most important skills he has learned from El-Bayoumi is a caring bedside manner. "She makes patients feel at ease," says Zweig. "She never rushes even if she seemingly has a thousand things on her calendar. I've tried to emulate that in my practice. In today's age of robust technology and imaging and testing, she brings back the patient-physician relationship. She's able to identify with any type of person, and that's remarkable. That's a gift."

Zweig also says that even her residents feel cared for. "In a way, we're like her children," he says. "She cares about our well-being." Her caring is evidenced in the many framed photos of residents that dot El-Bayoumi's office. Smiling out of one of the photos are three residents, each in a white coat. Inscribed on its silver frame: "Chief Medical Residents 2012–13. With love and gratitude. Sarah, Ju, Amy."

But El-Bayoumi says she too feels love and gratitude for her residents, colleagues, former students, and even patients, especially for the way they cared for her a decade ago after she was diagnosed with breast cancer. She underwent a bilateral mastectomy, chemotherapy, and later reconstructive surgery.

"My former students and residents were taking care of me," she says. "I was taken care of by excellent colleagues. The attending physicians said, 'We're thinking of doing x, y, z, what do you think?' I said, 'You're the doctors. I can't be my own doctor.' But just as importantly, I got loving and compassionate care. The amount of love that was expressed to me by my patients, in particular, was just unbelievable."

El-Bayoumi worked throughout her chemotherapy treatments, which helped her cope with the illness, her treatments, and her recovery. "I would have chemo every other week and sometimes have meetings at the same time. I saw patients the whole time, too, and it helped me. It allowed me to focus outside of myself, and it's all about things outside of you."

El-Bayoumi's phone rings, and she excuses herself, taking the call at her desk. She listens quietly. The husband of one of her patients is worried about his wife. She speaks softly, promising to follow up on his concerns, and then she goes quiet for a moment and smiles. "I love you back," she says.



ON THE WEB Scan this QR code with any mobile device for related content – available online below the story.



AN ALL-STAR ADVOCATE

BY THOMAS KOHOUT | PHOTOGRAPHY BY DALE ROTHENBERG

s a rule, Physician Assistants (PA) are passionate about their profession. They aren't simply practitioners, they are proponents, eager to extol the virtues of their chosen field. Alumni from GW's School of Medicine and Health Sciences (SMHS) PA program, however, carry that passion a little further than most.

Take John Trimbath, PA '79, past president of the Ohio Association of Physician Assistants (OAPA), as an example. For more than 30 years, Trimbath has championed the cause of PAs, both as a role-model clinician and through scores of leadership positions with the OAPA and the American Academy of Physician Assistants (AAPA). Why? Because of his solemn belief in the value of his profession and an unwavering commitment to its development — values he credits SMHS faculty mentors for imparting.

"I attribute a lot of my training, many of the things I've be able to accomplish, to the George Washington University," says Trimbath. "The underpinning of the profession began in Washington, D.C., and the underpinning of my own personal growth and career started when I was a student at GW."

Under the influence of the program's inaugural Director and Assistant Dean for Health Sciences Jarrett M. Wise, PA, who would later serve two terms as the president of the Physician Assistant Foundation, and Karl R. Katterjohn, PA, GW's PA program director when Trimbath was a student, he and his classmates would become activists for the profession. "They instilled in us the importance of not only developing excellent clinical skills, but also, because of how new the profession was, they made it clear that it was imperative for us to get involved and campaign for our profession."

At that time, less than five years after the founding of GW's PA program, Trimbath recalls there weren't many PAs in practice. "The only way the profession could develop into what it has become today was for us to be advocates," he says.

Growth Potential

By 1980, just a year after Trimbath entered practice in Euclid, Ohio, PAs had worked to gain prescriptive authority in 10 states across the country. It would be another 28 years, however, before PAs in all 50 states plus the District of Columbia and Guam could say the same.

As more states expanded the PA scope of practice, recognizing that in order for PAs to do their jobs they needed to have additional tools at their command, the profession became an increasingly attractive choice for many people. "Now, more than 40 years after the establishment of the profession, it has grown to become the fastest growing position in the medical field," he says. The Bureau of Labor Statistics agrees, projecting PAs to be among the fastest-growing professions, with a 27 percent growth between 2006 and 2016.

What really helped jump-start the profession were changes to physician training in the mid 1990s, reducing the hours residents were allowed to work and raising concerns about demands on physician time. That was the moment, says Trimbath, that he and others across the country made the push before state legislatures for an even greater expansion of the scope of the PA practice.

With residents working fewer hours, eyes turned toward PAs to fill that niche. "I saw a big push for PAs in specialty care. Someone had to fill that void and PAs were the most qualified to do so," he recalls.

It's a move Trimbath made in his own career, practicing as a surgical PA for about 15 years before switching to emergency medicine in 1995. "That's the beauty of being a PA," Trimbath explains. "You have the ability to move between specialties as interest and the need arise."

A New Perspective

In 2008, Trimbath's view of the health care industry changed. A freak accident left him paralyzed from the chest down, with reduced mobility in his hands. Although he has not been able to practice clinically, Trimbath maintained his zeal for improving the practice.

In 2012, Trimbath was elected to serve as president of the OAPA for the second time. While his first term as president of the OAPA was about working to change legislation in order to expand the scope of practice and gain physician-delegated prescriptive authority, Trimbath's second term garnered even more authority. Today, Ohio PAs are no longer required to have a physician on site at all times, except in the case of emergency departments, and can be as far as an hour away from their supervising physician. PAs in the state are no longer required to have a counter-signature on medical charts, and the supervising ratio is now two PAs per physician.

That ratio, as well as simplifying the two-step licensing processes, one license to practice and the other to earn prescriptive authority, are areas Trimbath sees for growth. "We'd also like to merge the two to have one license. We're very close. We have a bill and a sponsor, we just need to get back into the legislative process."

Although his two-year term as president is wrapping up, Trimbath still sees much to be done. "I will always be an advocate for the profession, whether I am involved in committee work or mentoring."

Trimbath's injury forced him to transition from being a long-time clinical provider to becoming a long-term care patient. The experience offered him a new perspective on the evolution of health care and the migration of new technology into the field.

"With a spinal cord injury, you are constantly involved in physical therapy and preventative care to stay healthy," he explains. "As a result, I have spent a lot of time as a patient. I've been able to see how difficult it can be on this side."

Technology, Trimbath explains, doesn't necessarily equate to better care. The emergence of health IT and electronic medical records may have created a more seamless flow of information in the health arena, but, he adds, it has come at the cost of interpersonal attention. "I've had clinicians come in and spend the entire time looking at their computer screen, not looking at me at all, talking to me through the computer, and typing everything I say. It's opened my eyes and led me to think 'do we need to look at how we train people to tell them there are some things practitioners need to be more aware of when they enter an exam room?'"

Trimbath sees that as an opportunity for more seasoned PAs to step up and serve as mentors for the next generation entering the field. "Whether you are a new physician or a new PA coming out of training, so much of how you develop in your career depends upon the mentors you have," Trimbath says, explaining that guidance from his own mentors helped him develop his own approach toward patients. With younger people entering the profession, he adds, "that's the kind of help these kids need. We need to take on that responsibility. If we make the time to take these people under our wings and help them along, it can only help the patients and our profession."

Interested in getting involved with the program as an alumni volunteer? Contact Sarah Klein at smklein@gwu.edu.

BALANCING ACTION AND ART: Luther W. Brady Jr., M.D. '48, B.A. '46, A.A. '44, HON '04

BY THOMAS KOHOUT | PHOTOGRAPHY BY PETE BYRON

uther W. Brady Jr. is on the verge of a clean sweep. A three-time alumnus of the George Washington University — Associate of Arts in 1944, Bachelor of Arts in 1946, and Medical Doctor in 1948 — Brady will receive the highest honor GW President Steven Knapp can bestow, the GW President's Medal, this spring. The honor will share space on his shelf with a GW Society Medal, presented in 1995 by GW's Board of Trustees; the 1991 Distinguished Alumni Achievement Award; and the highest university-wide honor available, an honorary degree, Doctor of Fine Arts.

Although Brady's shelf is full of honors and awards from various institutions, recognition from his alma mater is quite dear. "At a very critical time in my youth, GW gave me direction," says Brady, a GW Board of Trustees Emeritus. "It embedded in me the sense of responsible action. It gave me the sense of morals and ethics. It gave me a lifetime interest in ongoing inquiry. It imbued in me the sense to innovate and to participate in research and to be a teacher."

Brady, faculty member at Drexel University College of Medicine for more than 50 years, began his career when the field of nuclear medicine was still the Wild West. He learned his craft delivering radiation therapy using a Van Der Graaf generator the Navy originally commissioned to check steel plates for defects. Today, his clinical practice relies on the CyberKnife Robotic Radiosurgery System — technology that beams high-dose radiation with a degree of precision that could scarcely be imagined in the late 1950s. Along the evolution of his career, Brady has been instrumental in the initiation and establishment of modern radio-oncological treatments for eye tumors and cervical cancer, for which he established new standards of care.

World War II brought the family to Washington, D.C. from small-town Wilson, North Carolina, shortly after Brady graduated from high school at 16 years old. His father worked for the Navy Department, while his mother served as treasurer for a local bank in their newly adopted home of Bethesda, Maryland.

Brady chose George Washington and a zoology major for the start of his college education, but he had longed to study medicine since early childhood. As a toddler, Brady suffered a serious break to his upper arm after a pedal-car crash. He had it set at the local hospital under general anesthesia, "using ether if you can imagine such a thing."

From that moment, Brady was drawn toward medicine, and he was accepted to GW's M.D. program before earning his zoology degree. "To this day I really have no idea how I was accepted so quickly, having just started university."

Following a research internship at the National Cancer Institute, where he worked for Harold Stewart, M.D., and Thelma Dunn, M.D., Brady was pressed into service with the United States Navy. Among his early posts was the U.S. Naval Hospital in Bethesda; there, Brady was introduced to nuclear medicine and the Van Der Graaf generator.

During his Navy service, Brady also formed a life-long affection for art. While serving on a cruiser in Long Beach, California, Brady met a collection of young artists —Richard Diebenkorn, Sonia Gechtoff, William Wiley, and Nathan Oliveira — who would become luminaries in the mid-century American art scene. "So in the remaining weeks that I was in California," recalls Brady, "I visited their studios, and that's how I got involved in collecting art, something I've been doing for the rest of my life."

That interest provided counterbalance for Brady's long hours spent in the laboratory, the classroom, and the clinic. The humanities, he says, have provided a means of keeping the world in perspective. "Physicians burn out quickly when they don't have an outside interest," Brady explains. "We get so involved with what we're doing that we sometimes lose sight of the big picture."

That is why, in 2001 at the opening of GW's Media and Public Affairs building, Brady stunned the group on hand to view the "The Luther W. Brady, M.D. Collection of 20th Century Works on Paper" exhibition, by announcing that he would endow the new gallery. The endowment is emblematic of a life spent pursuing activity and experiences.

"I'm a great believer that things happen because you make them happen," explains Brady. "You don't always succeed of course, but nevertheless it's not going happen because you sit behind the desk and hope it will happen. You help make something positive happen, something that's a benefit. That's responsible action." "At a very critical time in my youth, GW gave me direction. It embedded in me the sense of responsible action. It gave me the sense of morals and ethics. It gave me a lifetime interest in ongoing inquiry. It imbued in me the sense to innovate and to participate in research and to be a teacher."

– Luther W. Brady Jr.M.D. '48, B.A. '46,A.A. '44, HON '04

RESIDENT PROFILE

Striving for Surgical Excellence

BY LAURA OTTO

resh out of medical school and on the first assignment of his young medical career, Yen-Yi Juo, M.D., M.P.H., found himself aboard a minesweeper, responsible for the health of 75 sailors and crew members as a medical officer for the Taiwanese Navy. Just a month into his position and far out to sea, Juo had to treat a sailor suffering from a pneumothorax, a life-threatening respiratory condition characterized by a tiny hole in the lung.

"It was a very scary situation," says Juo, describing how he inserted a needle in the sailor's chest to relieve pressure in the chest cavity, allowing the lung to expand and saving his patient's life. "It was my first experience as a practicing physician, alone, in the middle of the sea, and having to make life-changing decisions."

Born and raised in the seaport town of Kaohsiung, Taiwan, Juo moved to the United States in 2012 after finishing his military service, to pursue a career in medicine. Juo, now a second-year categorical surgical resident at GW's School of Medicine and Health Sciences (SMHS), came to SMHS for its renowned surgical residency program. "I chose surgery because of the commitment to holistic care and personal responsibility for the patient unique to the specialty," he says.

"When I first came here I didn't know that a Q-tip and a cotton swab were the same thing," recalls Juo, who received his medical degree from National Taiwan University, as well as a master's degree in public health from the Johns Hopkins University. "There was a learning curve in the beginning as a foreign graduate, but the warmth of the working environment and the patience of my mentors helped me catch on very quickly."

HE GEORGE WASHINGTON

The school's surgical program stood out for Juo, especially the opportunities for hands-on training and clinical research. "Part of the attraction is that GW's program is so comprehensive and really strives to deliver whole-person care," he explains. "The faculty is enthusiastic in taking residents through procedures and encourages independent thinking and decision making."

Also, being at a renowned academic institution such as GW has given Juo more opportunities for research and publication.

When he isn't in the operating room, Juo often finds solace sitting at a piano playing Bach. "I have played since I was kid," he says. "It has been a great way to relieve the stress of long hours and little sleep during residency."

After residency, Juo plans to pursue a fellowship in surgical oncology. "People have said that my lifestyle as a surgical resident will be hard and the hours will be long," he says. "But I think it's a beautiful thing to be able to commit oneself to the thing that one loves at least once in life and see what comes out of it."

Make No Bones About It BY LAURA OTTO

hen Jaspreet Suri arrived in Southern California as a 7-year-old in 1995, among his earliest experiences was a broken leg during school. Natives of New Delhi, India, Suri's parents had only recently moved him and his sister to Los Angeles in search of a better environment — one more conducive to raising children and ensuring their future success. He recalls running in gym class when his femur suddenly snapped before his leg even hit the ground. "I also remember walking home from school and breaking my femur bone again," says Suri, explaining that he has broken the same two bones, his left and right femurs, multiple times.

It wasn't until his fourth break, at age 11, that Suri was diagnosed with a mild form of *osteogenesis imperfecta* (OI), a rare genetic disorder characterized by brittle, easily breakable bones. The National Institute of Arthritis and Musculoskeletal and Skin Diseases estimates that roughly 20,000 people, and perhaps as many as 50,000, live with this disorder in the United States.

Since then, Suri, who earned his bachelor's degree in physiological science from the University of California, Los Angeles, has undergone countless surgeries to realign his bones and strengthen them with rods. "I have metal in both femurs right now," he says, which is why his bones are no longer breaking.

As a child, Suri notes, his experiences with doctors weren't always positive. "Just because a patient is young doesn't mean you should belittle their concerns and brush them aside," he says. "You still have to treat them with the same level of respect as if you were treating an adult."

Living with OI inspired Suri, now a fourth-year medical student at the George Washington University School of Medicine and Health Sciences, to pursue a career in medicine and ensure that people with similar health problems are treated with empathy and respect.

"Growing up in a close-knit family, I wanted the opportunity to be on my own and foster my personal growth," he says. Leaving the West Coast for GW offered Suri that sense of independence he craved, as well as limitless professional opportunities. "Being at GW has given me the chance to attend national conferences, attend health policy talks, and listen to politicians speak — experiences that are harder to come by in Los Angeles."

As the current senior class president, Suri sees a leadership role in medicine in his future. "Starting off as a clerkship



director [and then going from] program director to one day becoming chair of a department of medicine is a goal of mine," says Suri, who officially became a U.S. citizen during his second year of medical school. "I thought this would be a good place to start because it gives me firsthand experience in policy and decision making."

Suri manages his medical condition by maintaining a healthy lifestyle and limiting the amount of stress he puts on his bones. Sadly, this means he can't play contact sports such as soccer or basketball anymore, things he enjoyed as a child.

"At the end of the day, I just want to be a brilliant clinician," says Suri. "One who is liked by my patients, respected by my colleagues, and looked up to by the next generation of medical students."

FACULTY NEWS



An Inventive Fellow

Creativity in science requires more than just subject mastery. Consider Douglas Nixon, M.D., Ph.D., Ross Professor of Basic Science Research, and chair of the Department of Microbiology, Immunology, and Tropical Medicine at GW's School of Medicine and Health Sciences (SMHS), whose achievements in innovation have elevated him to the ranks of the best and brightest inventors.

Nixon, who leads GW's Research Center for Neglected Diseases of Poverty, recently received the 2014 National Academy of Inventors (NAI) Fellowship, a high honor awarded to academic inventors who have demonstrated a prolific spirit in creating or facilitating inventions with realworld applications.

Nixon was the first researcher to identify an HIV-specific cytotoxic T-cell epitope. He also counts among his credits the Elizabeth Glaser Scientist Award and inclusion in the 2012 POZ 100, an elite group of scientists, researchers, advocates, politicians, and celebrities recognized for their contributions to ending AIDS.

Executive Impact

Richard J. Simons, M.D., brings an extensive background as an internationally recognized leader in academic medicine to his new position as senior associate dean for M.D. programs at GW's School of Medicine and Health Sciences (SMHS). Simons, who joined the SMHS senior leadership in early fall 2015, is leading the school's ongoing development, implementation, and evaluation of the SMHS undergraduate and graduate medical education programs.

Most recently, he served as the associate vice president for health affairs at Dartmouth College and the senior associate dean for medical education at Geisel School of Medicine at Dartmouth, where he helped guide Geisel through an extensive accreditation process, securing a full eight-year term from the Liaison Committee for Medical Education.

As senior associate dean for M.D. programs, Simons oversees the accreditation of all undergraduate and graduate medical education programs at SMHS, and supervises M.D. admissions, financial aid, student affairs, and curricular affairs. Additionally, he provides oversight for the Office of Medical Education, the Clinical Learning and Simulation Skills Center, the Office of Student Opportunities, the Graduate Medical Education Programs, and the Office of Continuing Education in the Health Professions.





Grant Funds Pediatric Dysphagia Project

For doctors treating newborns suffering from pediatric dysphagia, a chronic condition related to feeding and swallowing, a solution may soon be available. With \$6.2 million in program project grant funding from the Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD), an interdisciplinary group of researchers from GW's School of Medicine and Health Sciences (SMHS) and Children's National Health System will search for a cure.

"Our combined expertise in circuit function, cranial and facial development, and

genetics, along with our ability to creatively come together and [our] strong institutional support, makes this team the ideal group to meet this challenge," said Anthony-Samuel LaMantia, Ph.D., director of the GW Institute for Neuroscience, and professor of pharmacology and physiology at SMHS. "Working together over the last several years, we have become incredibly committed to solving this major clinical issue and biological mystery."

Currently, dysphagia occurs in 35 to 80 percent of newborns with neurodevelopmental disorders. Those affected display malnutrition, acute choking, food aspiration, an inability to gain weight, and naso-sinus-, middle ear-, and lung aspiration-related infections, including pneumonia. Right now, treatments focus on symptom relief alone, and there are no preventative strategies.

In order to seek an effective solution, the team, after developing the first valid model for pediatric dysphagia, will use a three-pronged approach to provide a fundamental understanding of the disorder by defining its pathology, its developmental origins, and possible strategies for prevention.

Ellen Goldman, Ed.D. '05, M.B.A., Named Assistant Dean for Faculty and Curriculum Development in Medical Education

Ellen Goldman, Ed.D. '05, M.B.A., is now playing dual roles for the George Washington University (GW) as both the associate professor of human and organizational learning at GW's Graduate School of Education and Human Development and, more recently, as the assistant dean for faculty and curriculum development in medical education for the School of Medicine and Health Sciences (SMHS).

"In the context of our strategic efforts to invest in faculty development and curriculum enhancement, I am thrilled that Dr. Ellen Goldman, a nationally recognized leader in medical education, has joined the SMHS leadership team," said Jeffrey S. Akman, M.D. '81, RESD '85, Walter A. Bloedorn Professor of Administrative Medicine, vice president for health affairs at GW, and dean of SMHS. "Ellen's expertise will help our faculty take SMHS to the next level in accomplishing our goals of excellence not just in learning but in teaching, as well."

Goldman, who received the 2014 Morton A. Bender Teaching Award for outstanding teaching, focuses on leadership development both in and outside the classroom. She leads master- and doctoral-level courses and supervises dissertation research, and her own research has resulted in the Richard A. Swanson Research Excellence Award, recognition in the Journal of Strategy and Management, and an award from the Academy of Management.



FACULTY NEWS



Taking Curriculum to Task

Terry Kind, M.D., M.P.H., associate professor of pediatrics and the GW School of Medicine and Health Sciences' (SMHS) new assistant dean for clinical education, is taking curriculum to task.

In her new role as assistant dean, Kind will focus on the clinical component of the M.D. program curriculum. Along with the Committee on Undergraduate Medical Education Curriculum, its subcommittees, and the Office of Medical Education, she will ensure that the curriculum is on trend and continues to meet its requirements: preparing students for clinical practice and meeting accreditation criteria. She will also make sure it is properly integrated, as well as evaluated and improved.

"Let's help our students apply their knowledge and develop their clinical skills and reasoning to grow into professionals who provide care with excellence and compassion," said Kind. "I look forward to working together with the talented GW community to further enhance clinical education."

Kind, who currently chairs the clinical subcommittee under the Committee on Undergraduate Medical Education Curriculum, will provide support for the development, implementation, and evaluation of the undergraduate medical education curriculum, as well.

Emerging Scholars Program Awards Pilot Grants for 2014-15

GW's School of Medicine and Health Sciences (SMHS) recently granted pilot funding to three investigative teams as part of its Emerging Scholars Program. The program, which is designed to support scholarly projects undertaken by health sciences faculty and staff, focuses on academic advancements, service-learning opportunities, and professional and mentoring partnerships inside and outside of the school.

"This pilot grant program is important for health sciences staff and faculty who are working toward important discoveries, creating an environment of high-quality teaching and learning, and bettering processes for implementation and evaluation of administrative and communication approaches," said Mary Corcoran, Ph.D., associate dean for faculty development for health sciences and professor of clinical research and leadership. "This will lead to the fulfillment of our mission and goals for health sciences."

The winning projects and the principal investigators for the 2014-15 year are:

- "Assessing Collaboration Readiness: A Model for Understanding Individual Motivation and Deterrents to Team Collaboration (the Motivation Assessment for Team Readiness, Integration, and Collaboration MATRIx survey)," by Gaetano Lotrecchiano, Ph.D., assistant professor of clinical research and leadership;
- "Incidental Findings in Whole Genome Sequencing Research: Assessing the Roadblocks to Translation," by Shawneequa Callier, J.D., assistant professor of clinical



research and leadership; and "Using Individualized Proximal Testing to Shape Learning and Remediation of Concepts," by Carol Rentas, M.Ed., assistant professor of clinical research and leadership.

The program, which began in 2012, awarded each team \$10,000, \$25,000, or \$50,000. To date, the program has funded a total of eight pilot awards.

Emerging Scholars projects have resulted in eight professional presentations and five published articles. Educational tools developed and tested with pilot funds have included an online clinical decision-making interactive module that uses simulations to mimic physical therapy practice in an intensive care unit.

Robert Zeman Named 2015 ARRS Distinguished Educator

When it comes to education, innovation is critical – and so are those who incorporate and improve on what's new. For that reason, the American Roentgen Ray Society (ARRS) annually assesses which nominated educators of radiology have improved the education program and integrated state-of-theart and advanced techniques in the classroom. This year, the Distinguished Educator Award was presented to Robert Zeman, M.D., professor and chair of the Radiology Department for GW's School of Medicine and Health Sciences.

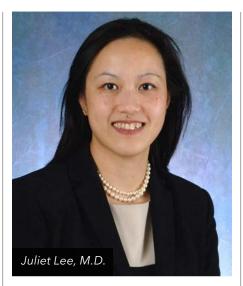
In addition to other qualifications, including a proficiency in teaching, nominees for the award must have a proven commitment to radiology education and a knack for identifying problems and possible solutions in the field.

Christina Puchalski Wins Humanities Award

Christina Puchalski, M.D. '94, RESD '97, founder and director of the GW Institute for Spirituality and Health (GWish) and professor of medicine at GW's School of Medicine and Health Sciences, was one of 10 leaders recognized with the Humanities Award presented at the Annual Assembly of the American Academy of Hospice and Palliative Medicine and the Hospice and Palliative Nurses Association on Feb. 27. The award is given only to those "whose work has advanced the relationship between humanities and palliative care and who [have] employed the discipline of the humanities to improve end-of-life care through community or professional education."

The Class of the Room

GW School of Medicine and Health Sciences faculty member Juliet Lee, M.D., assistant professor of surgery, was among the winners of the 2015 Bender Teaching Awards. Lee, a board-certified surgeon and a fellow of the American College of Surgeons, was recognized for her high academic standards and teaching skills. Lee joins Irene Foster, assistant professor of



economics; Adrienne Hancock, assistant professor of speech and hearing science; and Edward Helfers, part-time faculty, University Writing Program, as this year's recipients.

The Bender Teaching Awards recognize undergraduate, graduate, and professional teaching at GW. Awardees are nominated by a department chairs, colleagues, or students, and winners are selected by a committee consisting of a GW Student Association representative, previous Trachtenberg and Bender award winners, faculty members who have not won either award, and a Faculty Advisory Board member. Each award provides a \$1,000 prize to be used by the recipient for professional development.

Researchers Gain Ground in Treating Multiple Sclerosis

Researchers, including Robert Miller, Ph.D., senior associate dean for research, Vivian Gill Distinguished Research Professor, and professor of anatomy and regenerative biology at the George Washington University School of Medicine and Health Sciences, have taken another step forward in tackling multiple sclerosis (MS).

Miller, working with Paul Tesar, Ph.D., a professor in Case Western Reserve's Department of Genetics and Genome Sciences, has identified two drugs, miconazole and clobetasol, that could have a significant impact on reversing the severity of MS.

"Current therapies focus on stopping immune system attacks, slowing the progression of the disease," Miller said. "Our research is focused on trying to repair the brain itself, to stop the disease rather than slow it. While successful in vivo, we're looking forward to continuing our research through further testing of miconazole and clobetasol."

Miconazole, the scientists discovered, functions directly as a remyelinating drug without affecting the immune system, and clobetasol is both a powerful immunosuppressant and a remyelinating agent. Remyelinating is crucial to reversing the effects of MS as it leads to the creation of new myelin sheaths, which form protective insulation over nerves.

"We asked if we could find a faster and less invasive approach by using drugs to activate native stem cells already in the adult nervous system and direct them to form new myelin," Tesar said. "Our ultimate goal was to enhance the body's ability to repair itself."

Miller and Tesar's report, "Drugbased modulation of endogenous stem cells promotes functional remyelination in vivo," was published this spring in "Nature."



THE CAMPAIGN FOR GW SCHOOL OF MEDICINE & HEALTH SCIENCES

Support the School of Medicine & Health Sciences

By advancing our four-part mission – to teach, heal, discover, and serve – the School of Medicine and Health Sciences (SMHS) seeks to change lives and better mankind. Renowned for a faculty and student body that actively engages communities through clinical care, research, and volunteer work, SMHS offers a challenging and formative educational experience designed to train leaders in a swiftly changing health care landscape.

SMHS is part of the George Washington University's \$1 billion philanthropic campaign, which supports students, enhances academics, and breaks new ground through capital projects and research. Your gift enables SMHS to have an impact in the community, the country, and the world.

Join us in making history. go.gwu.edu/makehistorysmhs

THE GEORGE WASHINGTON UNIVERSITY WASHINGTON, DC



Mark Batshaw, M.D., Assumes New Leadership Role

Mark Batshaw, M.D., associate dean for academic affairs and professor of pediatrics at GW's School of Medicine and Health Sciences, is ascending to a new leadership position: president-elect of the American Pediatric Society (APS).

Batshaw, who is also chief academic officer and physician-in-chief at Children's National Health System, has long devoted his career to pediatric medicine, with a focus on rare diseases and children with developmental disabilities. His achievements in the field include the publication of more than 200 peer-reviewed articles and the "Children with Disabilities" textbook. He has received numerous honors, such as the Arnold J. Capute Award, which is given by the American Academy of Pediatrics.

Batshaw will serve as vice president/president-elect of APS for one year, starting May 2015. In May 2016, he will assume the role of president. He will remain an emeritus member of the Society for Pediatric Research.

Off with the Interim

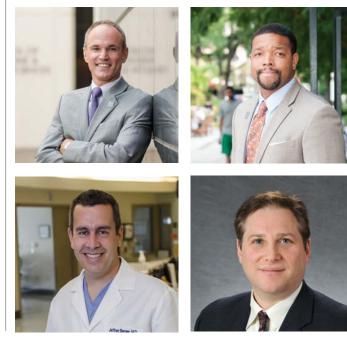
GW's School of Medicine and Health Sciences (SMHS) has promoted four assistant and associate deans by removing their "interim" title.

Raymond H. Lucas, M.D., associate professor of emergency medicine, has held the position of interim associate dean for faculty affairs and professional development since April 2013. He "has provided outstanding leadership and vision for the Office of Faculty Affairs," wrote Jeffrey S. Akman, M.D. '81, RESD '85, Walter A. Bloedorn Professor of Administrative Medicine, vice president for health affairs at GW, and dean of SMHS, in an announcement. Lucas, who has been a member of the SMHS faculty since 1994, has earned four Teaching Excellence Awards and has spearheaded several new programs, including a faculty development workshop series.

Lorenzo Norris, M.D., assistant professor in the Department of Psychiatry and Behavioral Sciences, took on his role of interim assistant dean for student affairs in February 2014. Norris, who was recently named "Top Doctor in Psychiatry" by Washingtonian Magazine, acts as a resource for SMHS students and assists with the development and implementation of career counseling programs.

Jeffrey Berger, M.D., associate professor of anesthesiology, is now the associate dean for graduate medical education (GME). "He has done an extremely effective job as interim associate dean," Akman wrote. In addition to working in both the hospital and the classroom, Berger serves as the chair of the GME Committee and is the designated institutional official for the Accreditation Council for Graduate Medical Education.

Matthew L. Mintz, M.D. '94, RESD '97, FACP, associate professor of medicine and former interim assistant dean for preclinical education, has led the charge on the newly revised and integrated M.D. program curriculum. Mintz, Akman wrote, "has also overseen the incorporation of active learning approaches into the classroom and the restructuring of the Office of Medical Education."



Clockwise from top left: Raymond H. Lucas, M.D., associate dean for faculty affairs and professional development; Lorenzo Norris, M.D., assistant dean for student affairs; Matthew L. Mintz, M.D. '94, RESD '97, FACP, assistant dean for preclinical education; and Jeffrey Berger, M.D., associate dean for graduate medical education.

Teaching with Honors

"Teaching is about communicating something that is complicated in a way that students can embrace and get excited about — and that excites me," explains Patricia Latham, M.D., Ed.D., professor of pathology at the GW School of Medicine and Health Sciences (SMHS).

Latham finds herself in a unique position as the inaugural faculty member to hold The Frank N. Miller, M.D. Distinguished Teaching Professorship. She is receiving an endowed title named for a professor she knew well, and so she understands the legacy she's been charged to maintain. "It's extremely gratifying to receive this honor because I knew Dr. Miller," she says. "He was inspirational to his students and people that knew him as an instructor, and he was so giving of his time and energy."

Latham recalls Miller's excitement for teaching as infectious. "I loved working with him because you could see his passion and commitment for teaching and for his students. This was reflected in the way he taught and students responded to it because they wanted to be a part of it."

The endowment, established through numerous donations and completed by SMHS alumna Diane Perrine Luckmann, M.D. '59, honors the career of Miller, M.D. '48, B.S. '43, Professor Emeritus of Pathology at SMHS, who passed away on April 24, 2013. For more than 40 years, Miller was a fixture in the SMHS community, helping to mold the careers of future physicians, including Luckmann. In his role as dean of students and curricular affairs from 1966 to 1973, Miller made it his mission to increase the number of women entering medical school, which he successfully did during those years. He also served as chair of the Department of Pathology from 1974 to 1977.

Patricia Latham, M.D. GWUMC

"I'm so proud of my father and his legacy," says Miller's daughter Catherine Sluder, manager of the Bloedorn Technology Center in GW's Himmelfarb Health Sciences Library. "He would want to be remembered as a devoted teacher and mentor to his students," she says, adding that "he was committed to giving them a solid foundation in pathology, but he did more than that. He incorporated medical humanities into his lectures."

Latham arrived at GW in 1991 and recalls that one of the strengths of SMHS's Pathology Department, spearheaded by Miller, was an emphasis on quality education. "The department had a major commitment to education, which was as important as any other responsibility in the department," she recalls.

"Dr. Miller was a role model. As the director of the pathology course, he not only set it up to meet the requirements, but also addressed challenges faced by medical students, providing a very solid base in pathology."

To honor Miller's legacy, Latham will continue to make "research, service, and education the cornerstones of this department, as they were when Dr. Miller was chair."

Before Miller passed away, Sluder was able to tell her father about the endowed professorship. "He was in decline and not always fully aware or responsive, but when I told him the news he actually smiled, so he understood."

PRIMARY CARE SCHOLARSHIPS

The George Washington University (GW) School of Medicine and Health Sciences (SMHS) awarded \$500,000 in scholarships to four, third-year medical students interested in pursuing a career in primary care. The students — Douglas M. Herrin, Daniel Mays, Margarita Ramos, and Suhavi Tucker — received certificates of their awards, each totaling \$125,000, Jan. 28.

Although primary care doctors are at the front line of health care and are often viewed as key members of the health care team, there is an alarming shortage of primary care physicians, nationally, as well as locally. The scholarship, now in its second year, was established anonymously by two grateful patients of primary care physician Matthew Mintz, M.D. '94, RESD '97, assistant dean for pre-clinical education and associate professor of medicine at SMHS, to support those interested in pursuing the much needed specialty.

"Primary care is the nuts and bolts of medicine," says Herrin, whose diverse experience spans domestic volunteering, interning at the White House, medical and educational work in Jamaica, and an anti-human trafficking



ON THE WEB

Scan this QR code with any mobile device for related content – available online below the story.

NGO in Belarus. He adds that primary care "is the traditional embodiment of medicine that allows a practitioner to establish a long-term relationship and continuum of care for a patient. In this capacity, the practitioner can act as both counselor and doctor in the healing process."

"We knew we wanted to use these generous gifts to encourage students to enter the primary care field due to the great need for primary care physicians," said Mintz.

The selection was based on three criteria: financial need, academic scholarship, and a real dedication toward an interest in the primary care field. Awards are contingent upon a successful match in a primary care residency, family medicine, pediatrics, or internal medicine residency.



CLASS NOTES



A Fast-Paced Path

BY CHRISTIAN MYSLIWIEC

or Sheila Pinette, D.O., PA '83, chief health officer for the Maine Department of Health and Human Services (DHHS), the path leading to Maine's highest public health office was a fast-paced and challenging journey – and one that began at the GW's School of Medicine and Health Sciences (SMHS) physician assistant (PA) program.

For a self-described country girl, Pinette felt that coming to GW's urban campus in 1981 and experiencing an international city for the first time was as intimidating as it was exhilarating. "It was alarming, it was beautiful, it was exciting," she says. "In the beginning it was overwhelming, but it was one of the most exciting times of my life."

Like students today, SMHS PAs in the 1980s trained and completed clinical rotations alongside medical students, offering the opportunity for the two groups to share knowledge and build strong relationships. "We really learned a lot together," says Pinette. "It was fantastic the way it was set up."

Pinette recalls her many mentors at GW, such as Frank N. Miller, M.D. '48, B.S. '43, chair of the Department of

Pathology; Benny Waxman, M.D., associate chair of obstetrics and gynecology; and Thomas Eugene Piemme, M.D., who was integral to bringing the PA program to GW.

During her time at SMHS, Pinette became the school's first Upjohn Presidential Scholarship recipient.

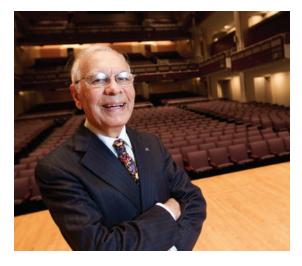
After earning her degree in August 1983, Pinette went to Hartford, Connecticut, to begin her PA career at Saint Francis Hospital, where she served as a house officer for the neonatal intensive care unit. There she met a young doctor, Michael G. Pinette, M.D., FACOG, and the two were married in August 1988.

In 1989, Michael Pinette was recruited by the Maine Medical Center to develop the maternal-fetal medicine program and to direct the women's health program. Sheila Pinette joined him, working as a PA caring for high-risk patients in the program. Together, the couple strengthened the perinatal outreach program – building it from a staff of three to a staff of more than 50 employees with three other physicians – to address Maine's high maternal morbidity and mortality rates.

In 1996, Pinette looked to build upon her medical training. She earned a doctorate in osteopathy from the University of New England College of Osteopathic Medicine in Biddeford, Maine, in 2000, and followed that with an internal medicine residency at the Maine Medical Center in 2003.

After nearly a decade in private practice, Pinette was appointed director of the Maine Center for Disease Control and Prevention (CDC) in April 2011, under the administration of Governor Paul LePage. During her tenure with the CDC, Pinette spearheaded policy changes for women's health, worked to restrict elected deliveries prior to 39 weeks (which succeeded in decreasing preterm births), advised legislators on how to educate doctors and the public on breast cancer risk factors, promoted healthy eating and bringing down the state's obesity rates, and raised awareness for Lyme disease, which is an epidemic in Maine. In February 2015, she was promoted to chief health officer for the Maine DHHS, as well as the acting state medical epidemiologist.

For Pinette, leadership and success have been a collaborative effort. "I attribute many of my successes to a strong educational foundation and a passion for medicine much inspired by the faculty at GW," she says. "With tremendous dedication, ambition, my faith, and lots of positive energy, along with the love and support of my family and friends, I have been able to lead in a respectful, thoughtful manner as part of a community of leaders. No one person can do it alone, as it takes collaboration and partnership to succeed."



ASSAD MEYMANDI, M.D. '62, PH.D.,

Distinguished Life Fellow, American Psychiatric Association, was selected to serve as the 2015 Commencement Speaker for William Peace University in downtown Raleigh, North Carolina. He will also receive an honorary doctorate in humanities at the graduation ceremony. Meymandi, an adjunct professor of psychiatry at the University

of North Carolina School of Medicine, is a noted philanthropist in the region. He has endowed a professorship in psychiatry at the University of North Carolina, a fellowship at the National Humanities Center, and a nursing scholarship at Cumberland Community College in Fayetteville in honor of his late wife, Patricia. His \$2 million gift built the 1,700-seat Meymandi Concert Hall in Raleigh named in honor of his mother, and another \$2.5 million established the Meymandi Exhibition Gallery at the North Carolina Museum of Art, named for his poet and philosopher father, Farajollah Meymandi.



ALAN E. GREENBERG, M.D. '82, M.P.H., professor

and chair of the Department of Epidemiology and Biostatistics at the Milken Institute School of Public Health at GW, and director of the District of Columbia Developmental Center for AIDS Research, received the Alvan R. Feinstein Award for Patient Care in the Field of Clinical Epidemiology by the American College of Physicians (ACP). Greenberg

has published extensively in the area of HIV epidemiology in the United States and in Africa. The Feinstein award is given to an American physician who has made a major contribution to clinical epidemiology or clinimetrics, the direct study of patients' clinical conditions. The award was presented at ACP's Internal Medicine Meeting 2015, in Boston, Massachusetts.

1950s

GEORGE J. COHEN, M.D. '50, FAAP,

clinical professor of pediatrics at GW's School of Medicine and Health Sciences, received the 2014 Local Heroes Award from the American Academy of Pediatrics.

1960s

KENNETH A. FISHER, M.D. '68, served as a delegate and representative for GW President Steven Knapp at the inauguration of Mark S. Schlissel, M.D., Ph.D., as the 14th president of the University of Michigan.

EDWARD G. KOCH, M.D. '69, RESD '73, was chosen to serve as president of the Medical Society of Virginia (2015-16).

IRA L. SPAR, M.D. '68, RESD '75, published New Haven's Civil War

Hospital: A History of Knight U.S. General Hospital, 1862-65 (McFarland Books, 2013).

1970s

RICHARD B. REFF, M.D. '72, RESD '77, B.A. '69, received the inaugural Jewish Community Center of Greater Washington Maccabi Legacy Award.

MICHAEL C. SCHWEITZ, M.D. '72, RESD '75, B.A. '69, was recognized as a Master of the American College of Rheumatology.

PETER B. SHERER, M.D. '79, was named a 2014 "Top Doc" by Washingtonian Magazine.

OMEGA L. SILVA, M.D. '75, received the 2014 Commitment to Excellence award from the American Medical Women's Association.

CLASS NOTES

1980s

JEFFREY ALAN BECKER, M.D. '88, B.S.

'80, was named a 2014 "Top Doc" by *Washingtonian Magazine*.

RICHARD CYTOWIC, M.D., RESD '81, was awarded the 2015 Artist Fellowship Award by the Washington, D.C. Commission on the Arts and Humanities. He also was an invited speaker discussing brain-inspired computing at the IBM Research Cognitive Systems Colloquium in November 2014.

GARY FALK, M.D., RESD '83, associate scholar in epidemiology, Center for Clinical Epidemiology and Biostatistics, University of Pennsylvania Perelman School of Medicine, received the 2014 American Gastroenterological Association Distinguished Clinician Award and the 2014 American Gastroenterological Association Imaging & Advanced Technology Section Research Mentor Award.

WAYNE KENNETH HOFFMAN, M.D. '80, was selected to serve as president of the Georgia Academy of Family Physicians for 2014-15.

JAMES LONGOBARDI, D.P.M., PA '80, M.B.A., was appointed medical director of Surgical Service at Scripps Mercy Hospital, Chula Vista, California, where he also runs his private practice. Longobardi is actively involved in diabetic limb salvage/wound care.

BOB RAPPAPORT, M.D. '85, RESD '86, received the 2015 John and Emma Bonica Public Service Award from the American Pain Society.

JESSICA WEISS, M.D., RESD '89, was named a 2014 "Top Doc" by Washingtonian Magazine.

1990s

FADYA EL RAYESS, M.D. '96, M.P.H. '96, was selected to serve as chair of the Society of Teachers of Family Medicine Group on Global Health.

GARY FRIEDMAN, M.D. '92, president of the New Hampshire Society of Anesthesiologists, was a featured guest on the radio show *On Call* in an episode titled "Getting to Know Your Anesthesiologist," as part of Physician Anesthesiologists Week.

CHRISTINE MENIAS, M.D. '95, professor of radiology at the Mayo Clinic, Scottsdale, Arizona, was named Educator of the Year by the Department of Radiology at Mayo Clinic. Menias is a member of the Gastrointestinal Education Exhibits and Awards Committee of the Radiological Society of North America and a Fellow in the Society of Abdominal Radiology. She

SAVE the **DATE** GW MEDICAL SCHOOL'S 2015 Alumni Weekend

SEPTEMBER 25-27 2015



School of Medicine & Health Sciences





also serves as an associate editor of Abdominal Imaging, the journal of the Society of Abdominal Imaging, and an editorial board member for Radiographics, the bimonthly journal of the Radiological Society of North America.

THOMAS YACKEL, M.D. '96, RESD '96,

M.P.H. '96, has been appointed vice president and chief clinical integration officer and associate dean for clinical practice at the Oregon Health & Science University School of Medicine.

2000s

JASON E. BRENNER, M.D. '11, was named chief resident of ophthalmology for 2014-15 at Temple University Hospital.

ANDREW D. CHOI, M.D. '08, B.A. '03, was recognized as a finalist for the Siemens Outstanding Academic Research Award at the 2014 Society of Cardiovascular Computed Tomography Scientific Sessions, as well as a finalist for the Young Investigator Award at the 2014 American College of Cardiology (Mid-Atlantic) Cardiology Symposium. He is currently a fellow in advanced cardiac imaging at the National Institutes of Health and Washington Hospital Center.

BRIAN EDMONSTON, M.S.H.S. '08,

captain with the Prince William County Department of Fire and Rescue, and member of Fairfax County's Urban Search and Rescue Team, recently earned an M.P.A. from George Mason University.

SCOTT FALK, M.D. '00, B.A. '96,

assistant professor of clinical anesthesiology and critical care, University of Pennsylvania Perelman School of Medicine, was recently named director of performance improvement quality and safety for the Department of Anesthesiology and Critical Care, and lead faculty, Penn Medicine Leadership Forum, Performance Improvement in Action.

JAYSON H. HUBER, D.D.S., M.S. '11, was inducted into the 2014 Class of the International College of Dentists.

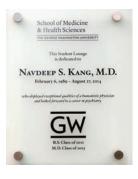
RACHEL MEDNICK THOMPSON, M.D. '10, B.A. '06, won the 2014 Mid-America Orthopaedic Association Dallas B. Phemister Physician in Training Award.

LESLIE A. PEEDIN, M.D. '08, joined the Brody School of Medicine at East Carolina University as a neonatologist in the Department of Pediatrics.

ROY WASHINGTON JR., CERT '03, A.S. '08, won the USA BMX North Carolina 2014 Cruiser Title in BMX racing.

RACHNA VANJANI, M.D. '10, was named chief resident in obstetrics and gynecology at Boston Medical Center.

ERIC WOLLINS, M.D. '02, RESD '09, was named a 2014 "Top Doc" by both Washingtonian Magazine and Northern Virginia Magazine.



In March, students were welcomed into the newly named "Navdeep S. Kang, M.D. Student Lounge," which was

dedicated in his memory. Kang, a fourth-year medical student, died last August.

"Nav was a wonderfully caring, engaging person, an incredibly bright light in our school, whose absence will leave a tremendous hole in our community," says Jeffrey S. Akman M.D. '81, RESD '85, Walter A. Bloedorn Professor of Administrative Medicine, vice president for health affairs, and dean of the GW School of Medicine and Health Sciences.

WHAT WILL YOUR *legacy* BE?

GW's Office of Planned Giving can help put philanthropy in your estate plan.

877-498-7590 • pgiving1@gwu.edu go.gwu.edu/plannedgiving





CLASS NOTES

IN MEMORIAM

HUGO V. RIZZOLI, M.D., Professor Emeritus in the Department of Neurological Surgery, passed away at age 98. A true neurosurgical pioneer and devoted mentor, Rizzoli earned his bachelor's degree in 1936 and his medical degree in 1940 from the Johns Hopkins University. He served as a Harvey Cushing Fellow before completing his training in neurosurgery in 1944. Rizzoli was the last resident under Walter E. Dandy, M.D., one of the founding fathers of neurosurgery, as part of his famed "brain team."

While at GW, Rizzoli became well known for the development of procedures for the surgical management of intervertebral disc herniations. He treated many influential politicians and other famous figures, including former Chief Justice William H. Rehnquist and former Federal Bureau of Investigation Director J. Edgar Hoover.

He was appointed the first full-time chair of neurosurgery at GW in 1971, and during his tenure at the university he trained dozens of neurosurgeons to whom he was a tireless mentor. In 1998, an endowed professorship – the Dr. Hugo V. Rizzoli Professor of Neurosurgery – was established in his honor.

JOHN E. HUTTON JR., M.D. '63, former clinical professor of surgery at SMHS, passed away in December 2014 at age 83. The former U.S. Army combat surgeon and Vietnam veteran served as physician to the president during the end of the Ronald Reagan administration. In that role, Hutton directed the White House Medical Unit, responsible for the medical needs of the president, vice president, White House staff, and visitors. In addition to his service at GW and the White House, Hutton was an associate professor of surgery at the Uniformed Services University of the Health Sciences in Bethesda, Maryland.



RICHARD S. SNELL, M.D., Ph.D.,

Professor Emeritus of Anatomy and Orthopaedic Surgery, passed away on Jan. 30, 2015. Snell served as chair of the Department of Anatomy and Regenerative Biology for nearly two decades. For generations, medical students and seasoned clinicians alike have turned to Snell's "Clinical Gross Anatomy," "Clinical Histology," "Clinical Neuroanatomy," and "Clinical Embryology" textbooks as the preemi-

nent anatomical reference books. Among his many honors, Snell was a member of the Anatomical Society of Great Britain and the American Association of Anatomy, and in 2009 became an Honored Member of the American Association of Clinical Anatomists.

In December 2014, Snell's members visited Ross Hall to present Robert Hawley, Ph.D., King Fahd Professor of Anatomy and Regenerative Biology and chair of the Department of Anatomy and Regenerative Biology, and Frank Slaby, Ph.D., professor of anatomy and regenerative biology, with a self-portrait of Snell. The portrait now hangs in the first floor of Ross Hall's Himmelfarb Library.

Ahmed F. Abughaban, M.D., RESD '15 Joseph M. Adcock, A.S. '85 Bramwell R. Anthony, M.D., RESD '54 Patricia Ann Bell, A.S. '82 Gerald K. Bowman, B.S. '64 Robert W. Bright, M.D. '65 David J. Buran, M.D. '57 Walter F. Cresswell Jr., M.D. '48 William C. Crowder, M.D., RESD '05 Clifford N. Cutler, M.D. '57 John C. Gall Jr., M.D. '53, RESD '54 Ray F. Garman, M.D. '61 Martin E. Hansen, M.D. '51 Susan Hasselquist, M.D., RESD '84 Gregory T. Henesy, M.D. '52, B.A. '49, A.A. '48 Clayton Allan Hixson, M.D. '61 Clarence H. Hodge, M.D. '57 William Robert Jenkins, M.D. '82 James H. Larner, B.S. '59 Seymour Lifschutz, M.D. '44, B.A. '42 James L. Maciulla, B.S. '40 Lynn L. Marlor, M.S. '06 William F. Morrissey, M.D. '57, RESD '62 Robert S. Reitman, M.D. '55, B.S. '51 Charles Edward Rigney, M.D. '80 Mansfield F. W. Smith, M.D. '56 Kenneth A. Spano, M.D. '68 Louise Elaine Swanberg, M.D., RESD '80 Douglas Haymore Todd, M.D. '87 Mario Vahos, M.D., RESD '66 James C. Walsh Jr., M.D., RESD '51 Joseph C. Zolman, M.D., RESD '87

IN DEVELOPMENT



e are most grateful to our donors who have contributed to the SMHS fundraising campaign to raise \$225 million for GW Medicine and Health. *Making History: The Campaign for GW* will transform the institution and accelerate the pace of discovery and innovation at GW.

The expansion of our research endeavors translates into new treatments for patients and new knowledge for the educational curriculum. Researchers need resources to conduct great science, and that's why we are raising at least \$50 million to add professorships, endowments, and laboratory facilities. Education and clinical care will correspondingly benefit from this expansion in research activity.

The build-out of the top floor of GW's Science and Engineering Hall is a key priority. Slated to open in 2016, it will be the new hub of cancer research. The renovation of laboratory space in Ross Hall is central, as well to the aggressive growth of biomedical research. These facilities will catalyze the entire enterprise and attract the best and brightest minds to GW.

We welcome the opportunity to share our plans with you in detail and invite your involvement and support.

Sincerely,

Dennin Marango

Dennis Narango, M.A., CFRE Associate Dean, SMHS, and Associate Vice President for GW Medicine Development and Alumni Relations

Dean's Council Members

Stuart S. Kassan, M.D. '72, FACP, MACR, Co-Chair Rheumatology; Distinguished Clinical Professor of Medicine, University of Colorado-Denver School of Medicine; Chief Medical Officer, Multispecialty Physician Partners; GW Board of Trustees

Lara S. Oboler, M.D. '95, Co-Chair Cardiology; Lenox Hill Heart & Vascular Institute

Gary M. Abramson Partner, the Tower Companies

Christopher L. Barley, M.D. '93 Internal Medicine; Clinical Assistant Professor of Medicine, Cornell/ Weill School of Medicine

Luther W. Brady Jr., M.D. '48, HON. '04, B.A. '46 Radiation Oncology; Professor, Department of Radiation Oncology, Drexel University College of Medicine; GW Emeritus Trustee

Carlos R. Diaz, M.D. '72, RESD '75 Internal Medicine; Head, Internal Medicine Department, Naval Aerospace Medical Institute

Daniel Ein, M.D., FACP, FAAAAI, FACAAI

Allergy, Asthma, and Immunology; Clinical Professor of Medicine, The George Washington University; Director, Allergy & Sinus Center, GW Medical Faculty Associates

Jeanne G. Holzgrefe, M.D. '96, PH.D., M.P.H.

Psychiatry; Chevy Chase Psychiatric Services; Assistant Clinical Professor of Psychiatry and Behavioral Sciences, The George Washington University School of Medicine and Health Sciences

Floyd Alexander Katske, M.D. '76, RESD '77 Urology; Clinical Assistant Professor of Urology, David Geffen School of Medicine, University of California-Los Angeles

Jay E. Katzen, M.D. '72, B.A. '67 Ophthalmology; The Eye Center; GW Board of Trustees

Kerry L. Kuhn, M.D. '73, RESD '77, B.A. '70, FACOG OB/GYN; Private Practice; Senior Vice President of VitalMD

Gerald S. Lazarus, M.D. '63 Dermatology; Professor of Dermatology, Johns Hopkins University; Former Member, GW Board of Trustees

Manucher Mohtashemi, M.D., FACS, FACC Internal Medicine, Cardiothoracic Surgery; Emeritus Associate Professor of Surgery, Stony Brook University

John C. Pan, M.D. '70, RESD '74 OB/GYN; Founder, Center for Integrative Medicine, The George Washington University

Richard G. Popiel, M.D. '81, RESD '83, M.B.A., B.S. '75 Internal Medicine; Executive Vice President, Healthcare Services & Chief Medical Officer, Cambia Health Solutions & Regence Health Insurance Company

Rakesh C. Sahni, M.D. Cardiology; Maryland Cardiology Associates

Mark W. Surrey, M.D. '72, FACOG, FACS

OB/GYN-Fertility; Professor & Clinical Director, Reproductive Surgery, University of California-Los Angeles; Co-Founder and Medical Director, Southern California Reproductive Center

Allan B. Weingold, M.D., HON. '98

OB/GYN; Professor Emeritus, Former Chair of OB/GYN, Former Vice President for Medical Affairs and Executive Dean, The George Washington University

Art B. Wong, M.D. '67

Emergency Medicine; Founder, Emergency Physicians Medical Group, PC

The Dean's Council advises the dean of the School of Medicine and Health Sciences on strategic priorities and important issues for the school, and provides generous support and advocacy.

School of Medicine & Health Sciences

THE GEORGE WASHINGTON UNIVERSITY

OFFICE OF COMMUNICATIONS AND MARKETING 2030 M St., N.W. Suite 4024 Washington, D.C. 20036 NON-PROFIT ORG. U.S. POSTAGE PAID Merrifield, VA PERMIT NO. 2657



INTERSESSIONS

A new multi-day intersession workshop offers students real-world, Washington, D.C.-based experiences to prepare for their expanded scope of practice. Read more on page 8.